City of Franklin

Water Quality
Consumer
Confidence Report

Volume 25
June 2023

2023 Consumer Confidence Report

## Franklin Water Works

0851010

Introduction

Our mission for the City of Franklin Water Department is to supply safe reliable drinking water, while looking to the future demand for use and fire protection and staying compliant with State and Federal regulations.

Aging infrastructure presents challenges for maintaining safe quality drinking water and continuous improvements are necessary. In the past year, we have secured Arpan ad DWSRF funding to upgrade the water main and services on East Bow St. and West Bow St. to Cheney Hill. As well as a portion of Thunder Rd. to South Main. In the coming year we intend to have bids for these projects to be ready to start construction in the spring of 2024. Water services are also being taken off old 8" water and connecting onto the newer 12" in hopes of improved water quality for those residents. These investments along with on-going operation and maintenance costs are supported by user fees. When considering the high value placed on quality drinking water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and ensures high-quality drinking water is always available at your tap.

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and how to get more information. This annual report documents all detected primary and secondary drinking water contaminants and their respective standards known as Maximum Contaminant Levels (MCLs).

NOW IT COMES WITH A LIST OF INGREDIENTS.
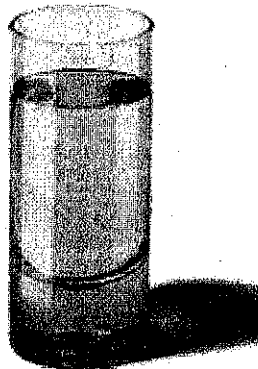
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

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, EPA prescribe 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?

The City of Franklin drinking water comes from 3 gravel packed wells as well a 48-point vacuum well system. The 3 gravels well are filtered through the water treatment plant. Disinfection is done with chlorination which also assists with oxidation for the removal of iron and manganese. Our average daily demand is around 600,000 gallons per day.

Why are 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 at 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. 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/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 at 1-800-426-4791.

Source Water Assessment Summary

NHDES 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 January 11th, 2000 for

the 3 gravel packed wells (GPW) and October 16th, 2002 for PTW are noted below.

>Acme Well #1- 1 susceptibility rating was rated high, 2 rated medium and 9 rated low.
>Acme Well #2- 2 susceptibility ratings were high, 2 rated medium and 8 rated low.
>Sanbornton Wellfield #3- 2 susceptibility ratings were high, 3 rated medium and 7 rated low.
>Franklin Fall Well - 4 susceptibility ratings were high, 2 rated medium and 6 rated low.

Note: Due to the time when the assessments were completed, some of the ratings might be different if updated to reflect current information.

The complete Assessment Report is available for review at *43 West Bow St Franklin, NH*. For more information, call *Justin Hanscom at 603-934-4103* or visit the NHDES website.

How can I get involved?

If you are interested in learning more about the water system you can contact Municipal Services Director Justin Hanscom 43 West Bow St, Franklin, NH or by calling 603-934-4103. You may also attend scheduled meetings of the Municipal Services Committee and City Council. All proposed changes to rates and fees as well as, to the City Water Ordinance are scheduled for public hearing prior to adoption. A vote of approval is required by the Franklin City Council.

Violations and Other information: NONE

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

UCMR: Unregulated Contaminant Monitoring Rule

ug/L: micrograms per Liter

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 cannot 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 at 1-800-426-4791 or at US EPA Basic Information about Lead in Drinking Water

System Name: <u>Franklin Water Works</u>   PWS ID: <u>0851010</u>

2023 Report (2022 Data)

VIOLATIONS					
VIOLATIONS	**Date of violation**	**Explain violation**	**Length of violation**	**Action taken to resolve**	**Health Effects (Env-Dw 804-810)**
Public notice	N/A				N/A
Monitoring and Reporting (M/R)	N/A				N/A
MCL	N/A				*Insert health effects language for contaminant from Env-Dw 804-810*
E. coli MCL	N/A	Insert required language from Env-Dw 811.17(h)			*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We violated the standard for E. coli, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct a detailed assessment to identify problems and to correct any problems that are found.
TT (Treatment Technique)	N/A				Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.
Filtration/disinfection Processes	N/A				Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

