2016 CONSUMER CONFIDENCE REPORT

North Tiverton Fire District

North Tiverton, RI
PWS ID#1592018

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. If after reviewing this report you have any questions, or would like to know more about the North Tiverton Fire District water system, please call the Superintendent at 401-624-8432. The District's offices are located at 241 Hilton Street in North Tiverton, RI. Office hours are 8:45 AM – 12:00 Noon and 1:00 PM to 4:15 PM during normal business days.

The Quality of Your Drinking Water

The quality of your drinking water is excellent and your water is safe to drink. The North Tiverton Fire District and all of its employees are committed to providing 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

We purchase our water from two separate sources, the City of Fall River, Massachusetts, and the Stone Bridge Fire District.

The water that the District receives from Fall River comes from Wattupa Reservoir in Fall River, MA. Before delivery to the transmission and distribution systems, all water from the reservoir system is treated at the North Wattupa Water Treatment Plant.

The Stone Bridge Fire District obtains its water from Stafford Pond in Tiverton, RI. Before delivery to the transmission and distribution systems all water from the reservoir system is treated at the Stone Bridge Fire District Water Treatment Plant which is located on the west side of Stafford Pond.

The RI Department of Health, in cooperation with other State and Federal agencies, has assessed the threats to Stone Bridge Fire District 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 MODERATE RISK of contamination. This means the water could one day become contaminated. Monitoring and protection efforts are necessary to assure continued water quality. The complete Source Water Assessment Report is available from Stone Bridge Fire District 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 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 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 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.

2016 TEST RESULTS FOR FALL RIVER WATER						
Microbial Contaminants	**Violation Y/N**	**Level Detected** (Range)	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Total Coliform Bacteria (2016)	N	1.0%	%Positive Samples per Month	0 %	5% of monthly samples	Naturally present in the environment
Total Organic Carbon (TOC)[1] (2016)	N	Average: 1.9	ppm	2	TT	Naturally present in the environment
Turbidity (2016)	N	0.46	NTU	n/a	TT	Soil Runoff
[1] ppm was the 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.						
Radioactive Contaminants	**Violation Y/N**	**Level Detected** (Range)	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Gross Alpha (2012)	N	0.99	pCi/L	0	15	Naturally occurring radioactivity in bedrock.
Combined Radium (2012)	N	0.06	pCi/L	0	5	Naturally occurring radioactivity in bedrock.
Inorganic Contaminants	**Violation Y/N**	**Level Detected** (Range)	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Barium (2015)	N	0.008 single sample	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper * (2015)	N	ND-0.84	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride (2016)	N	1.1 (0.3-1.1)	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead* (2015)	N	ND-73**	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
* Reported results are the 90th percentile value (the value that 90% of all samples are less than). Of the samples collected for in 2015, our resulting 90th percentile for Lead fell below the AL of 15ppb.						
Volatile Organic Contaminants	**Violation Y/N**	**Level Detected Stafford Pond**	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Chlorine (2016)	N	1.25 – 1.75	ppm	**MRDLG = 4**	**MRDL = 4**	Water additive used to control microbes
Haloacetic Acids (HAA5) (2016)	N	12.0-32.7	ppb	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (2016)	N	20.0-84.4**	ppb	0	80	By-product of drinking water chlorination

*All sampling results represented at the 90th Percentile

** Of the samples collected for in 2015, our resulting RAA for TTHM's meets the acceptable MCL of 80 ppb.

RAA: Running Annual Average, is the average of all monthly or quarterly samples for the last year at all sample locations.

