

Water Supply Update

Serving the Communities of Hingham, Hull, & North Cohasset

News and Notes

It is with great pride that I report to you that our system serving Hingham, Hull, and North Cohasset will be receiving an award from the Massachusetts Department of Environmental Protection (MassDEP) for Outstanding Performance. For over two decades, MassDEP has given this award to recognize a select group of dedicated water professionals for their outstanding accomplishments in delivering consistent and safe drinking water to its customers. All of the state's 1,735 public water systems are eligible for this award, but only 58 were chosen by MassDEP for this honor. MassDEP has announced that it will honor Aquarion's achievement at a May 8 ceremony at the State House in Boston, MA. Aquarion is one of only 19 medium (population served > 10,000) and large (population served > 50,000) public water systems receiving a similar award for 2017.



Aquarion implemented 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, 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. Historically, in the water industry, when the demand for water increased in a community, only one solution was considered: constructing a new source of water. This approach is usually costly, resulting in higher water rates, and can take many years to get regulatory approval. Water conservation is simply better for the environment. Customers can maintain healthy looking lawns with twice-weekly irrigation and normal precipitation.

The Accord Tank rehabilitation project is proceeding. Painting of the interior is nearly complete and soon the exterior will be encapsulated with a containment shroud. We are expecting the work will be completed by the end of May. During the planning phase of this project, Aquarion upgraded its delivery facilities, so the water needs of customers in South Hingham could be met while the tank is empty. However, to ensure that essential water needs of South Hingham (including water for everyday use and for firefighting) can be safely met, Aquarion is requiring customers in South Hingham (homes south of Ward Street, Cushing Street, and South

Pleasant Street) to wait until May 25 before turning on and using their irrigation systems. For more information on the Accord Tank project, please visit <http://www.aquarionwater.com>

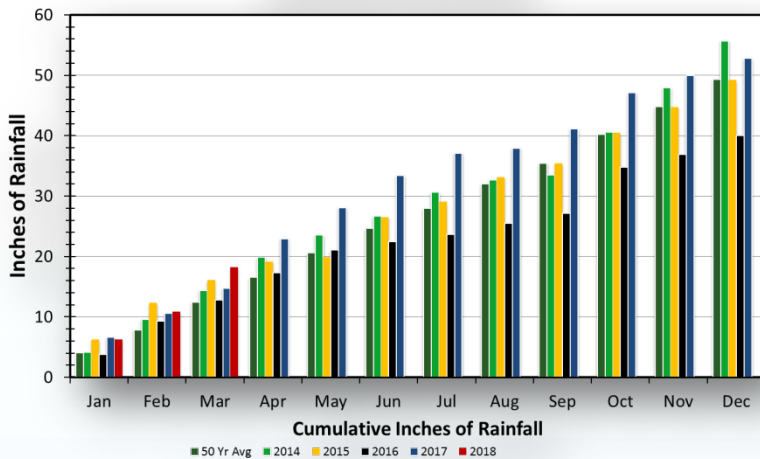
- Construction associated with our water main replacement project on Sherwood Road, Butler Road, Smith Road, is nearly complete. Almost all of the new main is installed and we began connecting customers to the new water main on April 20. We anticipate that all water utility work will be completed by mid-May, before the Hingham DPW begins repaving.
- Hydrant water main flushing began the second week of April, and has since been delayed due to the weather. Flushing will commence again for three weeks beginning Sunday night, May 13. Flushing will take place in North Hingham between the hours of 9 p.m. and 5 a.m. Weekly updates can be found at www.aquarionwater.com, under the “Alerts and Outages” section. Our plan is to flush North Hingham this spring, then proceed to flush Cohasset and Hull in the fall.
- Our customer water conservation program continues. Since March 2017, we have replaced over 400 toilets with new water conservation units for over 250 customers. 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 completed the first phase of a study to evaluate a unique approach to increase our available groundwater withdrawals, while also augmenting flow to the Weir River. The concept is called “flood skimming” and 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.

We began our annual well cleaning and maintenance projects in February and anticipate completing the remaining wells targeted for rehabilitation this April. In addition to routine maintenance on these 5 wells, we hope to complete capital improvements at our Free Street Well #2 in May, where we are replacing a pump and various other mechanical and electrical equipment to increase the pumping capacity of this supply. In addition, our contractors began to survey our entire water distribution system for leaks in April, with hopes to complete the survey in early May. Two of the leaks found have already been repaired.

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



Weather Trends – Is It Really Spring?

The total amount of recorded precipitation for March 2018 was 7.34 inches, which is 2.83 inches above the historic average precipitation for the month of March. Cumulative precipitation through the month of March is 18.23 inches, which is 5.83 inches greater than the average for this time of year.

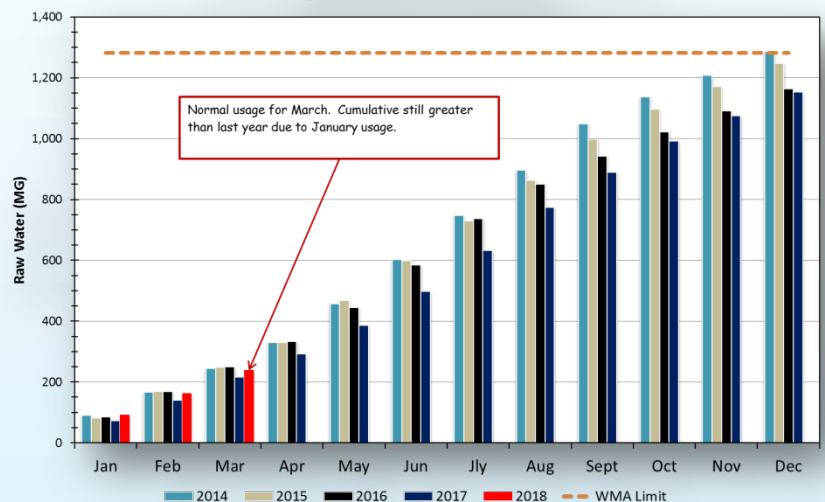
All of this precipitation has recharged our aquifer and resulted in normal groundwater

levels for this time of year. In addition, Accord Pond reached 100% capacity in March and began overflowing to Accord Brook.

