



## Water Supply Update

*Serving the Communities of Hingham, Hull, & North Cohasset*

### News and Notes

- Distribution System Flushing scheduled to begin in March – Weather permitting, distribution system flushing is scheduled to begin Sunday, March 24, 2019. Flushing will be conducted in the evenings, 9 p.m. to 5 a.m., Sunday through Thursday. Flushing will begin in northeast Hingham along East Street, then proceed to Cohasset and Hull. We expect the spring flushing program to take 5 to 7 weeks to complete. Additional information will be provided in the local newspapers and the daily schedule will be posted on our website. Customers in the affected areas will receive a Code Red message if they have signed up for our free notification system at [www.aquarionwater.com/codered](http://www.aquarionwater.com/codered)
- Unaccounted for water update – Preliminary results for 2018 indicated that our measured unaccounted for water volume for 2018 was 13%. We are still waiting for fire hydrant usage reports from several town departments, which should result in lower final numbers. 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 moving forward – Weather permitting, construction is targeted to begin on three of our water main replacement projects in March: Beach Avenue in Hull, Cadish Avenue in Hull, and Bradley Hill Road/Bremer Circle in Hingham. 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, Crow Point Lane, Bulow Circle, Wompatuck Road, and Downing Street in Hingham later this year in coordination with the town's paving program.
- Increasing the water supply capacity – We will begin the third phase of engineering work for our Fulling Mill resource area new source project. Field work is scheduled to begin the second week in April 2019. Planned activities include groundwater level measurements, stream flow testing, and additional topographic survey information to determine water capacity within existing impoundments. We will also continue to review our work with stakeholders including the Weir River Watershed Association, the Department of Environmental Protection, and Fisheries and Wildlife.
- Customer conservation program adds protection to Weir River Watershed - Our customer water conservation program is approaching its third year and continues to provide conservation savings for our valuable resources . Since March 2017, we have worked with 497 customers and replaced over 846 toilets in homes in Hingham, Hull, and north Cohasset. In addition, 17 customers have received a \$250 rebate towards the purchase and installation

*Stewards of the Environment™*

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 13,575 gallons per day or 4.96 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/conervationoffers](http://www.aquarionwater.com/conervationoffers).

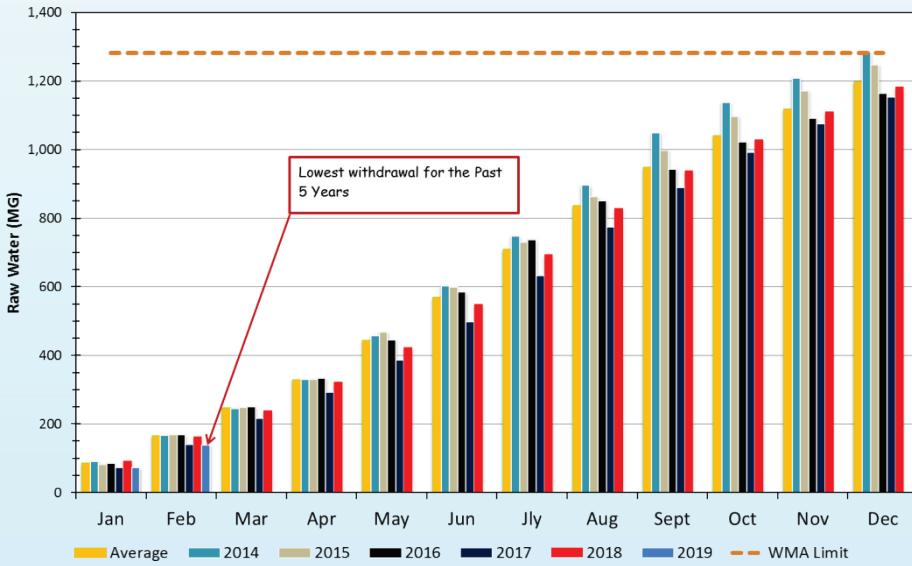
### Water Resource Management

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 winter we will be cleaning and rehabilitating several wells to prepare them for the spring.

Installation of a new 900 gallon per minute pump at our Fulling Mill Cistern water supply is anticipated to be completed in March 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 3 includes additional field work and meeting 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.

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



### Water Supply and Demand

Water demands for February 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 February 2019 was 2.38 million gallons per day (MGD). The cumulative average daily usage for 2019 was 2.37 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 continue to remain low through the winter and

we are confident we will continue to meet the needs of our customers.

