



Water Supply Update

Serving the Communities of Hingham, Hull, & North Cohasset

News and Notes

- Our fall flushing program began on Sunday evening, October 14. As of October 31, we have completed flushing our system in north Hingham and Cohasset. We are continuing to flush our water system in Hull, and expect to be completed by the second week in November. Flushing is being conducted in the evenings from 9:00 p.m. until 5:00 a.m., Sundays through Thursdays. Detailed information on the streets to be flushed each evening can be found on our website.
- Work on the Shallow Water Main Replacement project is complete. New water mains and services have been installed on Logan Avenue and Alsada Road in Hull and on Elmore Road in Hingham. Phase two is targeted to be completed in spring 2019, and includes replacing the mains on Hayes Road in Hingham and two streets in Hull – Maple Lane and a portion of Cadish Avenue. Once this project is complete, we will be able to eliminate the use of bleeders, which will save approximately 1.2 million gallons of water per year.
- We just completed a 570 feet extension of new 8” ductile iron water main down Bay Avenue East. The project was coordinated closely with the Town of Hull and their Bay Avenue East roadway reconstruction and drainage improvement project. The project included new services for several of our existing customers on Bay Avenue East, and a new fire hydrant to improve fire protection for the area.
- We are wrapping up design and permitting activities for the Beach Avenue water main replacement project in Hull. The project includes replacing over 3,000 feet of old unlined cast iron and galvanized pipe under the sand dune with new 8” and 6” ductile iron water main, replacing over 50 customer service connections, and the installation of 6 new fire hydrants. We are working with the Town of Hull on an easement in order to loop the system and provide greater reliability of service. Once completed, all of the remaining bleeders associated with the distribution system will be eliminated, saving over 2.5 million gallons per year.
- Our customer water conservation program continues to be a great success. Since March 2017, we have completed the replacement of over 700 toilets with new water conservation units for over 425 customers. The work completed has resulted in water conservation savings of approximately 11,400 gallons per day (approximately 4.16 million gallons per year)! If you have not already had the opportunity to sign up for our customer water conservation program, or tell others about it, please visit our website at www.aquarionwater.com/conservationoffers.

💧 We want to thank our customers for participating in the seasonal water restrictions in 2018. Twice a week restrictions ended on October 15, 2018. Our customer's conservation efforts helped us to stay within our registered annual water withdrawal limits with the Massachusetts Department of Environmental Protection and we continue to operate as responsible stewards of the environment.

Water Resource Management

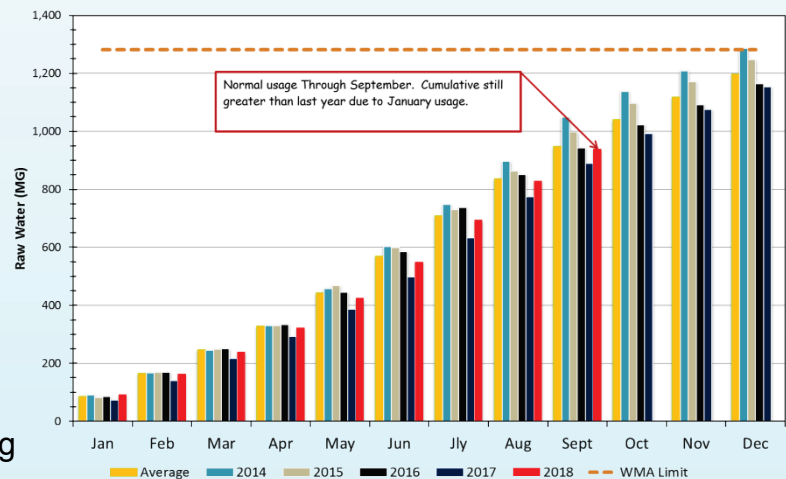
Accord Pond and our groundwater supply wells are in good condition after the summer demands. Accord Pond has been taken off line to recharge over the fall, winter, and spring. All of our wells are scheduled to be tested this November in order to schedule cleanings and rehabilitation work this coming winter. Next year, we plan to install a new pump for our Fulling Mill Cistern water supply. 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. In September, we met with various state regulatory officials 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 to the Weir River to augment stream flows in the summer.

Water Supply and Demand

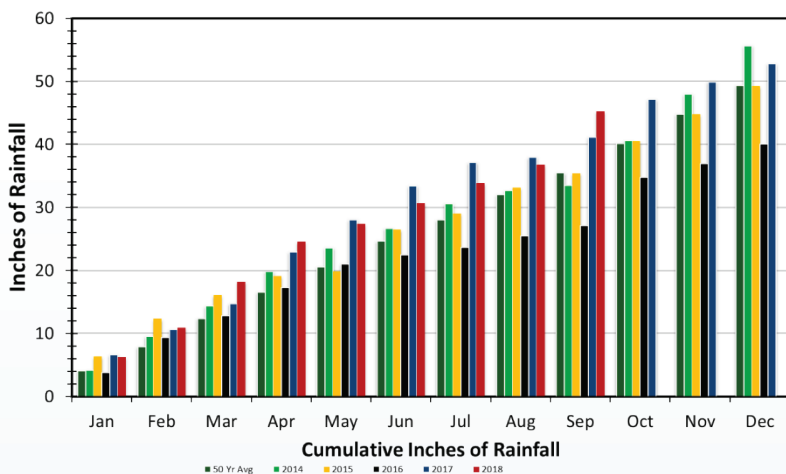
Water demands for September 2018 were slightly greater than average for this time of year. The average amount of water pumped from our sources to meet demands in the month of September 2018 was 3.65 million gallons per day (MGD). The cumulative average daily usage through September (3.44 MGD) is greater than last year at this time but the cumulative usage is less than average for this time of year. We anticipate that water demands will steadily decline through the coming fall and winter and we are confident that 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 total amount of recorded precipitation for September 2018 was 8.46 inches, which is 5.01 inches above the historic average precipitation for the month of September. Cumulative precipitation through the month of September is 45.23 inches, which is 9.75 inches above average.

