

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, 2019

Name of Officer to whom correspondence 0

Debra Kirven
Official Title
Controller

Office Address: **600 Lindley Street**
Bridgeport, CT 06606

26955

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Annual Report of Aquarion Water Company of Massachusetts			Year ended December 31, 2019
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	\$461,026.65 * \$25,316.14 charged to MA.
Executive Vice President, Treasurer, Secretary and Clerk	Donald J. Morrissey	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	\$322,321.89 * \$17,316.14 charged to MA.
Vice President of Operations	John P. Walsh	Aquarion Water Company of Massachusetts, Inc. 835 Main St., Bridgeport, CT 06604	\$231,968.46 * \$43,331.70 charged to MA.
Vice President Corporate Communications Term ended 4/31/19	Bruce T. Silverstone	Aquarion Water Company 835 Main St., Bridgeport, CT 06604	\$77,301.70 * \$0 charged to MA.
Directors*			
Names		Addresses	Fees Paid During Year
Charles V. Firlotte	0	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 32	\$26,955	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."			

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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 which the same was paid in, and the number of shares so sold and the amounts realized: _____ D.P.U. No.																	
0																	
NONE																	
13. Management Fees and Expenses during the Year																	
<table border="0" style="width: 100%;"> <tr> <td style="width: 40%; text-align: center;">32</td> <td style="width: 40%; text-align: center;">26955</td> <td style="width: 20%;"></td> </tr> <tr> <td colspan="3">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.</td> </tr> <tr> <td style="text-align: center;">Aquarion Company</td> <td></td> <td style="text-align: right;">\$116,500</td> </tr> <tr> <td style="text-align: center;">Aquarion Water Company of Connecticut</td> <td></td> <td style="text-align: right;">\$1,593,482</td> </tr> </table>						32	26955		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		\$116,500	Aquarion Water Company of Connecticut		\$1,593,482
32	26955																
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		\$116,500															
Aquarion Water Company of Connecticut		\$1,593,482															
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 Massachusetts																	
NONE																	
17. Amount of stock held in Massachusetts, number of shares _____, amount																	
N/A																	

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Annual Report of Aquarion Water Company of Massachusetts

Year ended December 31, 2019

COMPARATIVE GENERAL BALANCE SHEET

The entries in this balance sheet should be consistent 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	\$ 78,735,475	101-113 Plant Investments (p202)	\$ 84,271,890	\$ 5,536,415
3	\$ 2,901,060	114-119 General Equipment (p202)	\$ 2,829,393	\$ (71,667)
4	\$ 1,202,208	201 Unfinished Construction(p202)	\$ 385,689	\$ (816,519)
5	\$ 1,401	202 Miscellaneous Physical Property (p203)	\$ 1,401	\$ -
6	\$ 72,914	203 Other Investments (p203)	\$ 87,773	\$ 14,859
7	\$ 82,913,059	Total Investments	\$ 87,576,146	\$ 4,663,088
8		CURRENT ASSETS		
9	\$ 180	204 Cash	\$ 180	\$ -
10	\$ -	205 Special Deposits	\$ -	\$ -
11	\$ -	206 Notes Receivable	\$ -	\$ -
12	\$ 1,406,924	207 Accounts Receivable	\$ 1,034,522	\$ (372,402)
13	\$ -	208 Interest and Dividends Receivable	\$ -	\$ -
14	\$ 387,946	209 Materials and Supplies	\$ 394,283	\$ 6,337
15	\$ 2,468,780	210 Other Current Assets	\$ 2,518,584	\$ 49,804
16	\$ 4,263,830	Total Current Assets	\$ 3,947,568	\$ (316,262)
17		RESERVE FUNDS		
18	\$ -	211 Sinking Funds	\$ -	\$ -
19	\$ -	212 Insurance and Other Funds	\$ -	\$ -
20	\$ -	Total Reserve Funds	\$ -	\$ -
21		PREPAID ACCOUNTS		
22	\$ 14,798	213 Prepaid Insurance	\$ 14,110	\$ (688)
23	\$ -	214 Prepaid Interest	\$ -	\$ -
24	\$ 39,666	215 Other Prepayments	\$ 99,056	\$ 59,390
25	\$ 54,464	Total Prepaid Accounts	\$ 113,166	\$ 58,702
26		UNADJUSTED DEBITS		
27	\$ 83,685	216 Unamortized Dept Discount Exp (p203)	\$ 58,294	\$ (25,391)
28	\$ -	217 Property Abandoned	\$ -	\$ -
29	\$ 7,614,682	218 Other Unadjusted Debits (p203)	\$ 7,920,096	\$ 305,414
30	\$ 7,698,367	Total Unadjusted Debits	\$ 7,978,390	\$ 280,023
31				
32	\$ 94,929,720	GRAND TOTAL	\$ 99,615,271	\$ 4,685,551

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Annual Report of Aquarion Water Company of Massachusetts

Year ended December 31, 2019

COMPARATIVE GENERAL BALANCE SHEET

The entries in this balance sheet should be consistent 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	\$ 18,440,000	305 Bonds (p. 204)	\$ 18,245,000	\$ (195,000)
13		306 Coupon and Long Term Notes (p. 204)	\$ -	\$ -
14	\$ 18,440,000	Total Bonds, Coupon and Long Term Notes	\$ 18,245,000	\$ (195,000)
15				
16		CURRENT LIABILITIES		
17	\$ 6,423,210	307 Notes Payable (p. 205)	\$ 9,243,633	\$ 2,820,423
18	\$ 1,336,770	308 Accounts Payable	\$ 694,824	\$ (641,946)
19	\$ 1,242	309 Consumers' Deposits	\$ 1,557	\$ 316
20		310 Matured Interest Unpaid	\$ -	\$ -
21	\$ -	311 Dividends Declared	\$ -	\$ -
22	\$ -	312 Other Current Liabilities	\$ -	\$ -
23	\$ 7,761,222	Total Current Liabilities	\$ 9,940,014	\$ 2,178,792
24				
25		ACCRUED LIABILITIES		
26	\$ -	313 Tax Liability	\$ -	\$ -
27	\$ 152,639	314 Interest Accrued	\$ 153,663	\$ 1,023
28	\$ 205,540	315 Other Accrued Liabilities	\$ 117,115	\$ (88,425)
29	\$ 358,179	Total Accrued Liabilities	\$ 270,778	\$ (87,402)
30				
31		UNADJUSTED CREDITS		
32	\$ 26,955	316 Premium on Bonds (p. 205)	\$ 21,171	\$ (5,784)
33	\$ 10,415,531	317 Other Unadjusted Credits (p. 205)	\$ 8,177,527	\$ (2,238,004)
34				
35	\$ 10,442,486	Total Unadjusted Credits	\$ 8,198,698	\$ (2,243,788)
36				
37		RESERVES		
38	\$ -	318 Insurance and Casualty Reserve	\$ -	\$ -
39	\$ 21,167,116	319 Depreciation Reserve (p. 206)	\$ 22,046,929	\$ 879,812
40	\$ 7,656,874	320 Other Reserves	\$ 8,914,051	\$ 1,257,177
41	\$ 28,823,990	Total Reserves	\$ 30,960,980	\$ 2,136,989
42				
43		APPROPRIATED SURPLUS		
44	\$ -	321 Sinking Fund Reserves	\$ -	\$ -
45	\$ 12,266,856	323 Contributions for Extensions	\$ 12,047,196	\$ (219,660)
46	\$ 3,844,050	324 Surplus Invested in Plant	\$ 3,844,050	\$ -
47	\$ 16,110,906	Total Appropriated Surplus	\$ 15,891,246	\$ (219,660)
48				
49	\$ 8,100,386	400 Profit and Loss Balance (p. 301) +	\$ 11,216,006	\$ 3,115,620
50	\$ 24,211,293	Total Corporate Surplus +	\$ 27,107,252	\$ 2,895,959
51	\$ 94,929,720	GRAND TOTAL	\$ 99,615,271	\$ 4,685,551

