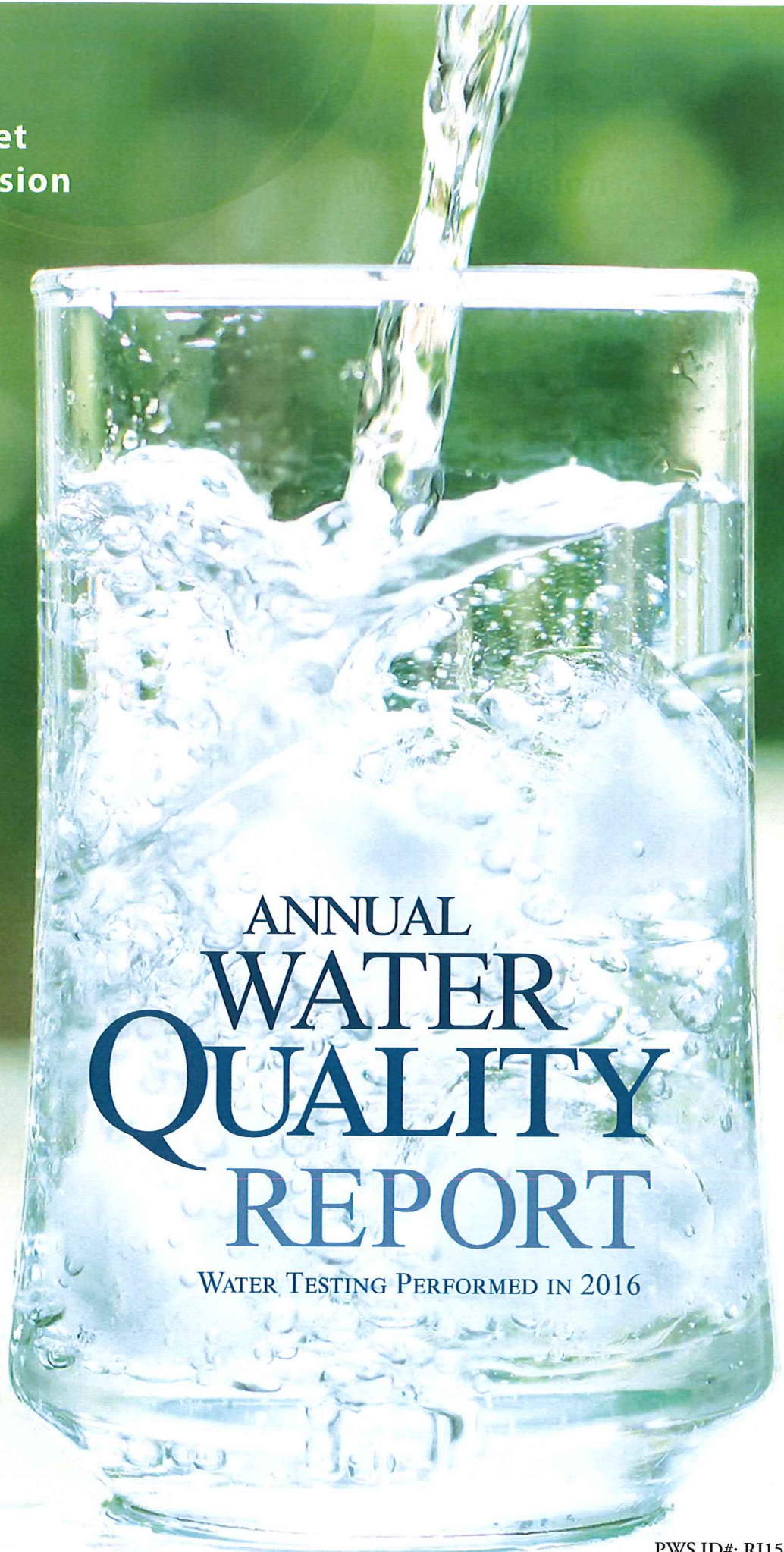
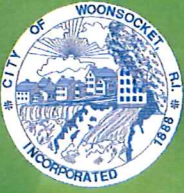


Presented By
**Woonsocket
Water Division**



ANNUAL
WATER
QUALITY
REPORT

WATER TESTING PERFORMED IN 2016

We've Come a Long Way

Once again we are proud to present our annual water quality report covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

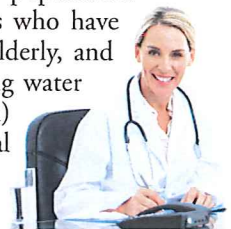
Source Water Assessment

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to Woonsocket's water supply sources. The assessment considered the intensity of development, the presence of businesses and facilities that use, store or generate potential contaminants, the ease with which contaminants can move through the soils in the Source Water Protection Area (SWPA), and the sampling history of the water.

