



Water Supply Update

Serving the Communities of Hingham, Hull, & North Cohasset



News and Notes

- It is with great pride that we inform you that the Massachusetts Department of Environmental Protection (DEP) has announced that Aquarion Water Company has once again received a Public Water System Award for outstanding performance for its water system serving Hingham, Hull, and North Cohasset. This is the third year in a row and fifth time in the past six years that DEP has recognized Aquarion for its exceptional performance. Aquarion is one of only 17 medium (population served between 3,301 and 49,999) and large (population served > 50,000) public water systems receiving a similar award for 2018.
- Distribution system flushing – Distribution system flushing this spring in north/east Hingham, Cohasset, and Hull has been completed. Aquarion is scheduled to begin flushing South Hingham the week of April 21, 2019. Flushing is typically conducted in the evenings, 9 p.m. to 5 a.m., Sunday through Thursday. However, there may be areas of South Hingham that are flushed during daytime hours (9:00 a.m. to 4 p.m.). We expect the spring flushing program to be completed by the middle of May. Detailed information about the program can be found on our website. Customers in the affected areas will receive a Code Red message each day.
- Irrigation Restrictions in effect April 15 - Despite the recent wet weather Aquarion has implemented their annual water restrictions on outdoor irrigation effective April 15. The restrictions apply only to irrigation systems and hose-end sprinklers. Customers with odd number street addresses may only water on Tuesdays and Saturdays, and those with even number street addresses may only water on Wednesdays and Sundays. On these assigned days, customers are allowed to water before 10 a.m. and after 6 p.m., when evaporation losses will be minimized and more water goes to the plants' roots.

During the past decade, forward-thinking, progressive, and environmentally conscious water utilities like Aquarion have come to recognize that prudent use of precious resources is an important facet of effective management, efficient operations, and a key component to addressing long term needs. Water conservation is good for the environment and customers can still achieve and maintain healthy looking lawns by limiting their irrigation to twice a week and having Mother Nature also help out. For more information and FAQs about lawn irrigation, please visit our website: www.aquarionwater.com/watering

- Unaccounted for water update – Calculations for 2018 indicate that our measured unaccounted for water volume for 2018 was 12.1%. Information has been submitted to DEP for review and approval. We attribute our continued reduction in unaccounted for water to our leak detection program, customer meter replacement program, and steadfast accounting of all hydrant usage.



- 💧 Water main replacement projects – Water main replacement work is under way in three areas of our distribution system: Hingham - Bradley Hill Rd & Bremer Circle; Hull - Beach Avenue (from L Street to Y Street) and Cadish Avenue (from M Street to S Street). We are coordinating construction activities with the Department of Public Works from each community to address Town paving and sewer line rehabilitation work.

Plans are also in place to replace water mains on Maple Lane (Hull), Hayes Road, Forget Me Not Lane, Crow Point Lane, Bulow Circle, Wompatuck Road, and Downing Street in Hingham later this year in coordination with the Town's paving program.

- 💧 Customer conservation program adds protection to Weir River Watershed - Our customer water conservation program is now in its third year and continues to provide conservation savings for our valuable resources. Since March 2017, we have worked with 512 customers and replaced over 876 toilets, 635 faucet aerators, and 489 shower heads in homes in Hingham, Hull, and north Cohasset. In addition, 17 customers have received a \$250 rebate towards the purchase and installation of a new front end loading energy efficient clothes washing machine. The installation of new water conservation fixtures in customers' homes has yielded water conservation savings of approximately 13,910 gallons per day or 4.97 million gallons per year! If you want to learn more about the customer water conservation program, enroll or tell others about it, please visit our website at www.aquarionwater.com/conservationoffers.

Water Resource Management

All of our sources are in excellent condition due to the abundance of precipitation this year. Accord Pond is fully recharged to 100% capacity and has been overflowing the dam spillway for several months. This spring we are cleaning and rehabilitating several wells to prepare them for the summer.

