

**CONSUMER CONFIDENCE REPORT for 2018**



1875 WATER TOWER

The Mass. Dept. of Environmental Protection (MA-DEP) and the U.S. Environmental Protection Agency (EPA) require public water systems to provide an *Annual Consumer Confidence Report*. The report communicates relevant information to customers about the quality of their drinking water and provides an update about water-related activities. The Watuppa Water Board and the Department of Community Utilities, under which the Water Division operates, presents our Report for 2018. Contact Jodi Raposa, Director of Treatment & Resources, at 508-324-2723, if you have any questions or comments.

**Important statement on the availability of the 2018 CCR**

This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

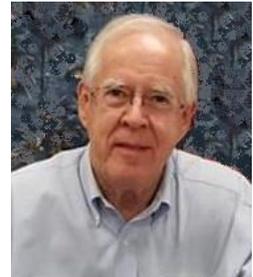
**Declaração importante sobre a disponibilidade da CCR 2018**

Este relatório contém informações importantes sobre sua água potável. Peça para alguém traduzir isso para você ou fale com alguém que o entenda.

**Declaración importante sobre la disponibilidad del CCR 2018**

Este informe contiene información importante sobre su agua potable. Haga que alguien lo traduzca por usted o hable con alguien que lo entienda.

**ADMINISTRATION:** During 2018, John Friar, II retired from his Director's position at the Fall River Water Department. Mr. Friar has been a longtime supporter of the Water Department, and we would like to thank him for his many years of service and advocacy.



Mr. John Friar, II

The Division is continuing its efforts with the large scale water meter replacement, and Automatic Meter Reading (AMR) equipment upgrade program. These upgrades are greatly improving the accuracy and efficiency of water use data collection, for billing purposes.

**QUALITY:** The following includes information about the source of your drinking water, what it contains, what other sources of water may contain, and how it compared in 2018 to Environmental Protection Agency (EPA) and Department of Environmental Protection (DEP) standards. We invite customer questions or comments about water quality. Call (508) 324-2725 for more information. Further, the Watuppa Water Board welcomes public input. Please contact (508) 324-2330 for meeting times and locations.

In 2018, thousands of water quality tests performed on samples taken from the City's source water (North Watuppa Pond), water produced in the treatment plant, and from consumer taps, found NO unacceptable levels of contaminants in the water supplied to you.

**SOURCES:** Drinking water for the City of Fall River is drawn from the North Watuppa Pond. When needed, water is pumped from Copicut Reservoir to the watershed of the North Watuppa, from which it flows to the North Watuppa Pond. In addition, the City has other water resources available if needed. These include the South Watuppa Pond, Terry Brook Pond, Sawdy Pond, Stafford and Devol Ponds, and Lake Noquochoke.

Thus, Fall River has an abundant water supply.



*INTERCEPTOR DRAIN, AFTER TREE REMOVAL*

An interceptor drain runs the length of Rt. 24, along the North Watuppa Pond's westerly boundary, to reduce potential sources of contamination associated with vehicle traffic and other surface runoff. Tree removal, for the protection of the interceptor drain, began in 2018 and continued into 2019. The Fall River Water Department has a Surface Water Assessment Program (SWAP) report. The report can be accessed on the MA-DEP website, or a copy can be requested using the contact information presented herein.

There are no known significant sources of contamination to either the North Watuppa or Copicut Reservoirs. Watershed lands are patrolled by the Fall River Environmental Police Unit to protect both supplies.

Dams control all but one of these resources. In accordance with requirements of the State Office of Dam Safety, work was initiated on the required updated re-inspection of our dams, and a contract for the rehabilitation of the dam at Stafford Pond has been awarded.

**DISTRIBUTION:** In addition to its normal activities during 2018, the Distribution and Maintenance Division replaced more water mains, valves, hydrants, and residential services.

Also about 900 (36%) of the city's hydrants were flushed twice during the year.

**QUANTITY:** In 2018, we delivered about 9,500,000 gallons of water per day to residential, commercial, municipal, and industrial customers; and for fire protection. Of that, about 400,000 gallons per day were sold to Tiverton, Westport and Freetown.

**TREATMENT:** The Water Division owns and operates a drinking water treatment plant on the west shore of the North Watuppa Pond. Its maximum registered capacity is 26 million gallons per day. Treatment processes carried out there include disinfection by chlorination, removal of suspended solids by flocculation/sedimentation, and filtration by sand and anthracite coal. Additionally, carbon dioxide and sodium hydroxide are added to reduce pipe corrosion. Fluoride has been added since 1972 to prevent tooth decay. Due to lack of suitable product, addition of Fluoride ceased mid-September, 2018. Fluoride addition will resume as soon as product becomes available. All treatment processes comply with Federal and State requirements. After treatment, the water is pumped to the City's water distribution system of about 250 miles of water mains, 7 storage tanks, and more than 2,000 hydrants. In 2018 we replaced two out of the four large capacity water pumps that supply the distribution system.



