



Water Supply Update

Serving the Communities of Hingham, Hull, & North Cohasset

News and Notes

- Expanded valve maintenance effort underway in Hull - This winter, we are expanding our valve maintenance program, which covers more than 4,900 valves across nearly 200 miles of water main pipes in Hingham, Hull, and north Cohasset. Valve maintenance is critical to our ability to provide you with reliable water service. Valve maintenance efforts will be concentrated in two areas of Hull to coordinate and prepare for planned water main replacement projects this year and next when we will replace over 9,000 feet of water main work on Beach Ave., Cadish Ave., and Atlantic Ave.
- New water storage tank coming to Strawberry Hill - Design work is underway for an important infrastructure project in Hull – a new 500,000 gallon water storage tank located at the site of our former Strawberry Hill Tank. This tank will improve the reliability of service, while ensuring adequate water pressure and flow for our customers in Hull and north Cohasset.
- Water main replacements continue to move forward - We are finishing design and permitting work for several water main replacement projects that will be constructed this year. These include replacements on Beach Ave. (Hull), Maple Ln., Cadish Ave., Hayes Rd., Bradley Hill Rd., Bremer Cir., and Forget Me Not Ln. By replacing old water mains that are buried at shallow depths, Aquarion will save nearly 4 million gallons of water per year (~11,000 gpd on an average annual basis) by eliminating the need to continuously “bleed” water during winter that otherwise contributes to frozen pipes and ruptures.
- Water treatment plant upgrades nearly complete – Ongoing construction of upgrades to our residuals handling systems are scheduled to be completed in February. Once complete, the investments will provide improved system reliability and efficiency for our residuals management systems and reduce chemical and operating costs.
- Increasing the water supply capacity – We are excited to announce another important water supply project at the Fulling Mill site in Hingham. Construction is expected to begin in February on a new vertical turbine pump at the Cistern Well. This new pump will increase pumping capacity and reliability of our water supply system, adding new resources to the system.
- Water conservation program adds protection to Weir River Watershed - Our customer water conservation program continues to provide new protections to the Weir River Watershed. Since March 2017, we have replaced over 815 toilets in homes in Hingham, Hull, and north Cohasset. The installation of new water conservation toilets in customers’ homes yielded

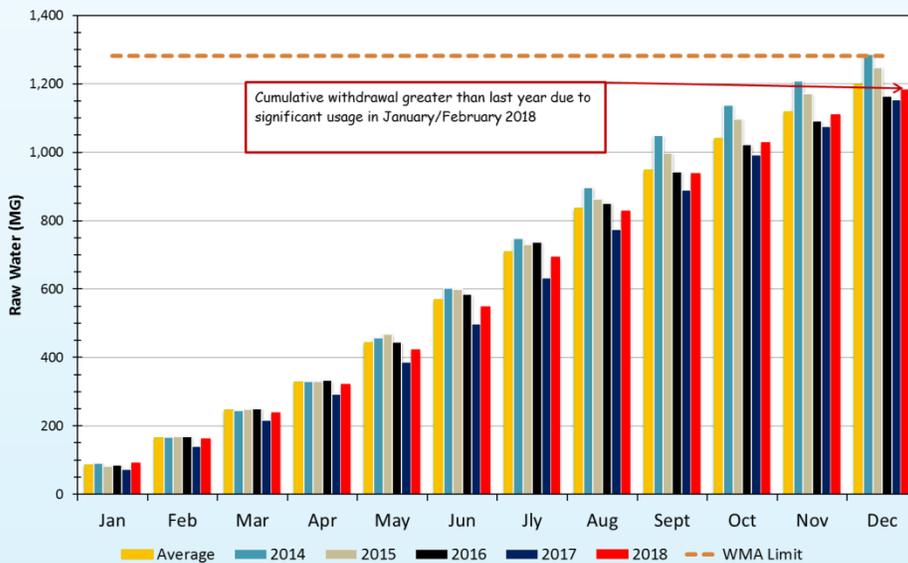
water conservation savings of approximately 4.53 million gallons per year! If you want to learn more about the customer water conservation program, enroll or tell others about it, please visit our website at www.aquarionwater.com/conservationoffers.