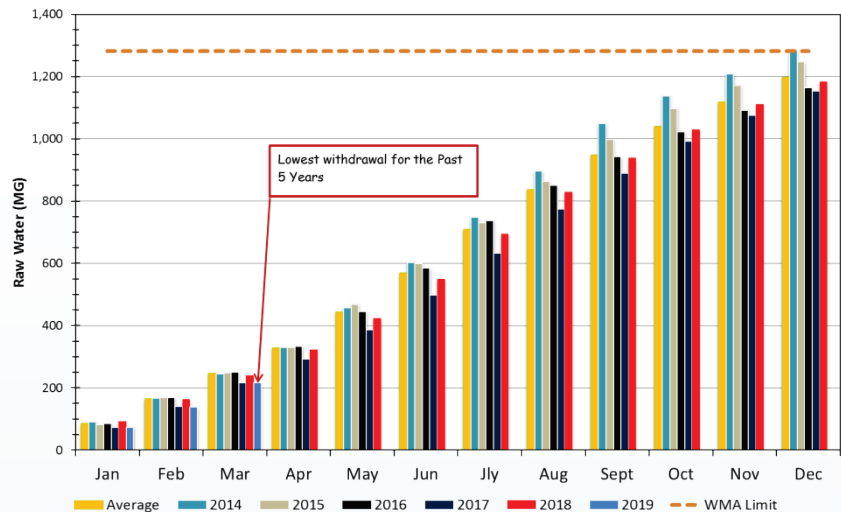
Installation of a new 900 gallon per minute pump at our Fulling Mill Cistern water supply is anticipated to be completed in April 2019. The Fulling Mill Cistern is recharged from a 1,000-foot horizontal collection well, a diversion from Accord Brook and a diversion from Fulling Mill Brook.

Aquarion is continuing to evaluate the Fulling Mill resource area as a possible way to increase our withdrawals from existing sources. We have begun a third phase of work to evaluate this alternative. Phase three includes additional field work and meetings with various stakeholders to discuss our proposed approach to store water in our Fulling Mill resource area during the winter and spring then release it to a tributary that leads to the Weir River to augment stream flows in the summer. Stakeholders include the Weir River Watershed Association, the Department of Environmental Protection, and Fisheries and Wildlife.

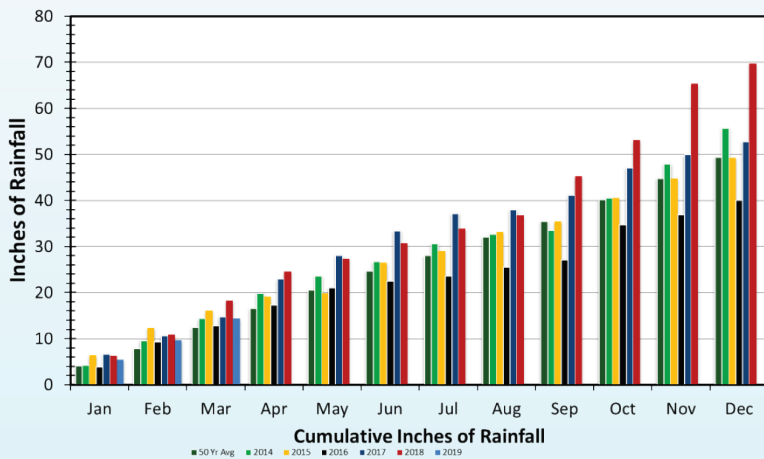
Water Supply and Demand

Water demands for March 2019 were below average for this time of year. The average amount of water pumped from our sources to meet demands in the month of March 2019 was 2.46 million gallons per day (MGD). The cumulative average daily usage for 2019 was 2.40 MGD, which is lowest cumulative withdrawal recorded in the past 9 years, and well within our regulatory limit of 3.51 MGD. We anticipate that water demands will begin to increase as the weather gets warmer. We are confident we will continue to meet the needs of our customers.

**Aquarion Water Company, MA
Cumulative Monthly Raw Water Flows (Sum of Sources)
Hingham Water Treatment Plant**



**Aquarion Water Company, MA
Cumulative Monthly Rainfall
Hingham Water Treatment Plant**



Weather Trends

The trend of greater than average precipitation has continued through the first 3 months of the year. The total amount of recorded precipitation for March 2019 was 4.67 inches, which is 0.16 inches above average for the month of March. The rolling 12-month cumulative precipitation for March 2019 was 17.11 inches above average. All of the recent precipitation has resulted in above average groundwater levels. In addition, the water level of Accord Pond remains at 104% capacity, representing a usable volume of over 286 million gallons, which is above average for this time of year. Accord Pond has been overflowing the dam spillway for several months.

