THE WATER WE DRINK

NORTH KINGSTOWN'S 2019 DRINKING WATER QUALITY REPORT

May 2020

North Kingstown's Drinking Water

We're pleased to present to you North Kingstown's 2019 Drinking Water Quality Report. This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. A copy of this report is available online at www.northkingstown.org.

If you have any questions about this report or concerning your water utility, please contact **G. Timothy Cranston at 268-1520** or **Deb Knauss at 268-1522.** We want you to be informed about your drinking water resources. If you want to learn more, please attend any of the regularly scheduled meetings of the Groundwater Committee. They are usually held on the first Thursday of each month at 7:00 PM in the Municipal Offices Conference Room, 100 Fairway Drive, North Kingstown.

Where does our drinking water come from?

All of the drinking water provided to customers of North Kingstown Water is supplied by groundwater. In 2019 North Kingstown Water operated eleven (11) municipal wells, which draw water from the Hunt-Annaquatucket-Pettaquamscutt (HAP) aquifer system. Average daily water use in 2019 was 2.62 million gallons per day. The HAP aquifer system has been designated a "Sole Source Aquifer" by the US Environmental Protection Agency (USEPA), meaning that there is no alternative source of drinking water available.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include microbes, organic or inorganic chemicals, or radioactive materials. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The presence of contaminants does not necessarily indicate that water poses a health risk.

We thank all our customers for their help in protecting our water sources. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all our customers. These improvements are included within the water rate structure. Thank you for understanding. Please call our office at (401) 268-1520 or 268-1522 if you have questions.

Routine water quality monitoring

The **North Kingstown Department of Water Supply** routinely monitors your drinking water for over 100 constituents according to Federal and State laws. For a complete listing of all the constituents that we are required to test for, contact the Department of Water Supply. These constituents fall into two categories: regulated constituents where enforceable standards or Maximum Contaminant Levels (MCLs) have been established and un-regulated where only health advisory levels have been set. A listing of *Test Results* for those constituents detected in North Kingstown's water supply wells follows. This report covers the monitoring period from January 1, 2019 to December 31, 2019.

TESTING RESULTS

All of the regulated constituents tested were non-detect (nd) except those listed in this section. A range is indicated if multiple testing rounds were conducted.

- ***Distribution System Test Results***

Contaminant	Violation Y/N	Level Detected	Range Detected	Unit	MCLG	MCL	Possible Source
Total Coliform	**N**	**0**	**NA**	**%**	**0**	**5% of samples positive**	**Naturally present in Environment**
Fecal coliform and *E. coli*	**N**	**0**	**NA**		**0**	**A routine sample & repeat sample are total coliform positive, & 1 fecal coliform or *E. coli* positive**	**Human and animal Fecal waste**
Lead*	**N**	**0.07** (90th percentile value)	**0.02– 5.0** Jun 2019	**ppb**	**0**	**AL=15**	**Corrosion of household plumbing systems; erosion of natural deposits**
Copper*	**N**	**0.0516** (90th percentile value)	**0.04-0.0590** Jun 2019	**ppm**	**1.3**	**AL=1.3**	**Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives**
Chlorine+	**N**	**0.28**	**0.22-0.36**	**ppm**	**4** (MRDLG)	**4** (MRDL)	**Water additive used to control microbes**
Total Trihalomethanes Haloacetic Acids +	**N**	**4.1 0**	**1.8 – 6.4 0**	**ppb**	**NA**	**80 60**	**Byproduct of drinking water disinfection**

*60 homes throughout the distribution system were sampled for lead and copper. If more than 10 percent are above the Action Level of 15 ppb for lead or 1.3 ppm for copper this would be considered an exceedance, but not a violation. An Action Level is defined as the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

+Chlorine is monitored on a weekly basis, Total Trihalomethanes & Haloacetic Acids are monitored yearly in the third quarter.

LEAD INFORMATION STATEMENT

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. *North Kingstown Water* is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://water.epa.gov/drink/info/lead/index.cfm

- ***TESTING RESULTS (continued)***

All of the constituents tested were non-detect (nd) except those listed in this section. A range is indicated if multiple testing rounds were conducted.

- ***Regulated Constituents***

Contaminant	Violation Y/N	Unit	MCLG	MCL	Well #1	Well #2	Well #3	Well #4	Well #5a**	Well #6	Well #7	Well #8	Well #9	Well #10	Well #11	Possible Source
Nickel	N	ppm	**Not est.**	**Not est.**	**nd**	**nd**	**nd**	**nd**	**nd**	**0.010** 4/25/17	**nd**	**nd**	**nd**	**nd**	nd	Erosion of natural deposits
Barium	N	ppm	**2**	**2**	**0.010** 3/27/17	**0.008** 3/27/17	**0.021** 3/27/17	**0.005** 3/27/17	**0.007** 3/27/17	**0.011** 4/25/17	**0.006** 3/27/17	**0.008** 3/27/17	**0.014** 3/27/17	**0.010** 4/25/17	**0.007** 4/25/17	Erosion of natural deposits
Fluoride	N	ppm	**4**	**4**	**nd**	**nd**	**nd**	**nd**	**nd**	**0.23** 4/25/17	**nd**	**nd**	**0.21** 3/27/17	**nd**	**nd**	Erosion of natural deposits
Dibromochloromethane	N	ppb	**70**	**70**	**nd**	**0.59 3/27/17**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	Byproduct of drinking water disinfection
Nitrate (as Nitrogen)	N	ppm	**10**	**10**	**1.28** 3/14/19	**1.21** 3/14/19	**0.06** 3/14/19	**2.12** 3/14/19	**3.00** 3/14/19	**1.97** 5/10/19	**0.05** 3/14/19	**0.05** 3/14/19	**3.04** 3/14/19	**3.46** 4/25/19	(range) **4.48-4.54** 9/11/19	Runoff from fertilizer use; leaching from septic tanks, sewage erosion of natural deposits