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	17,119,435	738,986	-	-	17,858,421
8		2,402,605	174,713	-	-	2,577,318
9	Misc. Pumping Plant Equipment	117,646	-	-	-	117,646
10	Purification System	4,272,247	711,083	-	-	4,983,330
11	Trans'n and Dist'n Mains	41,999,153	3,337,336	(136,368)	-	45,200,121
12	Services	7,951,304	299,338	-	-	8,250,642
13	Consumers' Meters	2,231,413	209,059	-	-	2,440,472
14	Consumers' Meter Installation	672,540	-	-	-	672,540
15		686,973	45,623	-	-	732,596
16	Fire Cist'ns, Basins, Fount'ns	-	-	-	-	-
17	Water Rights	-	-	-	-	-
18	Other Trans'n & Dist'n Plant	955,719	156,646	-	-	1,112,364
19	Miscellaneous Expenditures	-	-	-	-	-
20	Total Plant Investment	78,652,880	5,672,783	(136,368)	-	84,189,295
21	GENERAL EQUIPMENT					
22	Office Equipment	1,450,849	56,411	(265,016)	-	1,242,244
23	Shop Equipment	300,636	18,700	-	-	319,337
24		133,892	-	-	-	133,892
25	26,955	717,664	79,307	-	-	796,970
26	Transportation Equipment	34,674	-	-	-	34,674
27	Laboratory Equipment	263,345	38,932	-	-	302,276
28	Miscellaneous Equipment	2,901,060	193,350	(265,016)	-	2,829,393
29	Total General Equipment	2,901,060	193,350	(265,016)	-	2,829,393
30	Unfinished Construction	1,202,208	(805,959)	-	(10,560)	385,689
31	Total Cost of All Property	82,838,743	5,060,174	(401,385)	(10,560)	87,486,972
32	Assessed Value of Real Estate	17,363,280	738,986	-	-	18,102,265
33	Assessed Value of Other Property	64,190,660	5,127,147	(401,385)	-	68,916,423
34	Total Assessed Value	81,553,940	5,866,133	(401,385)	-	87,018,688

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Annual Report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019
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	\$72,914	\$14,859		\$87,773
7					
8					
9					
			Total		\$87,773
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 expense incurred in connection with the issue, the word "Discount" should be erased. Entries in Col (d) should be consistent with the returns made on page 301, Schedules of Income and Profit and Loss.					
0					
	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%	\$ 14,543		\$ 2,958	\$ 11,585
11	General Mtg Bonds 9.64%	\$ 6,445		\$ 2,148	\$ 4,297
12	MA Water Pollution Abatement Trust Loan - 0.0%	\$ 13,682		\$ 2,985	\$ 10,697
32	\$ 26,955.00	\$ 49,015	\$ -	\$ 17,299	\$ 31,715
14					
15	TOTALS	\$ 83,685	\$ -	\$ 25,391	\$ 58,294
OTHER UNADJUSTED DEBITS					
Give an analysis of the above-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	\$ 2,999,835	\$ 619,801	\$ 105,799	\$ 3,513,837
17	Deferred Pension	\$ 1,571,610	\$ -	\$ 412,201	\$ 1,159,409
22	FAS 158 Deferred Debits	\$ 1,937,852	\$ 1,003,374	\$ 620,244	\$ 2,320,982
23	Deferred Well Maintenance	\$ 50,755	\$ 74,210	\$ 82,180	\$ 42,786
24	Deferred Rate Case	\$ 387,472	\$ -	\$ 80,172	\$ 307,300
25	#VALUE!	\$ 618,699	\$ 53,644	\$ 96,560	\$ 575,783
26	Unrealized (gain) loss on swap	\$ 48,459	\$ -	\$ 48,459	\$ -
27					
28					
29					
30					
31					
32					
33					
34					
35	TOTALS	\$ 7,614,682	\$ 1,751,030	\$ 1,445,615	\$ 7,920,096

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.	Description (a)			Number of Shares Authorized (b)	Par Value of One Share (c)	Amount of Capital Stock Authorized (d)	Amount Actually Outstanding 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 consistent with return made on page 301, Income Schedule (line 20).

	(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		3/03	8/23	\$ 845,000	\$ 845,000	0.00%	-	\$ -	\$ -
10	General Mortgage - swap loan	11/11	11/21	\$ 9,000,000	\$ 9,000,000	4.11%	Feb/May/Aug/Nov	\$ 376,061	\$ 376,061
11	Total Bonds			\$ 18,245,000	\$ 18,245,000			\$ 1,050,721	\$ 1,050,721
12	Coupon and Long Term Notes:								
13									
14									
15									
16									
17	Total Coupon & Long Term Notes								
32	26955	Grand Total					Totals	\$ 1,050,721	\$ 1,050,721

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Annual Report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
SUNDRY CURRENT LIABILITIES						
NOTES PAYABLE						
Line No.	Name of Creditor (a)	Date of Issue (b)	Date of Maturity (c)	How Secured (d)	Rate of Interest (e)	Amount (f)
1	Aquarion Company					\$ 9,243,633
2						
3						
4						
5						
6						
7						
8					TOTAL	\$ 9,243,633
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	\$ 26,955		\$ 5,784	\$ 21,171	
10						
11						
12	TOTALS				\$ 21,171	
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						
0 (a)		Character of Subaccount (b)				Amount (c)
13	Advances for Construction					\$ 1,703,159
14	Deferred OPEB					\$ (93,760)
15	Funded pension contribution					\$ 3,977,853
16	Unrealized (gain) loss on swap					\$ 115,362
17	Tax benefit due ratepayer					\$ 1,360,456
18	Deferred OPEB costs					\$ 1,065,864
19	Other deferred credits					\$ (4)
32	\$26,955.00					\$ 48,597
21						
22						
23		Total				\$ 8,177,527

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Annual Report of Aquarion Water Company of Massachusetts		Year Ended December 31, 2019
DEPRECIATION RESERVE		
Line No.	(a)	Amount (b)
1	Balance at beginning of year	\$ 21,167,116
2	Credits to Depreciation Reserve during year:	
3	Account 610-10 Depreciation	2,361,884
4	Other Accounts (Specify):	
5	Assets Held for Sale - Hingham, Hull, Cohasset and North Cohasset	(1,086,789)
6		
7		
8	CHARGES DURING YEAR	\$ 1,275,095
9	Net Charges for Plant Retired:	
10	Book Cost of Plant Retired	\$ 401,385
11	Cost of Removal	10,560
12	Salvage (credit in red)	(16,663)
13	NET CHARGES DURING YEAR	\$ 395,283
14	Balance at end of year	\$ 22,046,929
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		
0		
32		26955

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Annual Report of Aquarion Water Company of Massachusetts			Year ended December 31, 2019	
INCOME STATEMENT FOR THE YEAR				
Give the Income Account of the respondent for the year ended December 31, 2019 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)	\$ 17,407,022	\$ 1,078,694
3	600	Operating Expenses (p. 303)	\$ 13,416,873	\$ (818,563)
4		Net Operating Revenues	\$ 3,990,148	\$ 1,897,257
5	550	Uncollectible Operating Revenues	\$ 17,966	\$ (11,718)
6	551	Taxes (p. 303B)	\$ (378,675)	\$ (1,471,352)
7		Net Operating Income	\$ 4,350,858	\$ 3,380,327
8		NON-OPERATING INCOME		
9	560	Mdse. and Jobbing Revenue*	\$ 33,246	\$ (17,498)
10	561	Rent from Appliances	\$ -	\$ -
11	562	Miscellaneous Rent Income	\$ -	\$ -
12	563	Interest and Dividend Income	\$ -	\$ -
13	564	MWPAT Loan - Net Subsidy	\$ 43,233	\$ 6,663
14	565	MWPAT Amortization of Debt Premium	\$ 5,784	\$ -
15	566	Miscellaneous Non-operating Income	\$ 115,543	\$ (27,074)
16		Total Non-operating Income	\$ 197,806	\$ (37,909)
17		GROSS INCOME	\$ 4,548,664	\$ 3,342,417
18		DEDUCTIONS FROM GROSS INCOME		
19	575	Miscellaneous Rents	\$ -	\$ -
20	576	Interest on Bonds and Coupon Notes	\$ 1,266,877	\$ 92,158
21	577	Miscellaneous Interest Deductions	\$ -	\$ -
22	578	Amortization of Discount (p. 203)	\$ 25,391	\$ -
23	579	Miscellaneous Deductions from Income	\$ 21,711	\$ (10,499)
24	2885	Total Deductions from Gross Income	\$ 1,313,979	\$ 81,659
24		Income Balance transferred to Profit and Loss	\$ 3,234,685	\$ 3,260,758
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)
32	###	CREDITS		
27	401	Credit Balance at Beginning of Fiscal Period (p.201)		\$ 8,100,386
28	402	Credit Balance transferred from Income Acct. (p.301)		\$ -
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)	\$ (3,234,685)	
33	413	Accumulated other comprehensive gain on swap	\$ -	\$ (119,065)
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		\$ 3,115,620
		TOTALS		\$ 11,216,006
(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.				

