

Water Supply Update

Serving the Communities of Hingham, Hull, & North Cohasset

News and Notes

- At a ceremony held at the State House in Boston on May 8, Aquarion received an award from the Massachusetts Department of Environmental Protection for Outstanding Performance. The award is based on water quality and going above and beyond what a public water system must do for regulatory compliance. Of the 1,735 public water systems in the Commonwealth, only 19 medium (population served > 10,000) and large (population served > 50,000) public water systems receiving a similar award for 2017.
- Despite the recent wet weather seasonal water restrictions remain in effect from April 15 through October 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 are minimized and more water goes to the plants' roots. For more information on maintaining a health lawn while also conserving water please visit our website: www.aquarionwater.com/watering
- For the past several weeks you may have noticed the scaffolding and shrouding surrounding the Accord tank. Our contractor has worked long days and weekends upgrading and resurfacing the tank. Painting has been completed and the shrouding and scaffolding is now being removed. The Accord Tank was placed back into service for Memorial Day weekend. For more information on the Accord Tank project please visit our website: www.aquarionwater.com
- Our water main replacement project on Sherwood Road, Butler Road, Smith Road, was completed and placed on-line the second week in May. The project included over 2,400 feet of new eight-inch pipe, two new fire hydrants, and new water services for 33 customers. The Hingham Department of Public Works will be reconstructing and repaving the roads this May and June.
- We are ready to begin our next water main replacement project in 2018 referred to as the Shallow Water Main replacement project. This project will be completed in two phases over





the next two years. Phase I includes the replace of approximately 2,300 feet of shallow buried water mains in the Towns of Hingham and Hull (Elmore Road, Hayes Road, Logan Avenue, and Alsada Road). The project will eliminate the need for bleeder valves, which will save approximately 1.2 million gallons of water per year. Construction is ready to begin as soon as we obtain Grant of Location approval from the Hingham and Hull Boards of Selectmen.

- 💧 Hydrant flushing to clean the water mains is ongoing and scheduled to be completed for one third of our system (the north Hingham portion) by the end of May. The next phase of flushing will begin in the fall and will target the rest of north Hingham, Cohasset, and Hull. Flushing is conducted between the hours of 9 p.m. and 5 a.m. Weekly updates can be found on our website: www.aquarionwater.com
- 💧 Our customer water conservation program is ongoing. Since March 2017 we have completed the replacement of over 475 toilets with new water conservation units for over 270 customers. The work completed has resulted in water conservation savings of approximately 7,100 gallons per day (nearly 2.6 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.

Water Resource Management

Irrigation restrictions are just one of the solutions that Aquarion is implementing as part of its water resource management program. Aquarion has begun work on the second phase of a new source study which is evaluating a unique approach to increase our available groundwater withdrawals while also augmenting flow to the Weir River. The concept involves diverting excess water from Accord Brook and storing it in our existing kettle ponds and Fulling Mill Pond. This stored water would then be managed and released during periods of low stream flow in the summer to augment the flow of the Weir River. Aquarion is working closely with the Weir River Watershed Association and the Massachusetts Department of Environmental Protection (MassDEP) to evaluate whether this solution can provide both a benefit to the environment (in terms of healthy stream flows) while also allowing for increased withdrawals from our existing water supply sources located in the Weir River Watershed.

Our annual well cleaning and maintenance program was completed in April. Since January we cleaned and rehabilitated six groundwater supply wells in preparation for warm weather demands. In addition, we anticipate completing a capital project at our Free Street Well #2 in May. The project includes replacing a pump and various other mechanical and electrical equipment to increase the pumping capacity of this well.

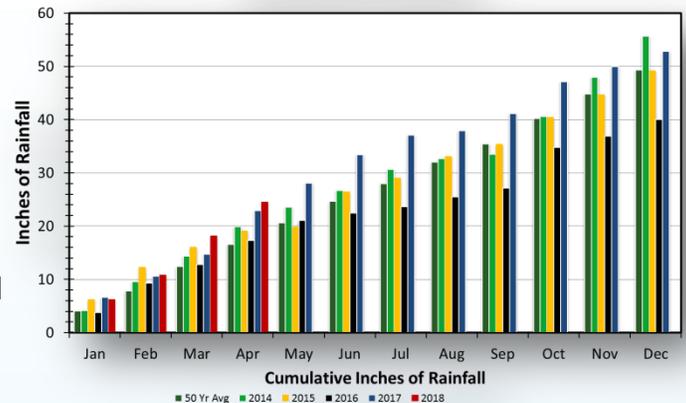
In addition, our contractor completed a leak detection survey our entire water distribution system in May. All of the water main leaks that were found have been repaired and we are working with the Town fire departments to coordinate the leaking fire hydrants that were found.