## Weather Trends

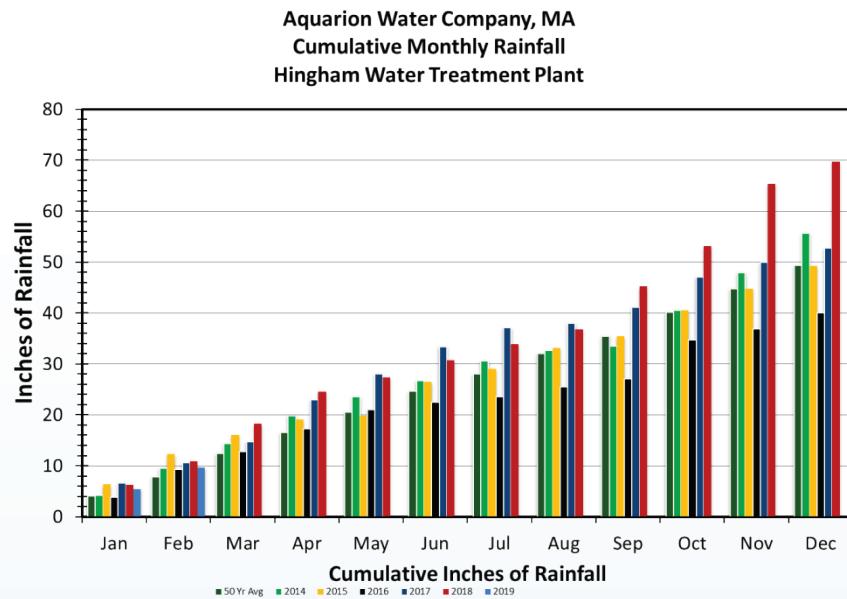
The trend of greater than average precipitation has continued through the first 2 months of the year. The total amount of recorded precipitation for February 2019 was 4.20 inches, which is 0.35 inches above average for the month of February. The rolling 12-month cumulative precipitation for February 2019 was 19.78 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.

## Community Outreach

Our 5<sup>th</sup> grade school tour program continues to provide school children with a tour of our Water Treatment Plant and builds a foundation of respect for protecting our precious water supply resources. A great newspaper article about the program was recently published in the Hingham Journal: <https://hingham.wickedlocal.com/news/20190315/hingham-5th-graders-participate-in-water-all-around-you-program>

Aquarion's annual rain barrel program is under way. For more information on the program, including ordering and pick up information please visit [www.aquarionwater.com/rainbarrels](http://www.aquarionwater.com/rainbarrels)

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)**

<b>Month/Yr</b>	<b>2011 (MGD)</b>	<b>2012 (MGD)</b>	<b>2013 (MGD)</b>	<b>2014 (MGD)</b>	<b>2015 (MGD)</b>	<b>2016 (MGD)</b>	<b>2017 (MGD)</b>	<b>2018 (MGD)</b>	<b>2019 (MGD)</b>	<b>Average (MGD)</b>
<b>January</b>	3.19	2.75	2.78	2.62	2.65	2.77	2.34	2.98	2.35	<b>2.76</b>
<b>February</b>	3.08	2.62	2.72	2.60	3.08	2.87	2.43	2.54	2.38	<b>2.74</b>
<b>March</b>	2.84	2.69	2.61	2.57	2.60	2.65	2.44	2.48		<b>2.61</b>
<b>April</b>	2.88	3.20	2.42	2.76	2.73	2.74	2.57	2.75		<b>2.76</b>
<b>May</b>	3.47	3.73	3.21	4.06	4.41	3.59	3.04	3.30		<b>3.60</b>
<b>June</b>	4.35	3.49	3.94	4.75	4.34	4.66	3.73	4.16		<b>4.18</b>
<b>July</b>	4.87	4.06	4.63	4.64	4.23	4.94	4.31	4.67		<b>4.54</b>
<b>August</b>	3.87	3.14	4.34	4.79	4.32	3.67	4.57	4.36		<b>4.13</b>
<b>September</b>	2.89	2.81	4.03	5.09	4.51	3.05	3.84	3.65		<b>3.73</b>
<b>October</b>	3.01	2.35	3.57	2.89	3.21	2.59	3.35	2.96		<b>2.99</b>
<b>November</b>	2.70	2.48	2.93	2.36	2.46	2.29	3.22	2.72		<b>2.64</b>
<b>December</b>	2.73	2.59	2.66	2.46	2.46	2.33	2.54	2.34		<b>2.51</b>
<b>Average (MGD)</b>	<b>3.32</b>	<b>2.99</b>	<b>3.33</b>	<b>3.47</b>	<b>3.42</b>	<b>3.18</b>	<b>3.16</b>	<b>3.25</b>	<b>2.37</b>	<b>3.27</b>