Wells 1,2, 6,9 and 10 primarily serve areas north of Hamilton-Allenton Road; Wells 3,7 and 8 primarily serve Saunderstown; Wells 4, 5a, & 11 primarily serve Slocum.

- ***Unregulated Constituents***

Contaminant	Violation Y/N	Unit	SMCL	Well #1	Well #2	Well #3	Well #4	Well #5a**	Well #6	Well #7	Well #8	Well #9	Well #10	Well #11
DCPA degradates*	**N**	**ppb**	**Not est.**	**nd**	**nd**	**nd**	**nd**	**(range) 2.3-2.4** 3/27/17	**nd**	**nd**	**nd**	**nd**	**Nd**	**(range) 4.5-8.1** 11/7/17
Chloroform	**N**	**ppb**	**100 ppm**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	**nd**	**1.50** 3/14/19	**2.6** 12/19/19	**nd**

*Breakdown products of DCPA, a fruit & vegetable crop herbicide, it is one of the most commonly found groundwater contaminants in the US.
**Well 5a permanently replaced Well 5 in 2005.

The following definitions have been provided to help you better understand the terms used in this report:

Non-Detects (nd) – laboratory analysis indicates that the constituent is not present in sufficient quantity to be found by the EPA approved analytical test method.

Parts per million (ppm) or Milligrams per liter (mg/l) – 1ppm corresponds to 1 minute in 2 years or 1 penny in $10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) – one ppb corresponds to 1 minute in 2,000 years, or 1 penny in $10,000,000.

Maximum Contaminant or Residual Disinfectant Level (MCL) (MRDL) – The Maximum Allowed is the highest level of a contaminant or disinfectant that is allowed in drinking water. A violation, requiring public notice, occurs when a constituent is detected above the MCL. MCLs are set as close to the MCLG as can be using the best available treatment technology.

Maximum Contaminant or Residual Disinfectant Level Goal (MCLG) (MRDLG) – The "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

SMCL - maximum permissible level established for contaminants that primarily affect aesthetic qualities relating to the public acceptance of drinking water.

Not Est. – Not Established – The US Environmental Protection Agency has not yet set an MCL or SMCL for this constituent.

North Kingstown and Lead Contamination

There is no question that in recent years, driven by the story of the devastating problems in Flint Michigan, lead contamination in drinking water is front and center in the news cycle. The issue in the Flint system, at its most basic, was the same as it would be anywhere there were issues with lead in drinking water. The water chemistry was not managed appropriately and the water, which entered the distribution system free of lead contamination, reacted with lead sources such as piping, solder, and plumbing fixtures and became contaminated. Here in North Kingstown, this is something we have always taken very seriously, and we are pleased to be able to report that our efforts at managing our water chemistry to lessen the leaching of lead from plumbing solder and older or foreign made plumbing fixtures into the drinking water has been successful. The required testing done for the Town of North Kingstown's drinking water, detailed in this report, as well as testing done in all of the Town's public school buildings came back with levels that were either non-detect or very low. The water department staff will continue to be diligent in our efforts to manage our water chemistry and the water distribution system, so that we can provide our customers with safe drinking water. For additional information on North Kingstown School testing results, contact the principal's office at your child's school or check out the RI Department of Health "Lead in Schools" webpage at http://www.health.ri.gov/data/schools/water/

Source Water Protection Assessment Results

The RI Department of Health and URI Cooperative Extension, in cooperation with other state and federal agencies, have assessed the threats to North Kingstown's water supply sources*. In our community's case, the assessment found that the water source is at LOW risk of contamination. This does NOT mean that the water cannot be contaminated. Protection efforts are important to assure continued water quality. The complete Source Water Assessment Report is available at the North Kingstown Department of Water Supply or the Rhode Island Department of Health, Office of Drinking Water Quality.

**threats to the groundwater (our water supply source) as opposed to water quality in the distribution system*

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Hotline (800-426-4791).

INFORMATION ABOUT CONTAMINANTS AND POTENTIAL HEALTH EFFECTS CAN BE OBTAINED BY CALLING THE ENVIRONMENTAL PROTECTION AGENCY'S SAFE DRINKING

WATER HOTLINE AT: 1-800-426-4791