Weather Trends – Is It Really Spring?

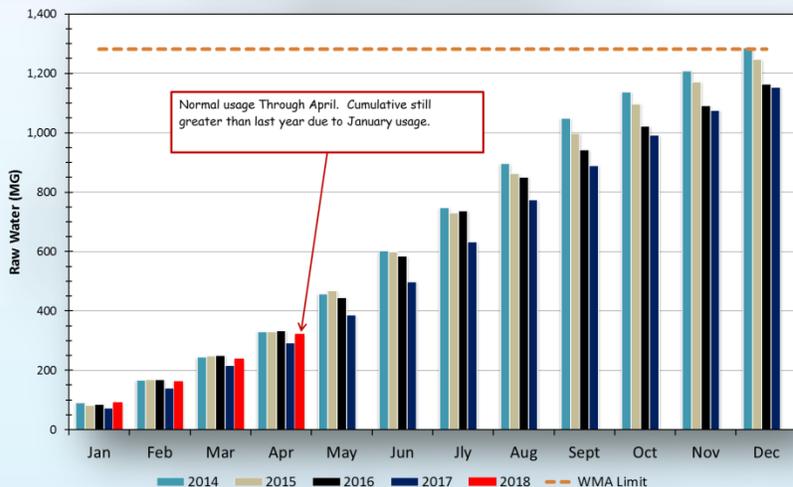
The total amount of recorded precipitation for April 2018 was 6.35 inches, which is 2.19 inches above the historic average precipitation for the month of April. Cumulative precipitation through the month of April is 24.58 inches, which is 8.02 inches greater than the average for this time of year.

All of this precipitation has recharged our aquifer and resulted in normal groundwater levels for this time of year. In addition, Accord Pond is still at 100% capacity and is overflowing to Accord Brook.

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



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



Water Supply and Demand – Usage Trends Normal

Water demands for April 2018 were normal for this time of year. The average amount of water pumped from our sources to meet demands in April 2018 was 2.75 million gallons per day (MGD). Although the cumulative usage through April is greater than last year at this time, the cumulative usage is the 3rd lowest in the past eight years. We anticipate that water demands will increase in May due to distribution system flushing and the onset of warmer temperatures.

Customer Service/Community Outreach - Supporting and Enhancing the Communities Where We Live, Work, and Operate.

[Click here to learn about our Accord Water Tank Project](#)

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		3.64
June	4.35	3.49	3.94	4.75	4.34	4.66	3.73		4.18
July	4.87	4.06	4.63	4.64	4.23	4.94	4.31		4.53
August	3.87	3.14	4.34	4.79	4.32	3.67	4.57		4.10
September	2.89	2.81	4.03	5.09	4.51	3.05	3.84		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	2.69	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		112.93
June	130.45	104.80	118.22	142.44	130.20	139.81	112.00		125.42
July	151.05	125.83	143.48	143.84	131.10	153.18	133.49		140.28
August	119.85	97.19	134.51	148.39	133.94	113.87	141.68		127.06
September	86.72	84.25	121.02	152.74	135.38	91.38	115.19		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	322.73	1,200.39
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	2.69	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
April

Year
2018

Monthly Supply Pumping Summary

Accord Pond	6.39	MG	7.7%
Scotland St Well #1	13.08	MG	15.8%
Scotland St Well #1A	5.74	MG	6.9%
Prospect St Well	7.31	MG	8.8%
Free St Well #2	0.00	MG	0.0%
Free St Well #2A	20.71	MG	25.0%
Free St Well #3	0.64	MG	0.8%
Free St Well #4	16.45	MG	19.9%
Free St Well #5	6.81	MG	8.2%
Fulling Mill Well #1	4.29	MG	5.2%
Fulling Mill Well #2	1.09	MG	1.3%
Fulling Mill Cistern	0.00	MG	0.0%
Downing St Well	0.20	MG	0.2%
	82.72	MG	100.0%
	2.67	MGD	

Accord Pond (last day of the month)

Water Elevation (Ft)	142.3
Usable Volume (MG)	286.0
Capacity (%)	104

MG - Million Gallons

MGD - Million Gallons Per Day

Statistics

Pumping	
Maximum Day (MGD)	3.22
Date	04/30/18
Minimum Day (MGD)	2.34
Date	04/04/18
Year to Date	
Maximum Day (MGD)	3.53
Date	01/16/18
Average Day (MGD)	2.69
Temperature (°F)	
Maximum	69.1
Date	04/24/18
Minimum	29.3
Date	04/05/18
Precipitation	
Monthly Total (Inches)	6.35
Annual Total (Inches)	24.58