*WATER STORAGE TANK. AIRPORT RD.*

## **Important Definitions to help understand the information in this CCR**

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

**Maximum Residual Disinfection Level (MRDL):** The highest level of disinfectant (Chlorine, Chloramines and Chlorine Dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Goal (MRDG):** The level of a drinking water disinfectant (Chlorine, Chloramines, Chlorine Dioxide), below which there is no known or expected risk to health. MRDGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Treatment Technique (TT):** A required process intended to reduce the level of contamination in drinking water

**Action level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

## **Substances Found in Tap Water**

Sources of drinking water (both tap and bottled) 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 activities. To insure that tap water is safe, Mass DEP and the US EPA enforce regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Massachusetts Department of Public Health establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants that MAY be present in source water include:

**Microbial Contaminants**, such as viruses and bacteria that may come from wastewater treatment plants, septic systems, agricultural livestock activities, wildlife, or even unsanitary or improper procedures by the user.

**Inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

**Organic 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 storm water runoff and septic systems.

**Pesticides and herbicides**, which may come from a variety of sources such as agricultural activities, urban storm water runoff and residential uses.

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

All 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. Call EPA's Safe Drinking Water Hotline at **800-426-4791** for more information about contaminants and potential health effects.

**Additional 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, who have undergone organ transplants, have HIV/AIDS or other immune system disorders, some elderly and some infants can be particularly at risk from infections. These people or their caregivers should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infections by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **800-426-4791**.

### **Specific Educational Statement on Lead**

If present, elevated levels of lead can cause serious health problems, especially in pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Fall River Water Division, Department of Community Utilities, is responsible for providing quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has not been run 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>.

As an incentive to reduce the number of lead services in the City, the Watuppa Water Board offers a \$500 credit for a customer who removes and replaces any lead service on their private property, and another \$500 credit for a lead service replaced by the customer on the public property side of a service. Further, lead services on the street side are replaced by the City, as a courtesy, when the water main in the street is replaced.

### **Specific Educational Statement on Cross-Connections**

A cross connection is a connection between a drinking water pipe and a potential source of contamination. Cross-connections can occur even in your own home. For instance, you hook up a water hose to a sprayer containing fertilizer to spray for your lawn. If the water pressure drops (perhaps because a nearby fire hydrant is used to fight a fire), the fertilizer may be sucked back through the hose into the drinking water pipes. To guard against this, owners need to use a **backflow prevention device**. The Fall River Water Department recommends the installation of devices such as a "hose bib vacuum breaker" on all outside hose connections. The devices can be purchased at most hardware or plumbing supply stores.

When **installed correctly**, this is a great way to protect the water in your home and the City's drinking water system. For additional information on these devices, please contact the Water Department at 508-324-2330.

In addition to this common concern, there are other sources of cross-connections, and those are subject to Chapter 74, Section 256-258 of the Fall River City Ordinance. This Ordinance covers lawn sprinkler systems, medical devices connected to water, and industrial/commercial equipment, etc. The City employs a full-time cross-connection inspector and backflow device tester to track and test these devices.

### **Information regarding high water bill complaints:**

Your water bill includes charges for water and sewer use\*, which are calculated from the amount of water that you use. Water use is based on readings obtained from your water meter. Leaks and excessive use of water will significantly increase that bill. To avoid high water/sewer charges, property owners should:

1. Make sure that plumbing is properly maintained. **A running toilet can waste 3,000 gallons per day.**
2. Periodically check the water meter when there is no water being used. If the red object near the center of the meter face is moving (old-style meters), or the image/icon of a dripping faucet is visible (new digital meters), then water is passing through the meter and there may be unintended use or a leak.
3. Check your quarterly bill to monitor use. Consumption is listed as CCF on the bill. 1 CCF = 748 gallons.

**Water that passes through the meter must be paid for; however, there is an abatement program for excess use due to a running toilet or leaking pipe, or other device.**

\*“Fixed” charges are also levied for collecting and treating storm water, and for water meter servicing/billing.

### **One water quality table follows this narrative.**

The table on the next page is a summary of the analysis done in 2018 on our drinking water. If you have any questions, call the Director of Treatment and Resources at (508) 324-2723.