Water Resource Management

All of our sources are in excellent condition due to the abundance of precipitation this year. Accord Pond was taken off line on October 14 and is fully recharged to 100% capacity. This winter we will be cleaning and rehabilitating several wells to prepare them for the spring. Work a new 900 gallon per minute pump at our Fulling Mill Cistern water supply is anticipated to begin in February 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 will be conducting computer modeling 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



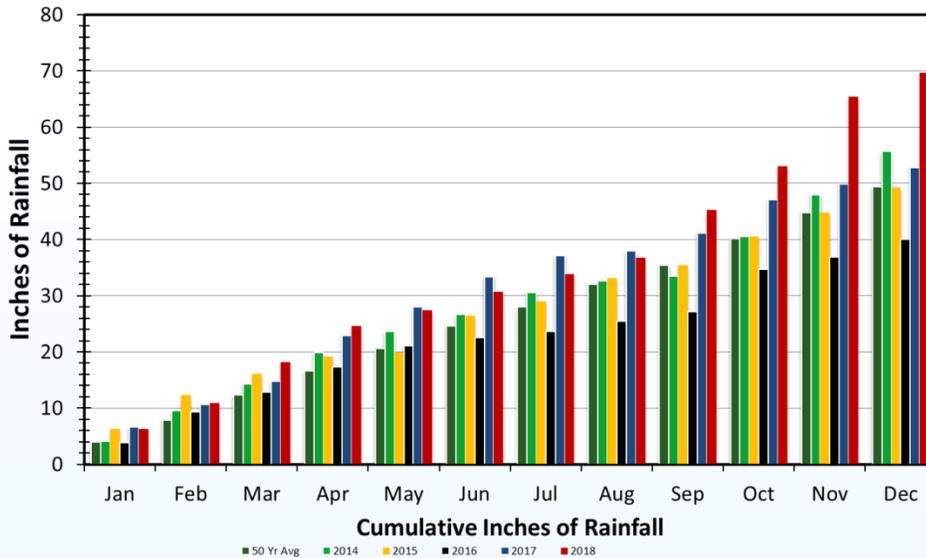
Water Supply and Demand

Water demands for December 2018 were average for this time of year. The average amount of water pumped from our sources to meet demands in the month of December 2018 was 2.34 million gallons per day (MGD). The cumulative average daily usage for 2018 was 3.25 MGD, which is 3% more than last year, but well within our regulatory limit of 3.51 MGD. We anticipate that water demands will steadily decline through the winter and we are confident we will continue to meet the needs of our

customers.

Weather Trends

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



The total amount of recorded precipitation for December 2018 was 4.29 inches, which is fairly close to the historic average precipitation for the month of December. Cumulative precipitation for the year (2018) was 69.67 inches, which is over 20 inches above the historic annual average, and almost 30 inches greater than the amount received during the recent drought in 2016. Recent precipitation has resulted in our aquifer to

remain at above average groundwater levels for this time of year. In addition, the water level of Accord Pond is at 104% capacity, representing a usable volume of over 286 million gallons, which is above average for this time of year. The Pond was taken offline on October 14, and will likely remain offline until next spring.

Community Outreach

If you haven't already please Like us on Facebook at 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	2.96	3.00
November	2.70	2.48	2.93	2.36	2.46	2.29	3.22	2.72	2.63
December	2.73	2.59	2.66	2.46	2.46	2.33	2.54	2.34	2.54
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	3.25	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	82.08	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	91.79	92.89
November	80.88	74.49	87.81	70.85	73.69	68.71	82.45	81.45	76.98
December	84.77	80.28	82.49	76.41	76.14	72.18	78.71	72.68	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	1,184.69	1,200.39
Average (MGD)	3.32	2.99	3.33	3.47	3.42	3.18	3.16	3.25	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
December

Year
2018

Monthly Supply Pumping Summary

Accord Pond	0.00	MG	0.0%
Scotland St Well #1	16.85	MG	23.2%
Scotland St Well #1A	5.57	MG	7.7%
Prospect St Well	8.04	MG	11.1%
Free St Well #2	1.71	MG	2.4%
Free St Well #2A	18.61	MG	25.6%
Free St Well #3	0.00	MG	0.0%
Free St Well #4	0.00	MG	0.0%
Free St Well #5	9.57	MG	13.2%
Fulling Mill Well #1	10.26	MG	14.1%
Fulling Mill Well #2	2.06	MG	2.8%
Fulling Mill Cistern	0.00	MG	0.0%
Downing St Well	0.00	MG	0.0%
	72.68	MG	100.0%
	2.34	MGD	

Accord Pond (last day of the month)

Water Elevation (Ft)	142.4
Usable Volume (MG)	286.5
Capacity (%)	104

MG - Million Gallons

MGD - Million Gallons Per Day

Statistics

Pumping

Maximum Day (MGD)	2.60
Date	12/03/18

Minimum Day (MGD)	2.00
Date	12/23/18

Year to Date

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

Average Day (MGD)	3.33
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Temperature (°F)

Maximum	64
Date	12/21/18

Minimum	21.6
Date	12/08/18

Precipitation

Monthly Total (Inches)	4.29
Annual Total (Inches)	69.67