Our monitoring program continues to ensure that the water delivered to your home is safe and wholesome. However, the assessment found that the water source is at moderate risk of contamination. This means that the water could one day become contaminated. Protection efforts are necessary to ensure continued water quality. The complete Source Water Assessment Report is available from Woonsocket Water Division at (401) 767-1411, or from HEALTH at (401) 222-6867.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or at <http://water.epa.gov/drink/hotline>.



Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016, the U.S. EPA passed a new regulation called the Revised Total Coliform Rule, which requires additional steps that water systems must take in order to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have in place procedures that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment of their system and correct any problems quickly. The U.S. EPA anticipates greater public health protection under the new regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

Though we have been fortunate to have the highest-quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this new rule helps us to accomplish that goal.

Unregulated Contaminant Data

Our water system has been sampled for a series of unregulated contaminants. As our customers, you have a right to know that these data are available, including detected and nondetected test results. If you are interested in examining the results or want more information on UCMR3, please contact Marc Viggiani at (401) 767-1411, or by mail to PO Box B, Woonsocket, RI 02895.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban storm-water runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

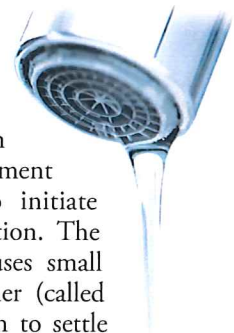
Public Meetings

For public comment on an ongoing basis, customers can contact the office of Mayor Lisa Baldelli-Hunt or attend the Woonsocket City Council Meetings. The Council holds hearings on budget and other financial matters, approves contracts, and considers ordinances that create or amend local laws. Some of these matters affect the operation of the Woonsocket Water Division. The council meets on the first and third Mondays of every month at 7:00 p.m. in Harris Hall in City Hall, 169 Main Street, Woonsocket, RI. The meetings are televised live on Cox Cable channel 17 and Verizon FIOS channel 22. Public comment is welcome.

How Is My Water Treated and Purified?

The treatment process consists of a series of steps.

First, raw water is drawn from our water source into the treatment plant. Chemicals are added to initiate the next process, called flocculation. The addition of these substances causes small particles to adhere to one another (called floc), making them heavy enough to settle to the bottom, from which sediment is removed. This process is called clarification, or sedimentation. The clear supernatant is then filtered through a deep-bed carbon filter that removes the smaller suspended particles. After filtration, the water undergoes disinfection, fluoride addition (to prevent tooth decay), corrosion inhibitor addition, and pH adjustment before it is pumped out into the distribution system.



QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Marc Viggiani, Water Superintendent, at (401) 767-1411, or visit our website at www.woonsocketri.org.

What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (back-pressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (back-siphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection.

For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.



Lead in Home Plumbing

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. We are 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 www.epa.gov/lead.

Where Does My Water Come From?

Woonsocket Water Division uses surface water from the Crookfall Brook and Harris Pond watersheds. The Crookfall Brook watershed extends over approximately 7.93 square miles. It is a protected, high-quality, and primary source of supply for the Woonsocket Treatment Plant. Harris Pond has a watershed area of approximately 33.3 square miles. This source is used as a supplemental source as needed. Woonsocket Water maintains an active watershed protection program and closely monitors the watershed lands to protect water quality.

Information on the Internet

The U.S. EPA (www.epa.gov) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Rhode Island Department of Health has a website (www.health.state.ri.us) that provides complete and current information on water issues in Rhode Island, including valuable information about our watershed.

Missed Monitoring/Reporting

The Woonsocket Water Division water system violated drinking water standards over the past year. Although this was not an emergency, as our customers you have the right to know what happened and what we did to correct the situation.

We are required to report the results of monitoring of your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards.

For the compliance period February 1, 2016, to February 29, 2016, 7 of the 109 results of monitoring for bacteria (coliform) were not reported until March 15, 2016. The due date was March 10, 2016.

For the compliance period August 1, 2016, to August 31, 2016, we did not report the results of monitoring for bacteria (coliform) by the due date. Original reports that were submitted on September 9, 2016, were missing results. The corrected results were submitted September 13, 2016. The due date for results was September 10, 2016.

For the compliance period November 1, 2016, to November 30, 2016, we did not take the sample for the second round of E. coli monitoring, as required under the Long Term 2 Enhanced Surface Water Treatment Rule. The E. coli sample was due to be taken November 2, 2016. The E. coli sample was taken November 28, 2016, 26 days late.