Recent precipitation has allowed our aquifer to remain at normal groundwater levels for this time of year. In addition, the water level of Accord Pond is at 48.5% capacity, representing a usable volume of

over 133.4 million gallons, which is about average for this time of year. The Pond was taken off-line in October to refill and recharge.

Community Outreach

Aquarion was pleased to provide water coolers for a number of community events in September. In addition, we are getting ready to kick off our “Water All Around You” education program with the 5th grade elementary classes in Hingham and Hull. Aquarion sponsors and collaborates with the North and South River Watershed Association (NSRWA) on this wonderful educational event. To learn more about the WaterSmart program and the NSRWA annual meeting on November 2, 2018 please visit their website: <http://www.nsrwa.org/watersmart/>

Aquarion continues to host a number of public open forums regarding the Town of Hingham’s Acquisition Study Group efforts on purchasing Aquarion’s water system in Hingham, Hull, and North Cohasset. Visit our website to learn more about these forums and our award winning water system at www.aquarionwater.com.

We welcome the public and Town officials to attend the forums and learn how water customers in Hingham, Hull and North Cohasset will pay \$3 million more in their water bills under Hingham Town ownership after Hingham officials fix the errors in their financial model. In addition, if Town officials correct the financial model to reflect Aquarion’s annual operations and maintenance (O&M) growth rate of 2.2%, customers will pay approximately \$40 million more over the next 31 years under Town ownership.

If you haven’t already please Like us on Facebook: <https://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)	Average (MGD)
January	3.19	2.75	2.78	2.62	2.65	2.77	2.34	2.98	2.73
February	3.08	2.62	2.72	2.60	3.08	2.87	2.43	2.54	2.77
March	2.84	2.69	2.61	2.57	2.60	2.65	2.44	2.48	2.63
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	3.64
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	4.53
August	3.87	3.14	4.34	4.79	4.32	3.67	4.57	4.36	4.10
September	2.89	2.81	4.03	5.09	4.51	3.05	3.84	3.65	3.75
October	3.01	2.35	3.57	2.89	3.21	2.59	3.35		3.00
November	2.70	2.48	2.93	2.36	2.46	2.29	3.22		2.63
December	2.73	2.59	2.66	2.46	2.46	2.33	2.54		2.54
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	3.44	3.27

MGD - Million Gallons per Day

* Includes Meter Corrections

Annual Water Management Act Registration Limit: 3.51 MGD

Aquarion Water Company, MA

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

Month/Yr	2011 (MG)	2012 (MG)	2013 (MG)	2014 (MG)	2015 (MG)	2016 (MG)	2017 (MG)	2018 (MG)	Average (MG)
January	98.89	85.17	86.33	81.37	82.11	85.89	72.55	92.35	84.61
February	86.27	76.11	76.27	72.79	86.12	83.16	67.91	71.07	78.38
March	88.19	83.29	80.98	79.52	80.72	82.21	75.49	76.80	81.49
April	86.52	95.94	72.63	82.70	81.99	82.23	76.97	82.52	82.71
May	107.58	115.63	99.41	125.74	136.57	111.28	94.27	102.23	112.93
June	130.45	104.80	118.22	142.44	130.20	139.81	112.00	124.86	125.42
July	151.05	125.83	143.48	143.84	131.10	153.18	133.49	144.85	140.28
August	119.85	97.19	134.51	148.39	133.94	113.87	141.68	135.03	127.06
September	86.72	84.25	121.02	152.74	135.38	91.38	115.19	109.49	112.38
October	93.24	72.93	110.76	89.59	99.47	80.41	103.83		92.89
November	80.88	74.49	87.81	70.85	73.69	68.71	82.45		76.98
December	84.77	80.28	82.49	76.41	76.14	72.18	78.71		78.71
Total (MG)	1,214.42	1,095.91	1,213.91	1,266.36	1,247.43	1,164.31	1,154.57	939.20	1,200.39
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	3.44	3.28

MG - Million Gallons

MGD - Million Gallons per Day

* Includes meter corrections

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

Month
September

Year
2018

Monthly Supply Pumping Summary

Accord Pond	26.30	MG	24.0%
Scotland St Well #1	13.74	MG	12.6%
Scotland St Well #1A	1.44	MG	1.3%
Prospect St Well	4.43	MG	4.0%
Free St Well #2	16.64	MG	15.2%
Free St Well #2A	15.13	MG	13.8%
Free St Well #3	0.00	MG	0.0%
Free St Well #4	15.87	MG	14.5%
Free St Well #5	4.00	MG	3.7%
Fulling Mill Well #1	9.58	MG	8.8%
Fulling Mill Well #2	2.35	MG	2.1%
Fulling Mill Cistern	0.00	MG	0.0%
Downing St Well	0.00	MG	0.0%
	109.49	MG	100.0%
	3.65	MGD	

Accord Pond (last day of the month)

Water Elevation (Ft)	137.6
Usable Volume (MG)	133.4
Capacity (%)	48.5

MG - Million Gallons

MGD - Million Gallons Per Day

Statistics

Pumping

Maximum Day (MGD) 5.53
 Date 09/02/18

Minimum Day (MGD) 2.82
 Date 09/14/18

Year to Date

Maximum Day (MGD) 6.33
 Date 07/04/18

Average Day (MGD) 3.44

Temperature (°F)

Maximum 97.6
 Date 09/06/18

Minimum 52.5
 Date 09/29/18

Precipitation

Monthly Total (Inches) 8.46
 Annual Total (Inches) 45.23