Water Supply and Demand – Usage Trends Return to Normal

Water demands for March 2018 were normal. The average amount of water pumped from our sources to meet demands in March 2018 was 2.48 million gallons per day (MGD), a 0.06 MGD decrease in usage compared with last month and a 0.5 MGD decrease in usage compared with January 2018. Although the cumulative usage through March is greater than last year at this time, the cumulative usage is the third lowest in the past eight years. We anticipate that water demands will increase in April and May due to distribution system flushing and the onset of warmer temperatures.

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





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

No matter the season, participating in community activities is part of who we are at Aquarion.

In March, we continued to provide tours for fifth grade students. Children from Foster School attended the tours wearing their 5th grade class t-shirts sponsored by Aquarion. They learned first hand about the journey our water takes from source to tap.

On March 28, Aquarion participated in the 4th annual Pizzapalooza at Hingham High school. This event, sponsored by the Hingham Business District and the South Shore Chamber of Commerce, benefits South Shore SNAP (Special Needs Athletic Program). Aquarion supplied water for over one thousand thirsty residents who were tasked with sampling pizza from local restaurants and picking a winner. Aquarion has participated in this new Hingham tradition since day one.

We also launched our annual rain barrel program. Details can be found by visiting www.aquarionwater.com/rainbarrels.

Interested in learning more about our water system? Know anyone who is? Consider joining our Customer Advisory Board. For more information, please contact Ronit Goldstein at rgoldstein@aquarionwater.com.

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	2.79
February	3.08	2.62	2.72	2.60	3.08	2.87	2.43	2.54	2.83
March	2.84	2.69	2.61	2.57	2.60	2.65	2.44	2.48	2.66
April	2.88	3.20	2.42	2.76	2.73	2.74	2.57		2.79
May	3.47	3.73	3.21	4.06	4.41	3.59	3.04		3.74
June	4.35	3.49	3.94	4.75	4.34	4.66	3.73		4.26
July	4.87	4.06	4.63	4.64	4.23	4.94	4.31		4.56
August	3.87	3.14	4.34	4.79	4.32	3.67	4.57		4.02
September	2.89	2.81	4.03	5.09	4.51	3.05	3.84		3.73
October	3.01	2.35	3.57	2.89	3.21	2.59	3.35		2.94
November	2.70	2.48	2.93	2.36	2.46	2.29	3.22		2.54
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	2.67	3.28

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	86.62
February	86.27	76.11	76.27	72.79	86.12	83.16	67.91	71.07	80.12
March	88.19	83.29	80.98	79.52	80.72	82.21	75.49	76.80	82.49
April	86.52	95.94	72.63	82.70	81.99	82.23	76.97		83.66
May	107.58	115.63	99.41	125.74	136.57	111.28	94.27		116.04
June	130.45	104.80	118.22	142.44	130.20	139.81	112.00		127.65
July	151.05	125.83	143.48	143.84	131.10	153.18	133.49		141.41
August	119.85	97.19	134.51	148.39	133.94	113.87	141.68		124.62
September	86.72	84.25	121.02	152.74	135.38	91.38	115.19		111.92
October	93.24	72.93	110.76	89.59	99.47	80.41	103.83		91.07
November	80.88	74.49	87.81	70.85	73.69	68.71	82.45		76.07
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	240.22	1,200.39
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	2.67	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
March

Year
2018

Monthly Supply Pumping Summary

Accord Pond	0.90	MG	1.2%
Scotland St Well #1	10.37	MG	13.5%
Scotland St Well #1A	2.76	MG	3.6%
Prospect St Well	7.25	MG	9.4%
Free St Well #2	0.00	MG	0.0%
Free St Well #2A	24.66	MG	32.1%
Free St Well #3	0.00	MG	0.0%
Free St Well #4	11.81	MG	15.4%
Free St Well #5	7.85	MG	10.2%
Fulling Mill Well #1	9.03	MG	11.8%
Fulling Mill Well #2	2.17	MG	2.8%
Fulling Mill Cistern	0.00	MG	0.0%
Downing St Well	0.00	MG	0.0%
	76.80	MG	100.0%
	2.48	MGD	

Accord Pond (last day of the month)

Water Elevation (Ft)	142.2
Usable Volume (MG)	286.0
Capacity (%)	104

MG - Million Gallons

MGD - Million Gallons Per Day

Statistics

Pumping

Maximum Day (MGD)	2.73
Date	03/07/18

Minimum Day (MGD)	2.29
Date	03/21/18

Year to Date

Maximum Day (MGD)	3.53
Date	01/16/18

Average Day (MGD)	2.67
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Temperature (°F)

Maximum	69.9
Date	03/31/18

Minimum	21.0
Date	03/17/18

Precipitation

Monthly Total (Inches)	7.34
Annual Total (Inches)	18.23