MGD - Million Gallons per Day

\* Includes Meter Corrections

Annual Water Management Act Registration Limit: 3.51 MGD

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<b>Month/Yr</b>	<b>2011 (MG)</b>	<b>2012 (MG)</b>	<b>2013 (MG)</b>	<b>2014 (MG)</b>	<b>2015 (MG)</b>	<b>2016 (MG)</b>	<b>2017 (MG)</b>	<b>2018 (MG)</b>	<b>2019 (MG)</b>	<b>Average (MG)</b>
<b>January</b>	98.89	85.17	86.33	81.37	82.11	85.89	72.55	92.35	72.99	<b>85.58</b>
<b>February</b>	86.27	76.11	76.27	72.79	86.12	83.16	67.91	71.07	66.69	<b>77.46</b>
<b>March</b>	88.19	83.29	80.98	79.52	80.72	82.21	75.49	76.80		<b>80.90</b>
<b>April</b>	86.52	95.94	72.63	82.70	81.99	82.23	76.97	82.08		<b>82.63</b>
<b>May</b>	107.58	115.63	99.41	125.74	136.57	111.28	94.27	102.23		<b>111.59</b>
<b>June</b>	130.45	104.80	118.22	142.44	130.20	139.81	112.00	124.86		<b>125.35</b>
<b>July</b>	151.05	125.83	143.48	143.84	131.10	153.18	133.49	144.85		<b>140.85</b>
<b>August</b>	119.85	97.19	134.51	148.39	133.94	113.87	141.68	135.03		<b>128.06</b>
<b>September</b>	86.72	84.25	121.02	152.74	135.38	91.38	115.19	109.49		<b>112.02</b>
<b>October</b>	93.24	72.93	110.76	89.59	99.47	80.41	103.83	91.79		<b>92.75</b>
<b>November</b>	80.88	74.49	87.81	70.85	73.69	68.71	82.45	81.45		<b>77.54</b>
<b>December</b>	84.77	80.28	82.49	76.41	76.14	72.18	78.71	72.68		<b>77.96</b>
<b>Total (MG)</b>	<b>1,214.42</b>	<b>1,095.91</b>	<b>1,213.91</b>	<b>1,266.36</b>	<b>1,247.43</b>	<b>1,164.31</b>	<b>1154.57</b>	<b>1184.69</b>	<b>139.68</b>	<b>1,192.70</b>
<b>Average (MGD)</b>	<b>3.32</b>	<b>2.99</b>	<b>3.33</b>	<b>3.47</b>	<b>3.42</b>	<b>3.18</b>	<b>3.16</b>	<b>3.25</b>	<b>2.37</b>	<b>3.26</b>

MG - Million Gallons

MGD - Million Gallons per Day

\* Includes meter corrections

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

**Month**  
February

**Year**  
2019

**Monthly Supply Pumping Summary**

Accord Pond	7.73	MG	11.6%
Scotland St Well #1	12.61	MG	18.9%
Scotland St Well #1A	4.75	MG	7.1%
Prospect St Well	7.26	MG	10.9%
Free St Well #2	0.00	MG	0.0%
Free St Well #2A	15.06	MG	22.6%
Free St Well #3	0.00	MG	0.0%
Free St Well #4	0.00	MG	0.0%
Free St Well #5	8.60	MG	12.9%
Fulling Mill Well #1	9.46	MG	14.2%
Fulling Mill Well #2	1.22	MG	1.8%
Fulling Mill Cistern	0.00	MG	0.0%
Downing St Well	0.00	MG	0.0%
	66.69	MG	100.0%
	2.38	MGD	

**Accord Pond (last day of the month)**

Water Elevation (Ft)	142.7
Usable Volume (MG)	286.5
Capacity (%)	104

MG - Million Gallons

MGD - Million Gallons Per Day

**Statistics**

**Pumping**

Maximum Day (MGD)	2.77
Date	<u>02/01/19</u>
Minimum Day (MGD)	2.05
Date	<u>02/02/19</u>

**Year to Date**

Maximum Day (MGD)	2.77
Date	<u>02/01/19</u>
Average Day (MGD)	2.38

**Temperature (°F)**

Maximum	70.3
Date	<u>02/05/19</u>
Minimum	13.0
Date	<u>02/01/19</u>

**Precipitation**

Monthly Total (Inches)	4.20
Annual Total (Inches)	9.68