OPERATING REVENUES

State the operating revenues of the respondent for the year ended December 31, 2019, 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	\$ 15,600,067	\$ 912,803	
3	502	Flat-rate Sales to General Consumers	\$ 739,066	\$ 66,303	
4	503	Sales to Other Water Companies	\$ -	\$ -	
5	504	Municipal Hydrants	\$ 1,005,762	\$ 92,201	
6	505	Miscellaneous Municipal Revenues	\$ -	\$ -	
7		Total Revenues from Water Operations	\$ 17,344,896	\$ 1,071,307	
8		MISCELLANEOUS REVENUES			
9	506	Rent from Property used in Operation	\$ -	\$ -	
10	507	Miscellaneous Operating Revenues	\$ 62,126	\$ 7,387	
11		Total Revenues from Miscellaneous Operations	\$ 62,126	\$ 7,387	
12		Total Operating Revenues	\$ 17,407,022	\$ 1,078,694	

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	RATE PER CENT Regular Extra	Amount of Capital Stock on which Dividend was Declared	Amount of Dividend	DATE Declared Payable
	(a)	(b) (c)	(d)	(e)	
13	Common Stock			\$ -	
14					
27					
16					
17					
19					
20					
21					
22					
23					
24	Totals			\$ -	
####					

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, 2018 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		<u>SOURCE OF WATER SUPPLY EXPENSES</u>		
2	601-1	Maintenance of Water Supply Buildings and Fixtures	\$ -	\$ -
3	601-2	Maintenance of Surface Source of Supply Facilities	\$ -	\$ -
4	601-3	Maintenance of Ground Source of Water Supply	\$ 407,639	\$ 4,667
5		Total Source of Water Supply Expenses	\$ 407,639	\$ 4,667
6	602	Water Purchased for Resale	\$ 30,517	\$ 24,755
7		<u>PUMPING EXPENSES</u>		
8	603-1	Pumping Labor	\$ 184,888	\$ (22,739)
9	603-2	Boiler Fuel	\$ -	\$ -
10	603-3	Water for Steam	\$ -	\$ -
11	603-4	Electric Power Purchased	\$ 667,924	\$ (20,610)
12	603-5	Miscellaneous Pumping Station Supplies and Expenses	\$ 137,995	\$ (15,663)
13	604-1	Maintenance Power Pumping Buildings and Fixtures	\$ 13,220	\$ (21,027)
14	604-2	Maintenance of Pumping Equipment	\$ 63,815	\$ (9,945)
15	604-3	Maintenance of Miscellaneous Pumping Plant Equipment	\$ -	\$ -
16		Total Pumping Expenses	\$ 1,067,841	\$ (89,984)
17		<u>PURIFICATION EXPENSES</u>		
18	605-1	Purification Labor	\$ 437,412	\$ 62,068
19	605-2	Purification Supplies and Expenses	\$ 3,623,448	\$ (96,284)
20	606-1	Maintenance of Purification Buildings and Fixtures	\$ 39,951	\$ 13,099
21	606-2	Maintenance of Purification Equipment	\$ 242,740	\$ (16,263)
22		Total Purification Expenses	\$ 4,343,551	\$ (37,380)
23	0	<u>TRANSMISSION AND DISTRIBUTION EXPENSES</u>		
24	607	Inspecting Customers' Installation	\$ 34,581	\$ 10,236
25	608	Miscellaneous Trans. and Dist. Supplies and Expenses	\$ 795,174	\$ 24,156
26	609-1	Maintenance of Trans. and Dist. Buildings and Fixtures	\$ 4,579	\$ 911
27	609-2	Maintenance of Trans. and Dist. Mains	\$ 490,962	\$ (43,021)
28	609-3	Maintenance of Storage, Reservoirs, Tanks and Standpipes	\$ 57,722	\$ 28,488
29	609-4	Maintenance of Services	\$ 244,164	\$ 115,539
30	609-5	Maintenance of Meters	\$ 113,225	\$ (201)
31	609-6	Maintenance of Hydrants	\$ 9,468	\$ (457)
32	\$ 26,955	Maintenance of Fountains and Troughs	\$ -	\$ -
33		Total Trans. and Dist. Expenses	\$ 1,749,874	\$ 135,652
34		<u>GENERAL AND MISCELLANEOUS EXPENSES</u>		
35	610-1	Salaries of General Officers and Clerks	\$ 445,041	\$ (83,849)
36	610-2	General Office Supplies and Expenses	\$ 2,282,732	\$ 296,869
37	610-3	Law Expense - General	\$ 447,678	\$ 204,072
38	610-4	Insurance	\$ 743,749	\$ (85,786)
39	610-5	Accidents and Damages	\$ -	\$ -
40	610-6	Store Expenses	\$ -	\$ -
41	610-7	Transportation Expenses	\$ 19,223	\$ 2,200
42	610-8	Inventory Adjustments	\$ -	\$ -
43	610-9	Maintenance of General Structures	\$ -	\$ -
44	610-10	Depreciation	\$ 925,381	\$ (1,105,531)
45	610-11	Miscellaneous General Expenses	\$ 953,646	\$ (84,246)
46		Total General and Miscellaneous Expenses	\$ 5,817,451	\$ (856,271)
47		GRAND TOTAL OPERATING EXPENSES	\$ 13,416,873	\$ (818,563)

303B**Annual Report of Aquarion Water Company of Massachusetts****Year ended December 31, 2018****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, 2018 classifying them in accordance with the Uniform System of Accounts.

Line No.	Kind of Tax (a)	Federal	State	Municipal	Total
48	FIT	\$ (1,750,493)			\$ (1,750,493)
49	FICA	\$ 195,551			\$ 195,551
50	FUTA	\$ 989			\$ 989
51	Property Tax			\$ 1,153,609	\$ 1,153,609
52	SUTA		\$ 8,094		\$ 8,094
53	SIT		\$ 13,574		\$ 13,574
54	Other General Taxes		\$ -		\$ -
55					
56					
57					
58					
59					
60	TOTALS	\$ (1,553,953)	\$ 21,668	\$ 1,153,609	\$ (378,675)

THIS RETURN IS SIGNED UNDER THE PENALTIES OF PERJURY

Don _____ President

_____ Director

_____ Director

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

Bridgport, Connecticut as March 20, 2020

Then personally appeared Donald J Morrissey,
President 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.

Signature Elizabeth Camerino-Schultz
Expiration of Commission _____

Notary Public or
Justice of the Peace

Elizabeth Camerino-Schultz
NOTARY PUBLIC
My Commission Expires Feb. 28, 2022

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 Distribution Tank	
C	Free Street	Well Stations	
D	Turkey Hill Lane	Standpipe	
E	Downing Street	Well Station	
F	Scotland Street	Well Station	
G	Prospect Street	Well Station	
	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

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Annual report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019	
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	
	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

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	1959-64-67	
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 B. Accord Pond	67.79 acres 40.916 acres	1902, 04, 06, 23 1882, 85-87	Included on page 400

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. DEP will not require registration renewals until 2021.

(Item 1 Page 401)

Annual Report of Aquarion Water Company of Massachusetts

Year ended December 31, 2019

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 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.

Water is supplied 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 DEP will not require it to be renewed until 2021. The Water Management Act Permit was renewed in February 2010 and is good until February 28, 2029.

2. Watersheds owned by the Company

Remarks:

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 will not require a renewal until 2021.