*HISTORIC ICEHOUSE ON THE NORTH WATUPPA POND*

# FALL RIVER 2018 CONSUMER CONFIDENCE REPORT DATA TABLE

| <u>Contaminant Names</u>  | <u>MCL</u>  | <u>MCLG</u> | <u>Detection Limit</u> | <u>Fall River Water</u> | <u>Sample date</u>  | <u>Violation (s)</u>           | <u>Major Sources in Drinking Water</u>  |
|---|---|-------------|------------------------|-------------------------|---|--------------------------------|---|
| <b>Inorganic Contaminant, ppm</b>   |   |             |                        |                         |   |                                |   |
| Fluoride  | 4   | 4           | 0.3                    | 0.5-1.1                 | daily   | none                           | Water Additive, promotes healthy teeth.   |
| Sodium  | 20 ppm*   |             | 0.5                    | 29                      | 3/15/18   | none                           | Naturally present, and added during treatment process   |
| * No current MCL, however DEP Office of Research and Standards has established a guideline limit for this contaminant.      |   |             |                        |                         |   |                                |   |
| Free Chlorine   | 4.0 MRDL  | 4           |                        | 1.25 - 1.75             | daily   | none                           | Added during treatment process (to kill bacteria)   |
| Barium  | 2.0   | 2           | 0.01                   | 0.01                    | 3/15/18   | none                           | Naturally present in source water   |
| <b>Nitrate Contaminants, ppm</b>  |   |             |                        |                         |   |                                |   |
| Nitrate   | 10  | 10          | 0.05                   | ND                      | 3/15/18   | none                           | Fertilizer use, septic tanks, erosion from natural deposits   |
| Nitrite   | 1   | 1           | 0.01                   | ND                      | 3/13/17   | none                           |   |
| <b>Manganese, ppm</b>   | <b>(SMCL) 0.05</b>  |             | 0.002                  | 0.0189                  | 5/18/17   | none                           | Errosion of natural deposits.   |
| <b>Organic Chemical Contaminants, ppb</b>   |   |             |                        |                         |   |                                |   |
| Trihalomethanes (THMs)  | 80  | n/a         | 0.5                    | 21.5 - 71.2             | Quarterly   | none (per avg.)                | Reaction by-products of chlorine and organics. THMs and HAAs are sampled 4 times per year, as required. |
| Haloacetic acids (HAAs)   | 60  | n/a         | 0.5                    | 8.9 -24.1               | Quarterly   | none (per avg.)                |   |
| <b>Lead, ppb, (ND = not detected)</b>   | 15 (AL not MCL)   | 0           | 2                      | ND to 52.3              | Qtr 3, 2018   | No violation @ 90th percentile | Next due Q3, 2021 Corrosion of household plumbing   |
| <b>Copper, ppm (ND = not detected)</b>  | 1.3 (AL not MCL)  | 0           | 0.02                   | 2.9 to 1.35             | Qtr 3, 2018   | No violation @ 90th percentile | Next due Q3, 2021 Corrosion of household plumbing   |
| <b>Turbidity, NTU</b>   | TT 5.0  | n/a         |                        | Single highest=1.85     | 6/18/18   | none                           | Suspended organic & inorganic particles from soil runoff  |
| Turbidity, a good indicator of filtration effectiveness; measures cloudiness of water. It is monitored throughout each day. |   |             |                        |                         |   |                                |   |
| <b>Microbial Contaminants</b>   |   |             |                        |                         |   |                                |   |
| Total coliform bacteria   | 5% of monthly samples   | 0           |                        | Highest mo.%=1.0        | Jun. 2018   | none                           | Naturally present in the environment and wastes.  |
| <b>Radioactive Contaminants</b>   |   |             |                        |                         |   |                                |   |
| Next Dep required sampling: 2021  |   |             |                        |                         |   |                                |   |
| Gross alpha particle emitters, pCu/l  | 15  | 0           |                        | 0.99                    | 12/31/12  | none                           | Decay of natural and man made deposits  |
| Radium 226 pCi/L  | 5   | 0           |                        | 0.02                    | 12/31/12  | none                           | Erosion of natural deposits.  |
| Radium 228 pCi/L  | 5   | 0           |                        | 0.04                    | 12/31/12  | none                           | Common trace element in the earth's crust.  |
| <b>Volatile Organic Compounds</b>   | Various limits  |             |                        | ND                      | 3/15/18   | none                           | Common trace element in the earth's crust.  |
| <b>Total Organic Carbon, ppm</b>  | TT not MCL  | 2           | 0.2                    | Annual avg = 1.83       | Monthly   | none                           | Naturally present, and in man-made chemicals  |
| <b>Perchlorate, ppb</b>   | 2   |             | 0.05                   | 0.06                    | 9/20/18   | none                           | Naturally present, and in man-made Chemicals  |
| Man-made chemical in rocket propellants, explosives, flares and blasting agents.  |   |             |                        |                         |   |                                |   |
| <b>Required Definitions</b>   |   |             |                        |                         |   |                                |   |
| AL  | ND = Not Detected   |             |                        |                         |   |                                |   |
| AL  | Action Level. See "Important Definitions", above.   |             |                        | mrem/year               | millirems per year, a measure of the amount of radiation                      |                                |   |
| (S)MCL  | (Secondary)Maximum Contaminant Level. See above.  |             |                        | NTU                     | Nephelometric Turbidity Units: measures solid materials suspended in water    |                                |   |
| MCLG  | Maximum Contaminant Level Goal. See above.  |             |                        | pCi/l                   | picocuries per liter, a measure of radiation.                                 |                                |   |
| MRDL  | Maximum Residual Disinfectant Level. See above.   |             |                        | ppm                     | parts per million (example: one pound of salt in one million pounds of water) |                                |   |
| MRDG  | Maximum Residual Disinfectant Goal. See above.  |             |                        | ppb                     | parts per billion, equals ppm multiplied by 1,000"                            |                                |   |
| TT  | Treatment Technique: a required process intended to reduce the level of a contaminant in drinking water |             |                        |                         |   |                                |   |