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents on those substances that were detected; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality. UCMR3 detections are shown in the data tables below.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2016	2	2	0.054	0.016–0.054	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2016	[4]	[4]	0.42	ND–1.06	No	Water additive used to control microbes
Chromium (ppb)	2016	100	100	1.0	NA	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	2016	4	4	0.97	0.15–0.97	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2016	60	NA	18.1	4.1–28.2	No	By-product of drinking water disinfection
Nitrate (ppm)	2016	10	10	0.480	0.160–0.480	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppm)	2013	1	1	0.02	ND–0.02	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2016	80	NA	50.3	22.5–56.1	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2016	TT	NA	1.3	0.8–1.8	No	Naturally present in the environment
Turbidity ¹ (NTU)	2016	TT	NA	0.761	0.049–0.761	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2016	TT = 95% of samples meet the limit	NA	97.64	NA	No	Soil runoff

Tap Water Samples Collected for Lead and Copper Analyses From Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2014	1.3	1.3	0.05	0/32	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2014	15	0	3	0/32	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2016	200	NA	263	60–887	No	Erosion of natural deposits; Residual from some surface water treatment processes
Fluoride (ppm)	2014	2.0	NA	0.32 ²	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2016	81.8	71.9–93.3	Sodium naturally found in plants, soil, and sodium compounds used for de-icing roads

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3)³

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chlorate (ppb)	2013	17.61	ND–83.74	Disinfecting by-product; ions formed during the slow decomposition of sodium hypochlorite solution
Hexavalent Chromium (ppb)	2013	0.025	ND–0.06	Erosion of natural deposits; Produced by industrial processes
Strontium (ppb)	2014	59.75	58.848–60.642	Occurs naturally in the environment
Vanadium (ppb)	2014	0.701	0.586–0.816	Metal used as an alloying addition to iron and steel

¹ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

² Raw untreated surface water sample.

³ Contains additional RIDOH testing of unregulated contaminants.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Reporting Requirements Not Met for Woonsocket Water Division

PWS# RI1559518

The Woonsocket Water Division water system violated a drinking water standard over the past year. Although this was not an emergency, as our customers, you have the right to know what happened and what we did to correct the situation.

We are required to report the results of monitoring of your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. For the compliance period August 1, 2016 to August 31, 2016, we did not report the results of monitoring for bacteria (coliform) by the due date.

What should I do?

There is nothing you need to do at this time. You do not need to boil your water or take other actions.

What is being done? All missing results were reported September 13, 2016. Due date for results was

September 10, 2016. Results were three days late.

For more information, please contact Marc Viggiani at 401-767-2619

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Woonsocket Water Division.

PWS ID#: RI1559518

Date distributed: 6/1/2017.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Woonsocket Water Division

PWS# RI1559518

The Woonsocket Water Division water system violated a drinking water standard over the past year. Although this was not an emergency, as our customers, you have the right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water and surface water sources for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Between the dates of 11/01/2016 and 11/31/2016, we did not monitor for *E. coli* in our untreated raw source water and therefore cannot be sure of the quality of our raw source water during that time.

E. coli are bacteria whose presence indicates water may be contaminated with human or animal wastes, and may be present in our raw source water.

What should I do?

There is nothing you need to do at this time. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

The table below lists the contaminant(s) we did not properly test for, how often we are supposed to sample for the contaminant(s) and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required Sampling Frequency	Number of Samples Taken	When All Samples Should Have Been Taken	When Samples Were or Will Be Taken
<i>E. coli</i>	1 sample per month	0	11/1/2016 – 11/31/2016	12/1/2016 – 12/31/2016

What happened? The Long Term 2 Surface Water Treatment Rule sampling period November 11/1/2016-11/31/2016

The one E.coli sample was not taken on 11/2/2016. Sample was taken on 11/28/2016, 26 days late .

What is being done? LT2 Sampling will taken at the correct dates and the program will be extended by one month

of testing to compensate for inaccurate November 2016 sampling.

For more information, please contact Marc Viggiani at 401-767-2619

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Woonsocket Water Division

PWS ID#: RI1559518

Date distributed: 6/1/2017.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Woonsocket Water Division

PWS# RI1559518
Woonsocket Water Division

Our water system violated a drinking water standard over the past year. Although this was not an emergency, as our customers, you have the right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Between the dates of 02/01/2017 to 02/28/2017, we did not correctly monitor for the contaminants shown in the table below and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required Sampling Frequency	Number of Samples Taken	When All Samples Should Have Been Taken	When Samples Were Or Will Be Taken
SODIUM	1 sample per 2 weeks	2 sample within the same week	02/01/2017 – 02/28/2017	2 samples between 03/01/2017 – 03/31/2017

What happened? Sodium sample period Febuary 2/1/2017 - 2/28/2017 one sample was not collected on 2/8/2017 and was collected 2/28/2017, 20days late and out of sequence.

What is being done? The two sodium samples in March 2017 will be collected in sequence and on the proper dates.

For more information, please contact Marc Viggiani at 401-767-2619

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Woonsocket Water Division

PWS ID#: RI1559518

Date distributed: 6/1/2017