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Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
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	Combined	
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		
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	\$346,024	
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 bottoms 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.						
<p>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/dam 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 which supply water to the Fulling Mill Cistern and Wells. This source is then pumped to the Hingham/Hull District Water Treatment Facility for treatment.</p>						

Annual report of Aquarion Water Company of Massachusetts

Year Ended December 31, 2019

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 a new vertical turbine pump to the Hingham/Hull District Water Treatment Plant.
- (B) The well was drilled in 1951 consisting of 30' of 24" stainless steel screen, 43' of 24" transite solid casing, gravel packed and concrete sealed. The casing was lined with steel pipe in 1999. The pump was replaced in 2019. The well was redeveloped in 2019, 2002, and 2000.
- (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. Pump replaced in 2015. Redeveloped in 1987 1998, 2014, 2015, and 2019.
- (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. Well pump replaced in 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. The pump was replaced in 2015. Redeveloped 2015 and 2019.
- (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. The pump was replaced in 2019. Redeveloped in 2003, 2015, 2016, and 2019.
- (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 in 2015 & 2016.
- (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 2014, 2015, 2017, and 2018.
- (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 2011, 2013, 2015, 2016, 2017, and 2018.
- (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 2011, 2013, 2015, 2016, 2017, 2018, & 2019.
- (L) Replacement/satellite well drilled in 2008 pump installed May 2008. 42' of 24"

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Annual report of Aquarion Water Company of Massachusetts			Year ended December 31, 2019		
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
F.					
5. Give a full and complete description of the wells					
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 bottoms 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.) Installed 1958. 18" diameter 31' deep 8" stainless steel screen redeveloped 2014, installed 1958
- (C.) Installed 1966. 24" diameter 72' deep 10" stainless steel screen installed 1965 gravel packed, redeveloped 2011
- (D.) Installed 1966. 24" diameter 63' deep 10' stainless steel screen gravel packed, installed 1966

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Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019	
SUPPLY INFORMATION - Continued - Oxford					
4. Wells					
Location	Inside Dimensions	Depth Below High Water	Covered or Uncovered	When Built	Cost
A. N. Main St, Well #1	16"	63'	Covered	1950	\$53,994
B. N. Main St, Well #2	24"	65'	Covered	1959	\$47,048
C. Nelson St, Well #3	24"	69.9'	Covered	1960	\$20,383
D. N. Main St, Well #1A	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 bottoms 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. Redeveloped in 2000 & 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. The Downing St. Well currently off line and is classified as an emergency water supply source. If activated, it would pump directly into the distribution system after on-site treatment. There are two distribution system pumping stations - the Hull Booster Station and the Baker Hill Booster Station.

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/OOS	*		
B	Fulling Mill #2	Hor Cent	Fairbanks-Morse	2008/OOS	*		
C	Free Street Well #2	Vert Turb	Goulds	2018	*		
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	Vert Turb	Goulds	2019	*		
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	Free Street #5	Submersible	Grundfos	2015	*		
N	Free Street #2A	Submersible	Goulds	2017	*		
O	Fulling Mill Well #1	Submersible	Goulds	2008	*		
P	Fulling Mill Well #2	Submersible	Goulds	2008	*		
Q	Scotland St. Well #1A	Submersible	Goulds	2015	*		
R	Baker Hill Booster #1	Hor Cent	Aurora	2017	*		
S	Baker Hill Booster #2	Hor Cent	Aurora	2006	*		
T	Baker Hill Booster #3	Hor Cent	Aurora	2006	*		
U	Baker Hill Booster #4	Hor Cent	Aurora	2006	*		
V	Baker Hill Booster #5	Hor Cent	Aurora	2006	*		
W	Fulling Mill Cistern	Vert Turb	Goulds	2019	*		
	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	1,008,000
E		7 stage	1,750 RPM	6"	N/A	Electric	829,440
F		7 stage	1,770 RPM	5"	N/A	Electric	216,000
G		1 stage	1,770 RPM	6"	N/A	Electric	504,000
H		5 stage	1,770 RPM	8"	N/A	Electric	1,000,000
I		1 stage	3,600 RPM	4"	N/A	Electric	1,008,000
J		2 stage	1,800 RPM	6"	N/A	Electric	2,016,000
K		2 stage	1,800 RPM	6"	N/A	Electric	2,016,000
L		2 stage	1,800 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		1 stage	3,600 RPM	12"	N/A	Electric	1,080,000
R		1 stage	3,500 RPM	2"	N/A	Electric	86,400
S		1 stage	3,500 RPM	2"	N/A	Electric	86,400
T		1 stage	3,500 RPM	3"	N/A	Electric	216,000
U		1 stage	3,500 RPM	3"	N/A	Electric	216,000
V		1 stage	1,800 RPM	8"	N/A	Electric	1,728,000
V		4 stage	1,770 RPM	6"	N/A	Electric	720,000

* Cost of pump separately unavailable

**Diameter of impeller

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	2019	*
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

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	2019	*
E	Sutton Ave. Booster			Turbine	G & L Goulds	2019	*
F	Sutton Ave. Booster			Turbine	Goulds	2019	*
G	North Main Street #1A			Submersible	Goulds	2007	*
	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		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		Turbine	3,500 RPM			Electric Motor	1,152,000
G		Submersible	3,500 RPM			Electric Motor	432,000

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Annual report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019		
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	*
	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	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 SWITCHCES							
	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		2018		*
D	Scotland Street Well		U.S. Motors		2015		*
E	Downing Street Well		U.S. Electric		1966		*
F	Free Street Well #3		U.S. Electric		2015		*
G	Prospect Street		U.S. Electric		2015		*
H	Free Street Well #4		US Motors		2019		*
I	Accord #3		U.S. Electric		2015		*
J	Accord #4		U.S. Electric		2015		*
K	Accord #5		U.S. Electric		2015		*
L	Beacon Road, Hull		U.S. Motor		1998		*
M	Free Street Well #5		Franklin		2015		*
N	Free Street Well#2A		U.S. Electric		2018		*
O	Fulling Mill Well#1		Centripro		2008		*
P	Fulling Mill Well #2		Centripro		2018		*
Q	Scotland Street #1A		Centripro		2015		*
R	Baker Hill Booster #1		Aurora		2017		*
S	Baker Hill Booster #2		Aurora		2006		*
T	Baker Hill Booster #3		Aurora		2006		*
U	Baker Hill Booster #4		Aurora		2006		*
V	Baker Hill Booster #5		Aurora		2006		*
w	Fulling Mill Cistern		US Motors		2019		*
	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		200
D	A.C. 3 Phase		220/440		Direct		25
E	A.C. 3 Phase		220/440		Direct		40
F	A.C. 3 Phase		460		Direct		25
G	A.C. 3 Phase		460		Direct		20
H	A.C. 3 Phase		460		Direct		100
I	A.C. 3 Phase		460		Direct		40
J	A.C. 3 Phase		460		Direct		40
K	A.C. 3 Phase		460		Direct		40
L	A.C. 3 Phase		460		Direct		75
M	A.C. 3 Phase		460		Direct		40
N	A.C. 3 Phase		460		Direct		125
O	A.C. 3 Phase		460		Direct		20
P	A.C. 3 Phase		460		Direct		15
Q	A.C. 3 Phase		460		Direct		10
R	A.C. 3 Phase		480		Direct		3
S	A.C. 3 Phase		480		Direct		3
T	A.C. 3 Phase		480		Direct		7.5
U	A.C. 3 Phase		480		Direct		7.5
V	A.C. 3 Phase		480		Direct		50
W	A.C. 3 Phase		480		Direct		30
					Total Horse Power		946

* 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 SWITCHES

	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

This schedule not presently used

	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			
	For Gas, Gasoline or Oil	Number of Cyls.	Single or Double Acting	Dimensions of Cylinders			
				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

	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
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Pumping Information - Continued. - Hingham

