

QCBFD Public Works Committee Report 2017

I wish to thank the members of my Committee: Dick Campbell, James Finn, Bob Frazier, Tom Frost, Jim Montstream, Steve Peet, George Prior, and Greg Reppucci and PW Agent John Rooney, for their assistance, input, and patience throughout the year. All Committee members are volunteers and we do our best to accommodate our QCBFD residents as best we can.

A very special thank you to the prior PW Chairs, Bill Meyer, George Prior, and Wally Kelly, for all their prior work and service to this community. Further, in my times of need, their insights and experience, especially Wally Kelly's, have proven invaluable!

The Public Works Committee wishes to share the following:

1. Stops signs have gone in place on the intersections from QCBFD private roads onto the Charlestown Town roads, Seabreeze, and West Beach Road.
2. Our road surface seems to be holding up well. Major road resurfacing was unnecessary this year and the roads will be oiled and gravelled in summer 2018 or more likely 2019. This will need to occur in the month of June as the warm weather is critical for proper outcome.
3. Several speed bumps will be converted to speed humps in an effort to determine how this would impact traffic flow.
4. Lead and Copper testing, due to a scheduling miscue caused by a computer program change by our water system operator, Northeast Water Solutions, was not performed within the required window of 2016. Rhode Island Department of Health (RIDOH) is aware and has recommended we obtain 10 samples of water in 2017. 5 samples were obtained in June of 2017; all were well below EPA requirements, and 5 more will be obtained in September 2017. We have, for several years, been utilizing orthophosphate as an anticorrosive measure to minimize copper leaching into the water system and will continue to do so.
5. Nitrate water levels, of concern due to the dense surrounding septic system concentration, especially north and east of our well fields, have been tested monthly since 2014; more frequently than the biannual RIDOH requirement. The attached spreadsheet shows the monthly nitrate levels since 2014. Despite the seasonal variability note that the individual monthly levels, as illustrated on the charts for Well 1 and Well 2, have remained stable, with no upward trend, for the past three years. They remain well below the EPA trigger level of 10 mg/ml.
6. The water control panel has been modified to allow QCBFD to mix water from well 1 and well 2. Well 2 traditionally has lower nitrate levels but increased iron. Prior to this modification we could only draw water exclusively from well 1 or well 2 except for during high water demand. We expect to maintain a 70/30 mix of well 1 and well 2 but will adjust as needed.

WATER USAGE: for these past 12 months, 8/1/2016 through 7/31/2017, we used **5.6 million gallons** of water. This is an **INCREASE of almost 18%** from the prior 12 month period, 8/1/2015 through 7/31/2016, usage of 4.7 million gallons and counter to a trend of continually decreasing water usage since 2010. Public Works will continue to monitor and explore the cause of this increased usage.

- a. **It is strongly recommended, since most properties in QCBFD are not primary residences, that water be turned off when you leave.** Any licensed plumber can assist with manual or remote shutoff valves. Over this past winter there would be sustained periods of steady 24 hr water usage which occurred and then stopped, usually around the weekends, suggesting an unintentionally opened faucet or running toilet.
- b. Please arrange for your home's plumbing to be winterized! Every winter someone's outdoor shower, faucet, or internal plumbing pipe bursts with the arrival of sub freezing temperatures. A burst internal pipe will ruin your home within a few minutes.
- c. The best prevention is to drain the pipes and shutoff the water. If your home is heated be aware that heating systems can go down due to power outages and extreme weather, often for several hours or days.
- d. Public works will continue to offer curbside winter shutoff as a courtesy. It is recommended this NOT be done in place of an internal water shutoff valve as mentioned above. Further it is requested someone be available to confirm water flow shutoff within the residence.
- e. Please continue to conserve water; check faucets, hose bibs, and that your toilets are not continuously running.
- f. Unattended garden and lawn watering is NOT permitted except by handheld devices.
- g. Lawn sprinkler systems must not be cross connected to the public water system.

Respectfully submitted,

Vincent Reppucci

Chair QCBFD Public Works Committee

Attach: QCBFD Nitrate Chart

MONTHLY NITRATE LEVELS QCBRD WELL 1 AND 2 DATA AND CHARTED BY MONTH

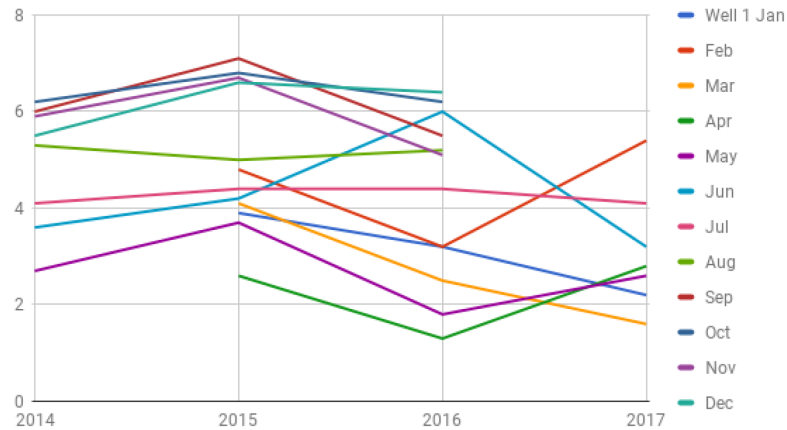
Well 1

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014					2.7	3.6	4.1	5.3	6.0	6.2	5.9	5.5
2015	3.9	4.8	4.1	2.6	3.7	4.2	4.4	5.0	7.1	6.8	6.7	6.6
2016	3.2	3.2	2.5	1.3	1.8	6.0	4.4	5.2	5.5	6.2	5.1	6.4
2017	2.2	5.4	1.6	2.8	2.6	3.2	4.1					

Well 2

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014					3.5	4.1	4.3	4.3	4.7	4.4	4.1	3.2
2015	3.5	3.7	3.7	3.6	4.0	4.1	4.0	4.1	4.0	4.8	5.1	4.9
2016	3.3	2.8	3.0	2.7	2.7	3.2	3.2	3.7	3.8	3.4	3.3	4.4
2017	1.3	3.7	0.8	3.7	3.4	3.3	3.7					

Well 1



Well 2