ASSESSMENTS					
During the past year we were required to conduct Assessment(s)	**Number of assessments required in the reporting year**	**Number of assessments completed in the reporting year**	**Number of corrective actions required**	**Number of corrective actions completed** *If you completed all corrective actions, you can remove the italicized statements in this table.*	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
Level I	0	0	0	N/A	*During the past year we failed to correct all identified defects that were found during the assessment.*
Level II	0	0	0	N/A	*During the past year we failed to correct all identified defects that were found during the assessment.*
Level II We were required to complete a Level II assessment because we found *E. coli* in our water system.	0	0	0	N/A	*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
ASSESSMENTS NOT COMPLETED					
During the past year we were required to conduct Assessment(s)	**Number of assessments required in the reporting year**	**Number of assessments completed in the reporting year**	**Number of corrective actions required**	**Number of corrective actions completed**	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution.
Level I	0	0	0	N/A	During the past year we failed to conduct all of the required assessment(s).
Level II	0	0	0	N/A	During the past year we failed to conduct all of the required assessment(s).
Level II Required because *E. coli* was found in our water system.	0	0	0	N/A	*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal waste. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct and problems that were found during these assessments.

Revised 2/28/2023   Template provided by New Hampshire Department of Environmental Services   Page 2 of 6

*The value must be reported as whole number, see Env-Dw 811, Appendix B for conversions:

LEAD AND COPPER

Contaminant (Units)	Action Level (AL)	90th percentile sample value *	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	.63	9/28/22	0	NO	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	.02	9/28/22	0	NO	Corrosion of household plumbing systems, erosion of natural deposits	(15 ppb in more than 5%) 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). (Above 15 ppb) Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

DETECTED WATER QUALITY RESULTS

Microbiological Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
E. coli Bacteria	*Identify total # of positive samples.*	0	0	0	NO	Human and animal fecal waste	**E. coli** 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.
Total Organic Carbon (ppm)	N/A		TT	N/A	NO	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

Radioactive Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Compliance Gross Alpha (pCi/L)	.0.2-1.0	2/10/15	15	0	NO	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.
Combined Radium 226 + 228 (pCi/L)	0.1-0.6 0.3	2/10/15 3/23/20	5	0	NO	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.

Inorganic Contaminants

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Barium (ppm)	0.0020 - .013	3/10/22	2	2		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.
Nitrate (as Nitrogen) (ppm)	.81	3/10/22	10	10		Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	(5 ppm through 10ppm) Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider. (Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Haloacetic Acids (HAA) (ppb)	3-6	7/12/22	60	N/A	NO	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (TTHM) (Bromodichloro-methane Bromoform Dibromochloro-methane Chloroform) (ppb)	7.7-18.5	7/12/22	80	N/A	NO	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS

Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Perfluorohexane sulfonic acid (PFHxS) (ppt)	ND	6/7/21	18	0	NO	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) (ppt)	ND	6/7/21	11	0	NO	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.
Contaminant (Units)	Level Detected*	Date	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant
Perfluorooctane sulfonic acid (PFOS) (ppt)	ND	6/7/21	15	0	NO	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) (ppt)	ND	6/7/21	12	0	NO	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.

SECONDARY CONTAMINANTS

Secondary MCLs (SMCL)	Level Detected	Date	Treatment technique (if any)	SMCL	50 % AGQS (Ambient groundwater quality standard)	AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Chloride (ppm)	21-42	3/10/22	N/A	250	N/A	N/A	Wastewater, road salt, water softeners, corrosion
Fluoride (ppm)	0.10	3/10/22	N/A	2	2	4	
Iron (ppm)	ND	3/10/22	Filtration	0.3	N/A	N/A	Geological
Manganese (ppm)	0.0051	3/10/22	Filtration	0.05	0.15	0.3	Geological
PH (ppm)	7.36-8.11	3/10/22	N/A	6.5-8.5 (Normal Range)	N/A	N/A	Precipitation and geology
Sodium (ppm)	24-53	3/10/22	N/A	100-250	N/A	N/A	We are required to regularly sample for sodium
Sulfate (ppm)	6.7-7.6	3/10/22	N/A	250	250	500	Naturally occurring
Zinc (ppm)	.023	3/10/22	N/A	5	N/A	N/A	Galvanized pipes