

2008 CONSUMER CONFIDENCE REPORT

Johnston Water Control Facilities-West End

Johnston, RI
PWS ID#2980183

We are very pleased to provide you with this year's Consumer Confidence Report. This report provides you with information on the water and services that we delivered to you in 2008. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies.

We want our valued customers to be informed about their water utility. There are no regularly scheduled meetings, therefore; if after reviewing this report you have any questions, or would like to know more about the Johnston Water Control Facilities-West End water system, please call Lorri Caruso at (401) 351-1760.

In 2008, in order to better serve our customers we continued to upgrade all of our meters, additionally we replaced a number of aging hydrants.

The Quality of Your Drinking Water

Our goal is to provide you with a safe and dependable supply of drinking water. However, in June 2008 and August 2008, we received Total Coliform monitoring violations for failing to take the appropriate number of water quality test samples after positive total coliform test results. In addition, we received monitoring violation for failing to conduct required Initial Distribution System Evaluation (IDSE) sampling. IDSE sampling requires our water system to conduct a system evaluation to characterize disinfection byproducts (DBPs) in our distribution system and to identify the best places in the distribution system to monitor for DBPs in the future. In 2008, we failed to collect the required DBP samples for Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) in our drinking water distribution system. Please see the attached Public Notice for additional details. The failure to collect these samples will delay the submittal of a report discussing the results of the evaluation. Please see our *Water Quality Test Results* and *Violations* sections at the end of this report for additional information.

The Source of Your Drinking Water

We purchase all of our water from the Providence Water system. Providence draws its water entirely from surface water sources located in the Scituate watershed. The main source of supply for the Providence system is the Scituate Reservoir; which is the terminal reservoir in a network of six reservoirs. The five other secondary reservoirs are: Regulating Reservoir, Barden Reservoir, Ponaganset Reservoir, Westconnaug Reservoir, and Moswansicut Reservoir. This reservoir system is located in a basin area totaling 92.8 sq. miles of mostly rural, forested lands of which Providence Water controls approximately 28% through outright ownership or through past purchase of development rights.

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to Johnston Water Control Facilities-West End water supply sources. The assessment considered the intensity of development, the presence of businesses and facilities that use, store or generate potential contaminants, how easily contaminants may move through the soils in the Source Water Protection Area (SWPA), and the sampling history of the water.

Our monitoring program continues to assure that the water delivered to your home is safe to drink. However, the assessment found that the water source is at LOW RISK of contamination. This does NOT mean that the water cannot become contaminated. Protection efforts are necessary to assure continued water quality. The complete Source Water Assessment Report is available from Johnston Water Control Facilities-West End or the Department of Health at (401) 222-6867.

Why Are There Contaminants in My Drinking Water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater 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 stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities.

Water Quality Test Results

The table below lists all of the drinking water contaminants that were detected through our water quality monitoring and testing. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from the January – December 2008 monitoring period. For those contaminants that are monitored less frequently the most recent test results are listed.

Maximum Contaminant Levels (MCL's) are set at very stringent levels. The Maximum Contaminant Level Goal (MCLG) is set at a level where no health effects would be expected, and the MCL is set as close to that as possible, considering available technology and cost of treatment. A person would have to drink 2 liters of water every day, as recommended by health professionals, at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

2008 TEST RESULTS-Providence Water Supply Board						
Microbial Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Organic Carbon (TOC) ¹	N	1.23 Range: 1.05 – 1.41	ppm	N/A	TT	Naturally present in the environment
Turbidity ²	N	0.14 Range: 0.05 – 0.14	NTU	N/A	TT	Soil runoff
Inorganic Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Barium	N	0.01	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	N	1.20 Range: 0.90 - 1.20	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

¹In order to comply with the EPA standard, the TOC removal ratio must be greater than 1.0 ppm. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts like TTHMs and HAAs.

²0.14 NTU was the highest single turbidity measurement recorded. The lowest monthly percentage of samples meeting the turbidity limit was 100%. The average turbidity value was <0.10 NTU. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms.

DISTRIBUTION SYSTEM TEST RESULTS-Johnston Water Control

Microbial Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria	N	1 Positive- May	Highest monthly # of positive samples	0	1 positive	Naturally present in the environment
		2 Positive-June ³				
		1-Positive August				

³In January of 2009 The Johnston Water Control Facility-West End was officially separated into 5 systems. However, in 2008 prior to the official separation the RIDOH had already begun to treat each future system as a separate entity. There was no MCL Violation issued in June because the two samples were not from the same system and so they fell within the monthly MCL.