9. Water Wheels and Turbines

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

407 Hingham						
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
Pumping Information - Continued Hingham						
11. Station log System Delivery Summary - Hingham/Hull District Water Treatment Facility Only						
Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	128,800		74.122	744		
February	130,200		66.941	672		
March	114,800		77.581	744		
April	120,750		79.089	720		
May	131,250		84.622	744		
June	140,000		106.222	720		
July	141,400		133.018	744		
August	176,750		136.503	744		
September	162,400		120.391	720		
October	138,250		94.800	744		
November	149,800		81.982	720		
December	129,150		90.110	744		
Totals	1,663,550	0	1,145.381	8,760	0	0
12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____						
13. Average gallons per day			3.138 MG (365 days)			
14. Maximum gallons pumped in a day			5.170 MG			
15. Date of same,			July 21, 2019			
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, 2019	
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		1,663,550	Kwhrs

407						
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
Pumping Information - Continued Hingham						
11. Station log		Accord Pond to Water Treatment Facility				
Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	2,928		7.875	720		
February	3,934		7.733	672		
March	3,308		7.875	744		
April	2,316		11.250	720		
May	1,075		11.560	744		
June	2,757		32.778	720		
July	5,411		44.941	744		
August	11,602		48.183	744		
September	10,618		44.139	720		
October	7,263		21.727	648		
November	2,164		1.619	408		
December	2,605		7.557	744		
Totals	55,981	0	247.238	8,328	0	0
12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____						
13. Average gallons per day			0.677 MG (365 days)			
14. Maximum gallons pumped in a day			1.87 MG			
15. Date of same,			July 21, 2019			
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, 2019
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	\$	0.18
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	55,981	Kwhrs

Pumping Information - Continued Hingham

11. Station log

Fulling Mill Well 1 to Water Treatment Facility

Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	16,056		8.574	648		
February	16,666		9.464	672		
March	14,283		10.729	744		
April	13,972		9.648	720		
May	17,083		8.855	720		
June	10,868		7.257	408		
July	13,342		12.745	744		
August	21,129		12.426	744		
September	16,873		11.235	720		
October	15,007		10.304	744		
November	18,209		10.581	720		
December	18,606		10.583	744		
Totals	192,094	0	122.401	8,328	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day _____ 0.335 MG (365 days)

14. Maximum gallons pumped in a day _____ 0.553 MG

15. Date of same, _____ 6/18/2019

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, 2019
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 during 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	192,094	Kwhrs

Pumping Information - Continued Hingham

11. Station log

Fulling Mill Well 2 to Water Treatment Facility

Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			1.489	360		
February			1.215	336		
March			1.041	312		
April			1.831	504		
May			0.288	120		
June			0.669	192		
July			2.015	312		
August			1.481	360		
September			0.000	0		
October			0.421	120		
November			0.575	144		
December			0.000	0		
Totals	0	0	11.025	2,760	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.030 MG (365 days)

14. Maximum gallons pumped in a day 0.249 MG

15. Date of same, July 3, 2019

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

408	Fulling Mill Well 2 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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	

Pumping Information - Continued Hingham

11. Station log

Fulling Mill Cistern to Treatment Facility

Year and Month 2018	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			0.000	0		
April			2.202	96		
May			9.812	672		
June			0.000	0		
July			3.038	288		
August			6.318	696		
September			4.471	480		
October			4.905	456		
November			8.414	720		
December			4.409	432		
Totals	0	0	43.569	3,840	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.119 MG (365 days)

14. Maximum gallons pumped in a day 0.711 MG

15. Date of same, April 30, 2019

16. Range of pressure in main 35-45 psi

17. Average pressure in main 40 psi

408	Fulling Mill Cistern to Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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 during 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	

Pumping Information - Continued Hingham

11. Station log

Scotland St 1 to Water Treatment Facility

Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	14,038		13.881	744		
February	12,920		12.609	672		
March	12,032		13.644	744		
April	8,226		6.898	336		
May	6,848		17.141	744		
June	6,990		17.554	720		
July	6,850		17.695	744		
August	9,058		17.353	744		
September	7,962		15.835	720		
October	6,545		15.800	744		
November	7,439		15.978	720		
December	6,618		17.815	744		
Totals	105,526	0	182.204	8,376	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.499 MG (365 days)

14. Maximum gallons pumped in a day 0.789 MG

15. Date of same, December 2, 2019

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, 2019
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	105,526	Kwhrs

Pumping Information - Continued Hingham

11. Station log

Scotland St 1A to Water Treatment Facility

Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			5.078	744		
February			4.751	672		
March			4.924	744		
April			0.445	168		
May			0.000	0		
June			0.000	0		
July			0.000	0		
August			0.006	24		
September			0.000	0		
October			0.000	0		
November			0.030	48		
December			0.000	0		
Totals	0	0	15.234	2,400	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.042 MG (365 days)

14. Maximum gallons pumped in a day 0.207 MG

15. Date of same, February 1, 2019

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, 2019
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 during 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	

Pumping Information - Continued Hingham

11. Station log

Downing Street Well

Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	102		0.000	0		
February	102		0.000	0		
March	88		0.000	0		
April	88		0.000	0		
May	96		0.000	0		
June	93		0.000	0		
July	83		0.000	0		
August	95		0.000	0		
September	89		0.000	0		
October	90		0.000	0		
November	106		0.000	0		
December	92		0.000	0		
Totals	1,124	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 (365 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, 2019
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	\$	0.18
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	1,124	Kwhrs

Pumping Information - Continued Hingham

11. Station log

Prospect Street to Water Treatment Facility

Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	3,977		8.005	744		
February	4,369		7.258	672		
March	3,827		8.125	744		
April	3,819		4.655	432		
May	1,043		3.920	312		
June	2,694		6.681	624		
July	2,334		8.008	744		
August	3,440		7.114	744		
September	3,163		6.219	696		
October	2,596		7.076	744		
November	3,216		7.895	720		
December	3,251		8.670	744		
Totals	37,729		83.627	7,920	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day _____ 0.229 _____ MG (365 days)

14. Maximum gallons pumped in a day _____ 0.346 _____ MG

15. Date of same, _____ May 20, 2019

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, 2019	
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	\$	0.18	
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	37,729	Kwhrs	

Pumping Information - Continued Hingham

11. Station log

Free Street #2 to Water Treatment Facility

Year and Month 2018	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			0.000	0		
April			0.011	24		
May			3.573	168		
June			18.481	720		
July			19.271	744		
August			19.083	744		
September			17.147	720		
October			16.743	744		
November			17.154	720		
December			21.264	744		
Totals	0	0	132.726	5,328	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.364 MG (365 days)

14. Maximum gallons pumped in a day 0.956 MG

15. Date of same, December 22, 2019

16. Range of pressure in main 50-60 psi

17. Average pressure in main 55 psi

408	Free Street #2 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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 during 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 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	21,420		18.600	744		
February	20,790		15.061	672		
March	18,480		19.150	744		
April	21,630		17.267	720		
May	16,380		12.177	600		
June	14,280		0.000	0		
July	11,970		0.000	0		
August	15,960		0.000	0		
September	16,710		0.000	0		
October	14,280		0.000	0		
November	16,170		0.015	24		
December	14,700		0.000	0		
Totals	202,770	0	82.271	3,504	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.225 MG (365 days)

14. Maximum gallons pumped in a day 0.830 MG

15. Date of same, March 27, 2019

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, 2019
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 during 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	202,770	Kwhrs

407						
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
Pumping Information - Continued Hingham						
11. Station log		Free Street #3 to Water Treatment Facility				
Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	10,360		0.000	0		
February	10,320		0.000	0		
March	9,640		0.000	0		
April	18,280		0.000	0		
May	18,520		0.000	0		
June	20,520		0.000	0		
July	19,880		0.000	0		
August	24,040		0.000	0		
September	22,640		0.000	0		
October	20,520		0.000	0		
November	17,760		0.000	0		
December	16,880		0.000	0		
Totals	209,360	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 (365 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, 2019
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 during 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	209,360	Kwhrs

407						
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
Pumping Information - Continued Hingham						
11. Station log		Free Street #4 to Water Treatment Facility				
Year and Month 2018	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			1.620	120		
April			17.107	720		
May			15.599	744		
June			17.753	720		
July			19.073	744		
August			18.907	744		
September			17.020	720		
October			16.453	744		
November			16.970	720		
December			21.233	744		
Totals	0	0	161.735	6,720	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			0.443 MG (365 days)			
14. Maximum gallons pumped in a day			0.805 MG			
15. Date of same,			June 9, 2019			
16. Range of pressure in main			50 -60 psi			
17. Average pressure in main			55 psi			