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Community Outreach

Aquarion continues to give facility tours to students, donate to charitable events, and provide sponsorship and drinking water at community events. We enjoy participating in the communities we serve. If you haven't already please Like us on Facebook:

www.facebook.com/HinghamWaterFacts

Aquarion Water Company, MA

Monthly Average Water Withdrawals (including Hingham, Hull, & N. Cohasset)

Month/Yr	2011 (MGD)	2012 (MGD)	2013 (MGD)	2014 (MGD)	2015 (MGD)	2016 (MGD)	2017 (MGD)	2018 (MGD)	2019 (MGD)	Average (MGD)
January	3.19	2.75	2.78	2.62	2.65	2.77	2.34	2.98	2.35	2.76
February	3.08	2.62	2.72	2.60	3.08	2.87	2.43	2.54	2.38	2.74
March	2.84	2.69	2.61	2.57	2.60	2.65	2.44	2.48	2.46	2.61
April	2.88	3.20	2.42	2.76	2.73	2.74	2.57	2.75		2.76
May	3.47	3.73	3.21	4.06	4.41	3.59	3.04	3.30		3.60
June	4.35	3.49	3.94	4.75	4.34	4.66	3.73	4.16		4.18
July	4.87	4.06	4.63	4.64	4.23	4.94	4.31	4.67		4.54
August	3.87	3.14	4.34	4.79	4.32	3.67	4.57	4.36		4.13
September	2.89	2.81	4.03	5.09	4.51	3.05	3.84	3.65		3.73
October	3.01	2.35	3.57	2.89	3.21	2.59	3.35	2.96		2.99
November	2.70	2.48	2.93	2.36	2.46	2.29	3.22	2.72		2.64
December	2.73	2.59	2.66	2.46	2.46	2.33	2.54	2.34		2.51
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	3.25	2.40	3.27

MGD - Million Gallons per Day

* Includes Meter Corrections

Annual Water Management Act Registration Limit: 3.51 MGD

Aquarion Water Company, MA

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Month/Yr	2011 (MG)	2012 (MG)	2013 (MG)	2014 (MG)	2015 (MG)	2016 (MG)	2017 (MG)	2018 (MG)	2019 (MG)	Average (MG)
January	98.89	85.17	86.33	81.37	82.11	85.89	72.55	92.35	72.99	85.58
February	86.27	76.11	76.27	72.79	86.12	83.16	67.91	71.07	66.69	77.46
March	88.19	83.29	80.98	79.52	80.72	82.21	75.49	76.80	76.39	80.90
April	86.52	95.94	72.63	82.70	81.99	82.23	76.97	82.08		82.63
May	107.58	115.63	99.41	125.74	136.57	111.28	94.27	102.23		111.59
June	130.45	104.80	118.22	142.44	130.20	139.81	112.00	124.86		125.35
July	151.05	125.83	143.48	143.84	131.10	153.18	133.49	144.85		140.85
August	119.85	97.19	134.51	148.39	133.94	113.87	141.68	135.03		128.06
September	86.72	84.25	121.02	152.74	135.38	91.38	115.19	109.49		112.02
October	93.24	72.93	110.76	89.59	99.47	80.41	103.83	91.79		92.75
November	80.88	74.49	87.81	70.85	73.69	68.71	82.45	81.45		77.54
December	84.77	80.28	82.49	76.41	76.14	72.18	78.71	72.68		77.96
Total (MG)	1,214.42	1,095.91	1,213.91	1,266.36	1,247.43	1,164.31	1,154.57	1,184.69	216.07	1,192.70
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	3.25	2.40	3.26

MG - Million Gallons

MGD - Million Gallons per Day

* Includes meter corrections

Aquarion Water Company, MA
Monthly Water Supply Report
Hingham/Hull/Cohasset

Month
March

Year
2019

Monthly Supply Pumping Summary

Accord Pond	7.88	MG	10.3%
Scotland St Well #1	13.64	MG	17.9%
Scotland St Well #1A	4.92	MG	6.4%
Prospect St Well	8.12	MG	10.6%
Free St Well #2	0.00	MG	0.0%
Free St Well #2A	19.15	MG	25.1%
Free St Well #3	0.00	MG	0.0%
Free St Well #4	1.62	MG	2.1%
Free St Well #5	9.28	MG	12.1%
Fulling Mill Well #1	10.73	MG	14.0%
Fulling Mill Well #2	1.04	MG	1.4%
Fulling Mill Cistern	0.00	MG	0.0%
Downing St Well	0.00	MG	0.0%
	76.39	MG	100.0%
	2.46	MGD	

Accord Pond (last day of the month)

Water Elevation (Ft)	141.9
Usable Volume (MG)	278.0
Capacity (%)	101

MG - Million Gallons

MGD - Million Gallons Per Day

Statistics

Pumping

Maximum Day (MGD)	2.98
Date	03/25/19

Minimum Day (MGD)	2.22
Date	03/22/19

Year to Date

Maximum Day (MGD)	2.98
Date	03/25/19

Average Day (MGD)	2.48
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Temperature (°F)

Maximum	69.8
Date	03/30/19

Minimum	15.4
Date	03/06/19

Precipitation

Monthly Total (Inches)	4.67
Annual Total (Inches)	14.35