2023 Consumer Confidence Report

Meredith Water Department 1521010

Introduction

Our mission as a responsible public water system 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.

These investments along with on-going operation and maintenance costs are supported by rate payers and residents. When considering the impact water has on our daily lives it is truly valuable to have a water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) 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 sub-

stances 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 storm-water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts 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 naturallyoccurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, 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?

Meredith's drinking water comes from Lake Waukewan. Lake Waukewan has a surface area of 953 acres, with an average depth of twenty-two feet. Water is pumped from the lake to the Meredith Water Treatment Plant which is located on Waukewan Street. Here, the water is clarified, filtered, and disinfected with the aid of chemicals and mechanical processes. In 2022, Meredith's Water Plant treated a total of 125,563,670 gallons. The pH of the water is controlled to prevent corrosion to your plumbing which can cause lead, copper, and other metals to

enter your water through the deterioration of plumbing pipes. Phosphates (corrosion inhibitors) are added to aid in plumbing and water main

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

DES 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 full assessment can be viewed on the DES Drinking Water Source Assessment Website at:

http://des.nh.gov/organization/divisions/water/d wgb/dwspp/dwsap.htm.

Note: This information is over 18 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 no plans to update this data.



How can I get involved?

For more information about your drinking water, please call the Primary Operator, Jason Bordeau (Water & Sewer Superintendent) at 677-4201 or the Meredith Water Treatment Plant at 279-3046. Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

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. Meredith had 0 coliform detects in 2022.

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 ppt: parts per trillion

RAA: Running Annual Average

UCMR: Unregulated Contaminant Monitoring

Rule ug/L: micrograms per Liter TTHM: Total Trihalomethanes

LRAA: Local Running Annual Average

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 or at:

http://water.epa.gov/drink/info/lead/index.cfm

Meredith Water Department

PWS ID: 1521010

2023 Report

2023 Bulk Water Deliveries: NONE

2023 Violations: DBP TTHM PRECURSOR REMOVAL Violation 1/1/23-4/1/23-7/1/23 Returned to compliance

1/19/24

				DETECTED WATER	QOALIII-MESOLIS	
Contaminant (Units)	Level Detected*	MCL	MCLG	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
E. Coli Bacteria	0 Positive Samples	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)	2023 RAA=1.94	П	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. Thes 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.
Turbidity (NTU)	Highest: 0.29 Highest Monthly Avg: 011	π	N/A	NO	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

	LEAD AND COPPER										
Contaminant (Units)	Action Level (A.L.)	90th Percentile	Date	# of Sites Above A.L.	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant				
Copper (ppm)	1.3 mg/l	0.062	10/05/2023	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)	.015 mg/l Or 15 PPB	0.001	10/05/2023	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).				

Contaminant (Units)	Level Detected	MCL	MCLG	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Total Trihalomethanes (TTHM) (Bromodichloromethan, Bromoform, Dibromochloromethane, Chloroform) (ppb)	2 Sample Sites High: 53 Low: 23 Site 1 LRAA: 46 Site 2 LRAA: 39	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.
Haloacetic Acids (HAA) (ppb)	2 Sample Sites High: 28 Low: 3 Site1 LRAA: 11 Site2 LRAA:23	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.

	INORGANIC CONTAMINANTS									
Contaminant (Units)	Level Detected	MCL	MCLG	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant				
Barium (ppm)	8/2/2023 0.0081	2	2	NO	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.				
Cyanide (ppb)	ND	200	200	NO	Discharge from steel/metal factories; discharge from plastic and fertilizer factories	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.				

Nitrate(as Nitrogen) (ppm)	ND	10	10	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	(5ppm through 10ppm) Nitrate in drinking water at levels above 10ppm 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.
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		ADDITIONAL	TESTING
Contaminant (Units)	Level Detected	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
Sodium (ppm)	8/2/2023 20	100-250	We are required to regularly sample for sodium

			PE	R- and POLYFLUOR	OALKYL SUBSTANCES	S
Contaminant (Units)	Level Detected	MCL	MCLG	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Perfluorohexane sulfonic acid (PFHxS) (ppt)	ND	70 As of 1/7/20	0	NO	Discharge from industrial processes, wastewater treatment, residuals from	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 woman's chance of getting pregnant.
Perfluorononanoic acid (PFNA) (ppt)	ND	70 As of 1/7/20	0	NO	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) (ppt)	ND	70 As of 1/7/20	0	NO	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 woman's chance of getting pregnant.
Perfluorooctanoic acid (PFOA) (ppt)	ND	70 As of 1/7/20	0	NO	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 woman's chance of getting pregnant.