408	Free Street #4 to Water Treatment Facility	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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 during 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	

407						
Annual report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019	
Pumping Information - Continued Hingham						
11. Station log Free Street #5 to Water Treatment Facility						
Year and Month 2018	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January			9.486	744		
February			8.603	672		
March			9.278	744		
April			4.810	504		
May			2.165	168		
June			6.142	648		
July			7.391	672		
August			7.098	744		
September			6.421	696		
October			2.585	336		
November			5.229	624		
December			2.674	408		
Totals	0	0	71.883	6,960	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			0.197 MG (365 days)			
14. Maximum gallons pumped in a day			0.424 MG			
15. Date of same,			December 16, 2019			
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, 2019
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	

Pumping Information - Continued Millbury									
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11. Station Log	Total System
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11. Station Log	Total System
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Year and Month 2019	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	107,330	0.000	45.494	1,375	45.494		
February	113,290	0.000	42.587	1,314	42.587		
March	98,750	0.000	47.433	1,486	47.433		
April	95,590	0.075	46.709	1,414	46.784		
May	99,170	0.000	50.011	1,522	50.011		
June	107,870	0.673	50.168	1,607	50.841		
July	109,000	0.224	55.344	2,390	55.568		
August	127,090	0.075	57.038	2,557	57.113		
September	109,550	1.346	51.182	1,965	52.528		
October	82,780	2.693	45.822	1,776	48.515		
November	93,500	0.075	42.583	1,871	42.658		
December	110,510	0.075	46.772	2,049	46.847		
Totals	1,254,430	5.236	581.143	21,326	586.379	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day	1.607	MG (365 days)
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14. Maximum gallons pumped in a day	2.455	MG
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15. Date of same,	July 28, 2019
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16. Range of pressure in main	21 to 125	lbs
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17. Average pressure in main	73	psi
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408	Total System	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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 during 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	1,254,430 Kwhrs	

407						
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
Pumping Information - Continued Millbury						
11. Station Log		Millbury Ave. Station				
Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	55,100		23.102	617		
February	58,600		22.503	606		
March	51,200		25.577	709		
April	51,200		25.353	687		
May	54,700		27.088	722		
June	60,000		25.104	728		
July	26,900		9.393	326		
August	24,300		9.317	327		
September	26,200		11.771	428		
October	17,300		9.376	392		
November	26,300		12.343	430		
December	40,800		16.047	557		
Totals	492,600	0	216.974	6,529	0	0
12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____						
13. Average gallons per day		0.594 MG (365 days)				
14. Maximum gallons pumped in a day		1.155 MG				
15. Date of same,		March 24, 2019				
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, 2019
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 during 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	492,600	Kwhrs

Pumping Information - Continued Millbury									
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11. Station Log		Oak Pond Station	
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100	100

Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	4,480		0.104	5		
February	5,440		0.576	30		
March	4,000		0.568	26		
April	2,240		0.128	5		
May	1,920		0.278	14		
June	2,720		2.727	116		
July	16,000		14.814	669		
August	23,840		16.018	742		
September	23,200		15.656	715		
October	23,680		11.127	471		
November	4,800		0.000	0		
December	3,360		0.000	0		
Totals	115,680	0	61.996	2,793	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day	0.170	MG (365 days)
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14. Maximum gallons pumped in a day	0.718	MG
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15. Date of same,	October 20, 2019
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16. Range of pressure in main	21 to 125	lbs
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17. Average pressure in main	73	psi
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408	Oak Pond Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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	\$	0.18
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	115,680	Kwhrs

Pumping Information - Continued Millbury

11. Station Log

Jacques #1 N. Main St. Station

Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	44,000		22.288	753		
February	44,900		19.444	672		
March	40,350		21.247	746		
April	40,200		21.228	722		
May	40,900		21.556	725		
June	37,700		21.186	697		
July	42,000		20.261	741		
August	38,300		18.147	744		
September	38,600		22.273	726		
October	40,950		22.736	748		
November	41,950		18.676	721		
December	39,600		18.518	746		
Totals	489,450	0	247.560	8,741	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.678 MG (365 days)

14. Maximum gallons pumped in a day 1.009 MG

15. Date of same, October 20, 2019

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, 2019	
Pumping Information - Continued M 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	489,450	Kwhrs	

Pumping Information - Continued Millbury

11. Station Log

Jacques #2 N. Main St. Station

Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	3,750		0.000	0		
February	4,350		0.064	6		
March	3,200		0.041	5		
April	1,950		0.000	0		
May	1,650		1.089	61		
June	7,450		1.151	66		
July	24,100		10.876	654		
August	40,650		13.556	744		
September	21,550		1.482	96		
October	850		2.583	165		
November	20,450		11.564	720		
December	26,750		12.207	746		
Totals	156,700	0	54.613	3,263	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.150 MG (365 days)

14. Maximum gallons pumped in a day 0.813 MG

15. Date of same, August 25, 2019

16. Range of pressure in main 21 to 125 lbs

17. Average pressure in main 73 psi

408	Jacques #2 N. Main St. Station	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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	\$	0.18
25. Wood consumed during 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	156,700	Kwhrs

Pumping Information - Continued Oxford

11. Station Log

Total System

Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	36,590		16.019	904		
February	34,381		14.183	805		
March	32,829		15.458	882		
April	32,733		15.605	853		
May	31,589		16.434	887		
June	32,321		18.597	991		
July	37,129		21.823	1,177		
August	38,545		21.220	1,185		
September	35,370		18.554	1,072		
October	32,820		16.201	931		
November	35,860		14.492	840		
December	31,724		15.104	927		
Totals	411,891	0	203.690	11,454	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.558 MG (365 days)

14. Maximum gallons pumped in a day 0.859 MG

15. Date of same, July 21, 2019

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, 2019
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 during 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	411,891	Kwhrs

Pumping Information - Continued Oxford

11. Station Log

North Main St. Well #1

Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	7,200		0.060	4		
February	8,200		0.141	7		
March	7,600		0.151	6		
April	7,200		2.090	99		
May	4,600		0.717	34		
June	7,000		0.121	8		
July	10,200		0.116	8		
August	13,200		0.346	26		
September	10,600		0.080	3		
October	9,000		0.197	8		
November	10,000		0.107	7		
December	5,200		0.039	2		
Totals	100,000	0	4.165	212	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day _____ 0.011 MG (365 days)

14. Maximum gallons pumped in a day _____ 0.26 MG

15. Date of same, _____ August 14, 2019

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, 2019
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	\$	0.21
25. Wood consumed during 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	100,000	Kwhrs

Pumping Information - Continued Oxford

11. Station Log

North Main St. Well #1A

Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	0		0.000	0		
February	0		0.000	0		
March	0		0.000	0		
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)		0.000	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 (365 days)

14. Maximum gallons pumped in a day MG

15. Date of same,

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, 2019
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 during 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	

407						
Annual report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019	
Pumping Information - Continued Oxford						
11. Station Log North Main St. Well #2						
Year and Month 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Average Total Static Head	Average Total Dynamic Head
January	0		2.312	158		
February	0		1.828	124		
March	0		2.048	136		
April	0		0.584	42		
May	0		2.166	107		
June	0		5.402	259		
July	0		8.089	422		
August	0		7.588	423		
September	0		5.825	367		
October	0		2.816	168		
November	0		1.805	112		
December	0		2.339	177		
Totals	(See station # 1 for totals)		42.802	2,495	0	0
12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____						
13. Average gallons per day			0.117 MG (365 days)			
14. Maximum gallons pumped in a day			0.390 MG			
15. Date of same,			July 20, 2019			
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, 2019
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 2019	Kwhrs Used	Pounds of coal Burned	Million Gallons of Water Pumped	Hours of Pumping	Total Static Head	Average Total Dynamic Head
January	29,390		13.647	742		
February	26,181		12.214	674		
March	25,229		13.259	739		
April	25,533		12.931	712		
May	26,989		13.551	746		
June	25,321		13.074	724		
July	26,929		13.618	747		
August	25,345		13.286	736		
September	24,770		12.649	702		
October	23,820		13.188	755		
November	25,860		12.580	721		
December	26,524		12.726	748		
Totals	311,891	0	156.723	8,746	0	0

