

# ABENAKI WATER COMPANY—TIOGA RIVER PSW ID# 0202030

## 2021 CONSUMER CONFIDENCE REPORT

Our mission is to deliver the best-quality drinking water and reliable service at the lowest, appropriate cost. Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future. In the coming year we intend to upgrade the current water treatment system by using new filter media and disinfect the water system.

Every year, all water suppliers that serve the same people year round must prepare a Consumer Confidence Report (CCR) for their customers. The report details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

**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 hu-

**Contaminants 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, 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 stormwater runoff, and residential uses.

**Organic chemical contaminants**, including per- and polyfluoroalkyl substances, 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.

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

**In order to ensure that tap water is safe to drink**, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **What is the source of my drinking water?**

Tioga River obtains its water from 2 bedrock wells. BRW 001 is located 8 feet north of the pump house. BRW 002 is located 70 feet northwest of the pump house. Water is pumped simultaneously from the two active bedrock wells to the pump house passing individual source meters and sampling taps. Water passes through one aerator followed by two birm/calcite vessels for iron and manganese removal. The treated water then enters a 5,000 gallon atmospheric storage tank. Two variable frequency drive booster pumps transfer the water through a small 25 gallon expansion tank



### **Why are there contaminants in my 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 Safe Drinking Water Hotline (1-800-426-4791).

### **Do I need to take special precautions?**

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 can be particularly at risk from infections. These people should seek advice about drinking water from the health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

### **Source Water Assessment Summary**

New Hampshire Department of Environmental Services prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the state's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources, and a summary of available protection options. The results of the assessment, prepared on August 16, 2001, are as follows.

**Bedrock Well #001** received 4 high susceptibility ratings, 1 medium susceptibility ratings, and 7 low susceptibility ratings.

**Note:** This information is over 10+ years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has



## Source Water Assessment Summary continued

The complete Assessment Report is available for inspection at the Abenaki Water Company office.

For more information, call Abenaki Water Company 603-293-8580 or visit the NHDES website <https://www.des.nh.gov/resource-center/publications>.

### How can I get involved?

For more information about your drinking water, please call *the owner, Donald Vaughan at 603-293-8580 or the primary operator, Eric Messier, at 603-293-8580*. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

**Violations and Other information:** See violation list in table following

We repaired 1 distribution main leak in the system, 24 Tioga Drive

### Definitions:

**Ambient Groundwater Quality Standard or AGQS:** The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.

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

**Level I Assessment:** A study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

**Level II Assessment:** A very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**Maximum Contaminant Level or MCL:** 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 or 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 Residual Disinfectant Level or 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.

**Maximum Residual Disinfectant Level Goal or 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.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

### Abbreviations

BDL: Below Detection Limit

mg/L: milligrams per Liter

NA: Not Applicable

ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

RAA: Running Annual Average

TTHM: Total Trihalomethanes

### Drinking Water Contaminants:

**Lead:** 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. This water system is responsible for high quality drinking water, but can not control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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://water.epa.gov/drink/info/lead/index.cfm>

## Violations

| Violations      | Date of Violation | Explain Violation  | Length of Violation | Action taken to resolve  | Health Effects |
|-----------------|-------------------|--|---------------------|--|----------------|
| Public Notice   | 8/24/2020         | Failure to submit Initial Water Quality Parameters.                | 9/11/2020           | Public notice was mailed out on September 4, 2020, indicating the submittal date was missed per NH DES guidelines. | N/A            |
| Lead and Copper | 7/11/2020         | Failure to submit Lead & Cooper sample notification within 30 days | 9/8/2020            | Public Notice was mailed out on July 20, 2020  | N/A            |
| Public Notice   | 2/25/2020         | Failure to submit Initial Water Quality Parameters.                | 3/31/2020           | Public notice was mailed, indicating the submittal date was missed per NH DES guidelines.                          | N/A            |

## Lead and Copper

| Contaminant  | Action Level | 90th percentile sample value | Date     | # of sites above AL | Likely Source of Contamination   | Health Effects of Contaminant   |
|--------------|--------------|------------------------------|----------|---------------------|--|---|
| Copper (ppm) | 1.3          | 0.106                        | 7/2/2020 | 0                   | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.   |
| Lead (ppb)   | 15           | 2                            | 7/2/20   | 0                   | Corrosion of household plumbing systems, erosion of natural deposits                                   | 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 (800-426-4791). |

