#### 2016 CONSUMER CONFIDENCE REPORT Jamestown Water Department Jamestown, RI PWSID# RI1858419

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 2016. 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 Jamestown Water Department water system, please call Michael Gray, Public Works Director, at 401-423-7225.

## The Quality of Your Drinking Water

Our goal is to provide you with a safe and dependable supply of drinking water We're proud to inform you that your drinking water meets all Federal and State requirements. We are committed to ensuring the quality of your water.

# The Source of Your Drinking Water

The two primary sources of water are North Pond and South Pond. One groundwater well, designated JR-1, is used as a supplemental water source during periods of the year when the water level in the reservoirs is lower. We disinfect our water and treat it for pH and corrosion control. Our treatment plant can produce 500,000 gallons of clean water a day.

The RI Department of Health, in cooperation with other state and federal agencies, has assessed the threats to Jamestown Water Department 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 Jamestown Water Department 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 following table 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 2016 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.

				2	2016 TEST	RESULTS			
Microbial	Violation	Level Detected (Range)				Unit	MCLG	MCL	Likely Source of Contamination
Contaminants	Y/N	North Pond	South Pond	Well JR-1	Treat. Plant	Measurement	WICLG	WICL	
Total Organic Carbon Removal Ratio (TOC) (2016)	Ν	Ave: 7.74 <i>(</i> 5.2-9.9)	ND	ND	Ave: 4.2 (1.2-6.7)	ppm	n/a	тт	Soil Runoff
Inorganic		MCLG MCI		Likely Source of Contamination					
Contaminants	Y/N	North Pond	South Pond	Well JR-1	Treat. Plant	Measurement	n/a		
Arsenic (2016)	Ν	2.0	ND	ND	ND	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (2016)	Ν	0.009	0.013	ND	ND	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (as Nitrogen) (2016)	N	0.21	0.41	0.81	ND	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits

\*The average presented is the running annual average. In 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. ND = Net Detected

DISTRIBUTION SYSTEM TEST RESULTS							
Microbial Contaminants	Violation Y/N	Level Detected (Range)	Unit Measurement	MCLG	MCL	Likely Source of Contamination	
Total Coliform Bacteria (July 2016)	N	1 Positive	Highest # of monthly positive samples	0	1 positive	Naturally present in the environment	
Turbidity (2016)	Ν	Max: 0.52 (0.05-0.52)	NTU	n/a	тт	Soil runoff	
Inorganic Contaminants	Violation Y/N	Level Detected (Range)	Unit Measurement	MCLG	MCL	Likely Source of Contamination	
Copper* (2016)	Ν	0.063 (0.02-0.066)	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead* (2016)			ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits	

\*All sampling results represented at the 90<sup>th</sup> Percentile

Volatile Organic Contaminants	Violation Y/N	Level Detected (Range)	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Chlorine (2016)	Ν	RAA: 1.21 <i>(0.70-1.5)</i>	ppm	MRDLG = 4	MRDL = 4	Water additive used to control microbes
Chlorite (2016)	N	Max: 0.44 <i>(0.0-0.44)</i>	ppm	0.8	1	By-product of drinking water chlorination
Total Haloacetic Acids [HAA5] (2016)	N	LRAA: 23.95 (18.8-26.2)	ppb	0	60	By-product of drinking water chlorination
[Total Trihalomethanes [TTHM] (2016)	N	LRAA: 53.32 (46.7-70.58)	ppb	0	80	By-product of drinking water chlorination

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.

The State of Rhode Island requires testing for other contaminants not regulated by the US EPA. The following contaminant was detected in our well water:

Alkalinity, Total: In 2016, Total Alkalinity was detected in the North Pond Entry Point at 12 ppm.

Sodium: In 2016, sodium was detected in Entry Point Well JR-1 at 12.1 ppm and in the Treatment Plant at 17.5 ppm.

#### Acute Chlorine Dioxide MRDL Exceedance Violation

During the monitoring periods of April 1-30, 2016 and May 1-31, 2016, our water system's testing results for Chlorine Dioxide did not meet the drinking water standards of 800µg/L. Since this violation, public notification has been posted or distributed to all concerned residents. Some people, including infants and young children, who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorine.

#### Violation of the Public Notification Rule

Our system was required to provide Public Notification to the system's customers and to the RIDOH Center for Drinking Water Quality regarding the Chlorine Dioxide MRDL violation during monitoring periods of 2016. Our system was also required to submit to the RIDOH Center for Drinking Water Quality, a copy of the public notice and a certification that it was in full compliance. Our system failed to submit public notification to its customers and a copy of the public notice and certification to the RIDOH Center for Drinking Water Quality, within the allotted time. Since the issue of this violation, our system has distributed and submitted the all appropriate paperwork and is in full compliance.

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. Jamestown 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

We at Jamestown Water Department 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.