12. Based upon the displacement of _____ gallons per revolution with _____ per cent allowance for slip _____

13. Average gallons per day 0.429 MG (365 days)

14. Maximum gallons pumped in a day 0.541 MG

15. Date of same, January 10, 2019

16. Range of pressure in main 48 to 112 lbs

17. Average pressure in main 80 psi

408	Nelson St. #3	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019
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 during 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	311,891	Kwhrs

409		Hingham						
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019				
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		46,786		586	586		46,786
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		183,426		926	11,123		193,623
8"	Transite		43,273		10			43,263
8"	Steel		70					70
8"	HDPE		1,620					1,620
8"	PVC		0			1,345		1,345
6"	Cast Iron		116,259		3,560			112,699
6"	Cast Iron Cement Lined		74,764					74,764
6"	Ductile		14,938			1,014		15,952
6"	Transite		87,124		10			87,114
6"	HDPE		2,060					2,060
4"	Cast Iron		30,928		1,552			29,376
4"	Cast Iron Cement Lined		77					77
4"	Ductile		12,247			28		12,275
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		34,749		1,126			33,623
2"	Steel		200					200
2"	Galvanized		17,021		1,131			15,890
2"	Plastic		2,477			3		2,480
1 1/2 "	Galvanized		2,449					2,449
1 1/4"	Galvanized		797					797
1"	Plastic		0					0
1"	Copper		339					339
1"	Galvanized		3,731					3,731
3/4"	Galvanized		100					100
3/4"	Copper		49					49
		TOTALS	1,018,261	0	8,901	14,099	1,023,459	
2. Cost of repairs per mile of pipe including valves \$ 1,795								
3. Number of leaks in mains, during the year 43								
4. Number of leaks per mile 0.2200								
5. Length of mains less than 4 inches in diameter 61,588 miles 11.66								

409		Milbury					
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019					
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				6,575
12	C. I. & Ductile		39,297				39,297
10	Cast Iron		17,691				17,691
8	C.I. & Ductile		119,894			1,446	121,340
6	C.I. & Ductile		66,586	5		10	66,591
4	Cast Iron		1,323				1,323
3	Cast Iron		935				935
2 1/4	Cast Iron		12,751				12,751
2	Cast Iron		3,060	392			2,668
8	Transite		1,497				1,497
6	Transite		3,609	5			3,604
2	Plastic		880			22	902
TOTALS			274,098	402	0	1,478	275,174
2. Cost of repairs per mile of pipe including valves				\$ 4,184			
3. Number of leaks in mains, during the year				10			
4. Number of leaks per mile				0.1919			
5. Length of mains less than 4 inches in diamater				17,256 miles 3.27			

409		Oxford					
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019					
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		32,075				32,075
10	C.I. & Ductile		1,674				1,674
8	C.I. & Ductile		83,590				83,590
6	C.I. & Ductile		51,973			6	51,979
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		5,480				5,480
6	Transite		20,890	6			20,884
4	Ductile		354				354
2	Plastic		31				31
		TOTALS	214,673	6	0	6	214,673
2. Cost of repairs per mile of pipe including valves				\$ 2,716			
3. Number of leaks in mains, during the year				2			
4. Number of leaks per mile				0.0492			
5. Length of mains less than 4 inches in diamater				15,309 miles 2.90			

410		Hingham	
Annual report of Aquarion Water Company of Massachusetts		Year ended December 31, 2019	
DISTRIBUTION INFORMATION			
6. Water towers or stand pipes			
		Land	
	Location	Area	When Bought
A B C	Turkey Hill Accord Tank Accord Tank on land adjacent to Accord Pond - included there	23	1963
			Cost
			\$4,766
	Capacity in Gallons	When Bought	Cost
A B C	2,000,000 750,000	1963 1967	\$103,921 \$145,359
	2,750,000		\$249,280
7. Services			
Nominal Diameter Inches	Kind of Pipe	Number Installed and in Use at Beginning of Year	Installed and in Use at Close of Year
3/4" - 10"	Copper-WI-Steel		
	Plastic Galv	10,279	10,275
3/4"	Plastic	0	-1
3/4"	Copper	168	59
1"	Plastic	1,007	1,007
1"	Copper	1,042	1,029
2"	Plastic	245	245
4"	DICL	115	115
6"	DICL	115	115
8"	DICL	83	83
12"	DICL	2	2
	TOTALS	13,056	12,929
8. Average length of service pipe _____ 25 feet			
9. Average cost of service laid during the year _____			
10. Percentage of services that are metered <u>All except for fire services</u>			
11. Percentage in income that is metered _____ 90%			
12. Leaks in service during the year _____ 34			
13. Are service pipes paid for by consumer, in whole or in part and by what extent? <u>Water company provides labor</u>			
<u>materials for installation up to 2 inch in size, customer provides all other requirements to install water service including</u>			
<u>materials over 2 inch in size.</u>			

410					
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019	
DISTRIBUTION INFORMATION					
6. Water towers or stand pipes					
	Location	Land			
		Area	When Bought	Cost	
A B C D	Burbank Hill	3.00 Acres	1895		
	Inside Diameter	Capacity in Gallons		When Bought	Cost
A B C D	130'	1,500,000		1895	\$25,802
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		1	55
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	1,460	22		1,438
3/4	Plastic	609			609
1	Copper	455		38	493
1	Plastic	504			504
1	Cement Lined	489			489
2	Plastic	30		8	38
2	Copper	2			2
1 1/4	Plastic	0		3	3
	TOTALS	3,734	22	50	3,762
Also 11 residential services in the Town of Auburn that are included in the above totals					
8. Average length of service pipe		<u>27 feet</u>			
9. Average cost of service laid during the year		<u>\$ 884</u>			
10. Percentage of services that are metered		<u>all except fire service</u>			
11. Percentage in income that is metered		<u>90%</u>			
12. Leaks in service during the year		<u>3</u>			
13. Are service pipes paid for by consumer, in whole or in part and by what extent? <u>Water company provides labor</u>					
<u>materials for installation up to 2 inch in size, customer provides all other requirements to install water service including</u>					
<u>materials over 2 inch in size.</u>					

410		Oxford							
Annual report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019				
DISTRIBUTION INFORMATION									
6. Water towers or stand pipes									
A B C D	Location		Area	Land When Bought		Cost			
	N. Main St., Oxford , MA		1 Acre	1905		\$319			
			13.4 Acres	1944		\$438			
	Inside Diameter	Capacity in Gallons		When Bought					
A B C D	27	215,000		1905					
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	8	11	1				
8	Cast Iron Ductile	4			4				
6	Cast Iron Ductile	28			30				
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	389			400				
3/4	Copper	1,383			1,375				
2	Cast Iron	5			5				
4	Cast Iron Ductile	6			6				
3/4	Plastic	228			228				
1	Plastic	547			547				
2	Plastic	33			33				
1	Galv Iron	18			18				
TOTALS		2,652			8	13	2,657		
8. Average length of service pipe 27 feet									
9. Average cost of service laid during the year \$ 5,900									
10. Percentage of services that are metered all except fire service									
11. Percentage in income that is metered 90%									
12. Leaks in service during the year 8									
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.									

411	Hingham
Annual report of Aquarion Water Company of Massachusetts	Year ended December 31, 2019
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	18			18
12	Gate Valves	314	5	5	314
10	Gate Valves	34		1	35
8	Gate Valves	975	1	57	1,031
6	Gate Valves	821	4	4	821
4	Gate Valves	207	11		196
3	Gate Valves	1			1
2 1/4 - 2 1/2	Gate Valves	83	7		76
2	Gate Valves	187	6		181
1 1/2	Gate Valves	9			9
1 1/4	Gate Valves	17			17
1	Gate Valves	265	2		263
3/4	Gate Valves	80	1		79
	Totals	3,101	37	67	3,131

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

411		Oxford			
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019	
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	7			7
16	Gate Valve	0			0
12	Gate Valve	72			72
10	Gate Valve	3			3
8	Gate Valve	209		1	210
6	Gate Valve	279		1	280
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		610	0	2	612
The above list should include all valves that are installed in the mains, whether they are gate valves, blow offs, check valves or otherwise.					