Inorganic Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Copper (2006)	N	0.04	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2006)	N	9*	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

*There were two (2) sites that exceeded the Lead Action Level. Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Initial Distribution System Evaluation (IDSE) Data †

Volatile Organic Contaminants	Violation Y/N	Level Detected	Unit Measurement	Likely Source of Contamination
Haloacetic Acids (HAA)	N	Average 15 Range: 7 - 20	ppb	By-product of drinking water disinfection.
TTHM (Total Trihalomethanes)	N	Average 70 Range: 65 - 80	ppb	By-product of drinking water chlorination

† In 2008 we failed to take HAA & TTHA samples in Jan, April and July. The results listed above are from October 2008. The IDSE data was not used for compliance by the Rhode Island DOH-Office of Drinking Water Quality, and test results were not required to meet the MCL of 60 ppb for HAA and 80 ppb for TTHMs. Please see the Violations section of this report for additional details.

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

Action Level (AL) - The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) -The MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - The MCLG 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.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Nephelometric Turbidity Unit (NTU) – Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU's is just noticeable to the average person. Turbidity had no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth.

For most people, the health benefits of drinking plenty of water outweigh any possible health risk from these contaminants. However, 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

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. The Johnston Water Department 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://www.epa.gov/safewater/lead>.

Violation:

Total Coliform Monitoring Violation: We received two total coliform monitoring violations in 2008 for failing to take the correct number of test samples. In June, we should have taken five (5) samples as a result of a positive sample taken in May. We took three (3) samples. In August we only took three (3) samples, rather than the four (4) repeat samples required within 24 hours of a positive sample. Please note, in January of 2009, the Johnston Water Control Facility-West End was officially separated into 5 systems; West End, Taylor Road, Everbloom Street, Nardolillo Street and Capitol Street. However in 2008, prior to the official separation the RIDOH had already begun to treat each future system as separate entities. These two monitoring violations were connected to the Taylor Road system.

Total Coliform: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Initial Distribution System Evaluation (IDSE) Monitoring Violation: Under the EPA Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR) our water system was required to conduct Initial Distribution System Evaluation (IDSE). The IDSE is a one-time evaluation to determine the levels of disinfection by-products (TTHM & HAA) in the distribution system for future regulations. Disinfection byproducts are the result of the disinfection of your drinking water. They form when the disinfectants combine with naturally occurring organic matter in the water. The IDSE data will be used to characterize the disinfection byproducts (DBPs) in our distribution system and identify the best places monitor for DBPs in the future. We failed to take our required TTHM and HAA samples in January, April and July of 2008 and were issued a monitoring violation. We took our first samples in October 2008. The failure to collect samples earlier in 2008 will delay the submittal of a report discussing the results of the evaluation. Please see the attached Public Notice for additional details.

We at Johnston Water Control Facilities-West End work to provide top quality water to every tap. We encourage all of our customers to conserve and use water efficiently and remind you to help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please do not hesitate to call our office with any questions.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring and Reporting Requirements Not Met for Johnston Water Control Facilities-West End

Our water system is required to conduct a system evaluation to characterize disinfection byproducts (DBPs) in our distribution system and to identify the best places in the distribution system to monitor for DBPs in the future. We recently failed to collect the correct number of drinking water samples required for this evaluation. The failure to collect these samples will also delay the submittal of a report discussing the results of the evaluation. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Between October 1, 2007 and September 30, 2008, our system failed to collect the required number of DBP samples for total trihalomethanes (TTHMs) and haloacetic acids (HAA5s) in our drinking water distribution system.

What should I do?

There is nothing you need to do. The missed samples were for the purpose of a system evaluation and are not compliance samples. You do not need to boil your water or take other corrective actions. 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.

What was done?

TTHMs and HAA5s are a group of chemicals that are formed when chlorine or other disinfectants used to control microbial contaminants in drinking water react with naturally occurring organic and inorganic matter in water. We are monitoring the formation of TTHMs and HAA5s while ensuring an adequate level of disinfection is maintained to protect customers from exposure to bacteria.

Contaminant	Required Sampling Frequency	Number of Samples Taken	When Samples Should Have Been Taken	When Samples Will Be Taken
Total Trihalomethanes (TTHMs)	Every 90 Days - 4 Sampling Events	1	Jan, April July 2008	Jan., April July 2009
Haloacetic Acids (HAA5s)	Every 90 Days – 4 Sampling Events	1	Jan, April July 2008	Jan., April July 2009

For more information, please contact Lorri Caruso at [401-231-4065](tel:401-231-4065) or [1385 Hartford Avenue Johnston, RI 02919](mailto:lorri.caruso@johnstonwater.com)

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 Johnston Water Control Facilities-West End PWS ID#2980183

Date distributed: _____.