## Detected Water Quality Results

| Contaminant (Units)                 | Level Detected* | MCL | MCLG | Violation YES/NO | Likely Source of Contamination  | Health Effects of Contaminant   |
|-------------------------------------|-----------------|-----|------|------------------|---|---|
| <b>Microbiological Contaminants</b> |                 |     |      |                  |   |   |
| <i>E. coli</i><br>Bacteria          | Absent          | 0   | 0    | No               | Human and animal fecal waste  | <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.   |
| <b>Radioactive Contaminants</b>     |                 |     |      |                  |   |   |
| Compliance Gross Alpha (pCi/L)      | 1.7             | 15  | 0    | No<br>6/2019     | Erosion of natural deposits   | Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.   |
| Uranium (ug/L)                      |                 | 30  | 0    |                  | Erosion of natural deposits   | Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.   |
| Combined Radium 226 + 228 (pCi/L)   | 0.9             | 5   | 0    | No<br>11/2020    | Erosion of natural deposits   | Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.   |
| <b>Inorganic Contaminants</b>       |                 |     |      |                  |   |   |
| Barium (ppm)                        | 0.133           | 2   | 2    | No<br>8/2018     | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits                                | Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.  |
| Chromium (ppb)                      | 4               | 100 | 100  | No<br>8/2018     | Discharge from steel and pulp mills; erosion of natural deposits  | Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.   |
| Fluoride (ppm)                      | 0.32            | 4   | 4    | No<br>8/2018     | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories | Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums |

| PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS |                   |         |                                    |   |  |  |
|---|-------------------|---------|------------------------------------|---|--|--|
| Contaminant<br>(Units)                                  | Level<br>Detected | MCL     | MCLG                               | Viola-<br>tion<br>YES/NO  | Likely Source of Contamina-<br>tion  | Health Effects of Contaminant  |
| Perfluorohexane sulfonic acid (PFHxS)<br>(ppt)          | ND                | 18      | 0                                  | No<br>10/15/20  | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems | Some people who drink water containing perfluorohexane sulfonic acid (PFHxS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels. It may also lower a women's chance of getting pregnant.  |
| Perfluorononanoic acid (PFNA)<br>(ppt)                  | ND                | 11      | 0                                  | No<br>10/15/20  | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems | Some people who drink water containing perfluorononanoic acid (PFNA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels.  |
| Perfluorooctane sulfonic acid (PFOS)<br>(ppt)           | ND                | 15      | 0                                  | No<br>10/15/20  | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems | Some people who drink water containing perfluorooctane sulfonic acid (PFOS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant. |
| Perfluorooctanoic acid (PFOA)<br>(ppt)                  | ND                | 12      | 0                                  | No<br>10/15/20  | Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems | Some people who drink water containing perfluorooctanoic acid (PFOA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women's chance of getting pregnant.        |
| <b>SECONDARY CONTAMINANTS</b>                           |                   |         |                                    |   |  |  |
| Secondary MCLs<br>(SMCL)                                | Level Detected    | Date    | Treatment<br>technique<br>(if any) | AL (Action Level),<br>SMCL or AGQS<br>(Ambient groundwa-<br>ter quality standard) | Specific contaminant criteria and reason for monitoring  |  |
| Chloride (ppm)  | 6                 | 8/15/18 | N/A                                | 250   | Wastewater, road salt, water softeners, corrosion  |  |
| Fluoride (ppm)  | 0.32              | 8/15/18 | N/A                                | 2   |  |  |
| Iron (ppm)  | 0.086             | 8/15/18 | N/A                                | 0.3   | Geological   |  |
| Manganese (ppm)   | 0.011             | 8/15/18 | N/A                                | 0.05  | Geological   |  |
| Nickel  | 0.001             | 8/15/18 | N/A                                | N/A   | Geological; electroplating, battery production,ceramics  |  |
| PH (ppm)  | 8.075             | 2020    | N/A                                | 6.5-8.5   | Precipitation and geology  |  |
| Sodium (ppm)  | 25                | 8/15/18 | N/A                                | 100-250   | We are required to regularly sample for sodium   |  |
| Sulfate (ppm)   | 13                | 8/15/18 | N/A                                | 250   | Naturally occurring  |  |
| Zinc (ppm)  | ND                | 8/15/18 | N/A                                | 5   | Galvanized pipes   |  |