412		Hingham			
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019	
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		419	1		418
5 1/4		498	12	36	522
TOTALS		917	13	36	940
16. Were all of the above hydrants purchases and installed at the expense of the company? <u>NO</u>					
17. If not, under what arrangement were they purchases and installed? <u>Customer/Town Purchased & Installed</u> <u>Town Owned</u>					
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		253	1	8	260
Metered		122			122
TOTALS		418	1	8	425
19. Were all of the above hydrants purchases and installed at the expense of the company? <u>NO</u>					
20. If not, under what arrangement were they purchases and installed? <u>Customer/Town Purchased & Installed</u>					

412		Millbury			
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019	
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	25	1		24
5	2 - 2 1/2, 1- 4	1			1
5 1/4	2 - 2 1/2, 1- 4	64		9	73
4 1/4	2 - 2 1/2, 1- 4	65			65
4 1/2	2 - 2 1/2, 1- 4	60			60
4 3/4	2 - 2 1/2, 1- 4	8			8
4 1/4	2 - 2 1/2, 1- 4	1			1
TOTALS			224	1	9
			Hydrant is located in town of Auburn		
16. Were all of the above hydrants purchases and installed at the expense of the company? <u>NO</u>					
17. If not, under what arrangement were they purchases and installed? <u>Hydrants installed on new main extensions are paid by developers.</u>					
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	78	6		72
TOTALS			124	6	0
19. Were all of the above hydrants purchases and installed at the expense of the company? <u>NO</u>					
20. If not, under what arrangement were they purchases and installed? <u>Customer Purchased</u>					

412		Oxford			
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019	
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	1		27
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	61			61
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	88		1	89
TOTALS		186	1	1	186
16. Were all of the above hydrants purchases and installed at the expense of the company? <u>NO</u>					
17. If not, under what arrangement were they purchases and installed? <u>Hydrants installed on new main extensions are paid for by developers.</u>					
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	12			12
5 1/4	2 - 2 1/2, 1- 4	0			0
TOTALS		12	0	0	12
19. Were all of the above hydrants purchases and installed at the expense of the company? <u>NO</u>					
20. If not, under what arrangement were they purchases and installed? <u>Customer Purchased</u>					

413		Hingham				
Annual report of Aquarion Water Company of Massachusetts					Year ended December 31, 2019	
DISTRIBUTION INFORMATION - Continued						
21. Meters owned by Company						
Size inches	Number at Beginning of Year		Bought Since	Condemned Since and Removed	Number at Close of Year	
	In Use	On Hand			In Use	On Hand
1/2	0	0	0	0	0	0
5/8	12,090	898	404	750	12,102	540
3/4	14	48	0	1	15	46
1	362	47	0	26	369	14
1 1/2	77	15	0	2	76	14
2	156	32	0	8	161	19
3	0	0	0	0	0	0
4	4	0	0	0	4	0
6	2	0	0	0	2	1
8	4	0	1	0	5	0
Totals	12,709	1,040	405	787	12,734	634
22. Has the plant been debited with the first cost of installing the meters in use at close of year, above stated? <u>Yes</u>						
23. If so, was the cost the actual cost or some assumed or average cost? <u>Actual</u>						
24. Are any of these meters paid for by consumers, and to what extent? <u>None</u>						

413		Millbury				
Annual report of Aquarion Water Company of Massachusetts						
Year ended December 31, 2019						
DISTRIBUTION INFORMATION - Continued						
21. Meters owned by Company						
Size inches	Number at Beginning of Year		Bought Since	Condemned Since and Removed	Number at Close of Year	
	In Use	On Hand			In Use	On Hand
1/2						
5/8	3,639	65	650	247	3,652	455
3/4	0	0	0	0	0	0
1	59	5	16	9	62	9
1 1/2	17	5	6	2	19	7
2	46	9	4	2	52	5
3	1	0	0	0	1	0
4	4	0	0	0	4	0
6	0	0	0	0	0	0
8	0	0	0	0	0	0
Totals	3,766	84	676	260	3,790	476
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						

413		Oxford				
Annual report of Aquarion Water Company of Massachusetts				Year ended December 31, 2019		
DISTRIBUTION INFORMATION - Continued						
21. Meters owned by Company						
Size inches	Number at Beginning of Year		Bought Since	Condemned Since and Removed	Number at Close of Year	
	In Use	On Hand			In Use	On Hand
1/2						
5/8	2,535	1	206	203	2,539	0
3/4	0	0	0	0	0	0
1	63	0	7	6	64	0
1 1/2	11	0	1	1	11	0
2	18	0	0	1	17	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	2,630	1	214	211	2,634	0
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:						
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.						

414	Hingham										Year ended December 31, 2019	
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		12,601	61	377		171					13,210
Neptune	Turbine					89			1		2	92
Neptune	Compound						4		2	1	2	9
Neptune	Protectus									2		2
Badger	Turbine										1	1
Trident	Disc		41		6	1	5					53
Kent	Disc								1			1
Hersey	Turbine											-
Totals		0	12,642	61	383	90	180	0	4	3	5	13,368

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Millbury

Annual report of Aquarion Water Company of Massachusetts

Year ended December 31, 2019

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		4,099	-	71	26	54	-				4,250
Badger	Disc		5									5
Neptune	Turbine											-
Kent	Disc		3									3
Rockwell	Disc											-
Sensus	Disc						2	1				3
Trident	Disc						1		4			5

414		Oxford										
Annual report of Aquarion Water Company of Massachusetts											Year ended December 31, 2019	
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		2,531	-	64	11	17					2,623
Badger	Disc		5									5
Neptune	Fullcrest									3		3
Rockwell	Disc											-
Kent	Disc		3									3
Neptune	Protectus											-

415	Millbury			
Annual report of Massachusetts American Water Company		Year ended December 31, 2019		
CONSUMPTION INFORMATION				
1. Estimated total population of territory covered by franchise,				13,757
2. Estimated population reached by the distribution system,				9,181
3. Estimated population actually supplied,				9,181
4. Total consumption during the year (1)				586,379,000 gallons
5. Average daily consumption (2)				1,607,000 gallons
6. Day on which greatest amount was pumped				July 28, 2019
7. Gallons pumped on above day				2,455,000 gallons
8. Week during which greatest amount was pumped				July 2 - July 28
9. Gallons pumped during above week				13,152,000 gallons
10. Gallons per day per service (3)				372 gallons
11. Consumption metered				511,072,000 gallons
12. Consumption metered				87.16% 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
4,006			25	4,031
Name of City, Town or District			Number of Customers as of December 31, 2019	
Millbury			4,031	

(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, 2019	
CONSUMPTION INFORMATION			
<p>1. Estimated total population of territory covered by franchise, <u>14,125</u></p> <p>2. Estimated population reached by the distribution system, <u>6,252</u></p> <p>3. Estimated population actually supplied, <u>6,252</u></p> <p>4. Total consumption during the year (1) <u>203,690,000</u> gallons</p> <p>5. Average daily consumption (2) <u>558,000</u> gallons</p> <p>6. Day on which greatest amount was pumped <u>July 21, 2019</u></p> <p>7. Gallons pumped on above day <u>859,000</u> gallons</p> <p>8. Week during which greatest amount was pumped <u>July 15 - July 21</u></p> <p>9. Gallons pumped during above week <u>5,286,000</u> gallons</p> <p>10. Gallons per day per service (3) <u>183</u> gallons</p> <p>11. Consumption metered <u>175,656,000</u> gallons</p> <p>12. Consumption metered <u>86.24%</u> Per cent of total consumption</p>			
13. Customers			
Number being Supplied at Beginning of Year	Disconnected Since	Connected Since	Number being Supplied at Close of Year
2,678		5	2,683
Name of City, Town or District		Number of Customers as of December 31, 2019	
Oxford		2,683	

(1) Represents Total Water Production During the Year

(2) Represents Average Daily Production

(3) Represents Metered Consumption per day per Customer, excluding Fire Services.