2016 TEST RESULTS FOR STONE BRIDGE FIRE DISTRICT						
Microbial Contaminants	**Violation Y/N**	**Level Detected Stafford Pond** (Range)	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Total Organic Carbon (TOC)[1] (2016)	N	Average: 3.72 (3.1-4.9)	ppm	N/A	TT	Naturally present in the environment
[1] ppm was the 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.						
Inorganic Contaminants	**Violation Y/N**	**Level Detected Stafford Pond** (Range)	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Barium (2016)	N	0.011 *single sample*	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate [as Nitrogen] (2016)	N	0.05 *single sample*	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

2016 DISTRIBUTION TEST RESULTS FROM THE NORTH TIVERTON FIRE DISTRICT						
Inorganic Contaminants	**Violation Y/N**	**Level Detected** (Range)	**Unit Measurement**	**MCLG**	**MCL**	**Likely Source of Contamination**
Fluoride[1] (2016)	N	1.1	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper [2, 3] (01/01/14-12/31/16)	N	0.52	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead [2, 3] (01/01/14-12/31/16)	N	0.0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

[1] North Tiverton Fire District adds Fluoride to the Stone Bridge Fire District water supply as an aid in dental cavity prevention in young children.
[2] Of the twenty-three sites sampled for Copper and Lead, none exceeded their respective actions levels.
[3] All sampling results represented at the 90th Percentile

Disinfectant Contaminants	**Violation Y/N**	**Level Detected** (Range)	**Unit Measurement**	**MRDLG**	**MRDL**	**Likely source of contamination**
Chlorine (2016)	N	RAA**: 1.12 Range: 0.91-1.23	ppm	4	4	Water additive used to control microbes
Haloacetic Acids (HAA5) (2016)	N	RAA**: 16.25 Range: 13.0-20.0	ppb	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (2016)	N	RAA**: 40.4 Range: 19.4-56.5	ppb	0	80	By-product of drinking water chlorination

*All sampling results represented at the 90th Percentile
**RAA: Running Annual Average, is the average of all monthly or quarterly samples for the last year at all sample locations.

Non Detect (ND) - Laboratory analysis indicated the contaminant was not present
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.
Maximum Residual Disinfection Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants
Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.
Nephelometric Turbidity Unit (NTU) – Nephelomatric 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.

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

- **Manganese:** In 2016, Manganese was detected in Fall River Water at 0.007ppm.
- **Sodium:** In 2016, Sodium was detected in Fall River Water at 18.3 ppm.

Frequently Asked Questions

- **Why does my bill change from quarter to quarter? -** Bills change according to water usage, which fluctuates as a result of a number of things, including the number of people who live at a property. Everyone has different personal water habits that will affect the amount of water used in a given month, and water consumption may vary from season to season. Many customers increase their water consumption in the summer months by using water-cooled air conditioning, watering lawns or gardens, washing cars, filling swimming pools, etc. Bills may also fluctuate based on the number of days in a billing period. The North Tiverton Fire District bills every quarter, however, on occasion a bill can be over or under the 90-day period. Almost all bills are based on actual readings, while a few estimated bills are based on usage history.
- **Why is my bill so high? -** Bills change according to water usage, which fluctuates from month to month. A drastic increase in consumption could be an indication that a problem at a property exists and should be inspected for leaks by checking all plumbing, fixtures and water appliances. A quick check would be to turn off all appliances and fixtures that use water and check the small red/ blue arrow or dial on the face of the meter. If there is any movement, even slightly, you may have a leak. If you can isolate the leak to a fixture, typically a toilet, contact a plumbing professional for assistance.
- **How do I check for leaks? -** Your meter is usually located in the basement. On your meter face is a red or blue triangle. If no water is being used, your triangle will be still. If the small triangle is rotating, then water is being drawn from somewhere in your building. Check all faucets and piping for leaks by monitoring for drips of water under sinks and from exposed pipes. Add a few drops of food coloring in the toilet tank. If the food coloring appears in the toilet bowl, this means you have a leak. Some toilet leaks are intermittent, so you don't always see or hear the water running. **A leaking toilet can waste up to 3,000 gallons per day.** Check plumbing in the basement by monitoring for drips of water coming from exposed pipes. Occasionally, leaks develop behind walls or in areas that are not visible. Read your meter periodically to monitor for drastic changes.

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 North Tiverton Fire District 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.

We at the North Tiverton Fire District 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.