

# Northeast Water System

2023

## Drinking Water Consumer Confidence Report

To comply with the Safe Drinking Water Act, the Northeast Water System has prepared the following report on monitoring performed on its drinking water. The purpose of this report is to advance consumers understanding of drinking water and heighten awareness of the need to protect water resources. Included within this report are general health information; water quality test results; and how to participate in decisions concerning your drinking water and contacts. We have a current, unconditioned license to operate our water system.

### Northeast Water System Water Source

The Northeast Water System purchases its drinking water from the City of Toledo. The City of Toledo draws its water from Lake Erie. Water is then treated at Toledo's water treatment plant. From there it is distributed to the customers through a piping network. The Northeast Water System receives the finished water via 12-inch main at Rd 3 and H, where it is metered and redistributed throughout the system. In an effort to maintain and supply the customers with the safest possible product, the Northeast Water System conducts daily monitoring of the disinfectant levels in the water at a representative location.

### Sources of Drinking Water Contamination

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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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 storm water runoff, and septic systems; (E) 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 prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 call the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

### Source Water Susceptibility

The State has completed a Source Water Assessment for the City of Toledo, which uses surface water drawn from Lake Erie. By their nature, all surface waters are considered to be susceptible to contamination from chemicals and pathogens. The time it would take for a contaminant to travel from our source water to our drinking water intake is relatively short. Although the water system's main intake is located offshore, its proximity to the following increases the susceptibility of the source water to contamination: municipal sewage treatment plants; industrial wastewater; combined sewer overflows; septic system discharges; open water dredge disposal operations; runoff from agricultural and urban areas; oil and gas production; mining operations; accidental releases and spills especially from commercial shipping operations and recreational boating. The City of Toledo treats its water to meet and even surpass drinking water quality standards, but no single treatment protocol can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More detailed information is provided in the City of Toledo's Drinking Water Source Assessment Report, which can be obtained by calling 419-936-3021 or at <https://toledo.oh.gov/services/public-utilities/water-treatment/drinking-water-quality-information/> or contact Toledo Water Treatment Plant 419-936-3021.

### Your Health and Drinking Water

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 their health care providers. EPA/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 (1-800-426-4791).

### Northeast Water System Water Quality

EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The tables below show the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in the tables below. EPA requires the Northeast Water System to conduct regular water sampling for disinfectant, bacteria, lead, copper and disinfections byproducts to ensure drinking water safety. Listed below are the contaminants that were found in the Northeast Water System drinking water.

Consecutive PWS: OAC 3745-81-24 requires specific public water systems to conduct disinfection byproduct sampling at their master meter location(s) after meeting specific triggers within the rule. This rule affects both consecutive systems and their wholesaler system. Northeast Water System has triggered into the requirement to sample at the designated master meter location for disinfection byproducts due to exceedances of the MCL and/or OEL for disinfection byproducts. This public water system purchases water from The City of Toledo. This sampling has been conducted since 4<sup>TH</sup> quarter 2022 and the results are shown below. If you have any questions about this sampling and/or the rule, please contact Randy Mahlman at 419-337-9263

MM DMP Sampling	1Q 2023	2Q2023	3Q2023	4Q2023	LRAA
HAA5	10.5 ppb	13.8 ppb	14.4 ppb	6.8 ppb	11.4 ppb
TTHM	35ppb	38.2 ppb	64 ppb	33.3 ppb	42.63 ppb

Contaminant (Unit)	MCLG	MCL	Level Found	Range of Detection	Sites >AL	Violation	Sample Year	Likely Source of Contamination
<b>Volatile Organic</b>								
TTHM (ppb)	NA	80	67.27	36-83.4	NA	No	2023	By-product of drinking water disinfection
HAA5 (ppb)	NA	60	16	8.1-23.9	NA	No	2023	By-product of drinking water disinfection
<b>Inorganic</b>								
Lead (ppb)	0	AL 15	<4 90 <sup>th</sup> percentile	<4-4	0	No	2023	Corrosion of household plumbing system; Erosion of natural deposits
0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppb.								
Copper (ppm)	1.3	AL 1.3	.008	<0.004-0.009	0	No	2023	Corrosion of household plumbing system; Erosion of natural deposits
0 out of 10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.								
<b>Residual Disinfectant</b>								
Total Chlorine (ppm)	MRDLG 4.0	MRDL 4.0	.88	.48-1.28	NA	No	2023	Additive used to control microbes

In addition to the Northeast Water System sampling, the City of Toledo conducts regular water sampling of its water prior to delivery to Fulton County for disinfectant, disinfections byproducts, bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants. Listed below are the contaminants that were found in Toledo drinking water.

Contaminant (Unit)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Likely Source of Contamination
<b>Inorganic</b>							
Fluoride (ppm)	4	4	1.0	0.97-1.03	No	2023	Erosion of natural deposits; water additive which promotes strong teeth; and discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	2.95	<0.2 – 2.95	No	2023	Runoff from fertilizer use; erosion of natural deposits; leaching from septic tanks
Chlorite (ppm)	0.8	1.0	0.07	<0.10 – 0.14	No	2022	By-product of drinking water disinfection
Sodium (ppm)	NA	NA	14.25	9.19-29.21	No	2023	Erosion of natural deposits
<b>Microbiological</b>							
Turbidity (NTU)	NA	TT	0.38	0.02-0.38	No	2023	Soil runoff, suspended matters in lake water
TOC	NA	TT	1.33	0.83-2.58	No	2023	Naturally present in the environment
<b>Other</b>							
Microcystin (ppb)	Threshold - Note Below		ND	ND	No	2020	Toxin produced by harmful algal blooms
PFAS	See Note Below		ND	ND	No	2020	Man-made chemicals
Chlorine Dioxide (ppm)	0.8	0.8	0.3	<0.2 – 0.3	No	2021	Additive used to control microbes
Alpha (pCi/l)	0	15	<3	NA	No	2018	Erosion of natural deposits
Radium (pCi/l)	0	5	<1	NA	No	2018	Erosion of natural deposits
Atrazine (ppb)	3	3	0.18	NA	No	2017	Runoff from herbicide used on row crops
Simazine (ppb)	4	4	ND	NA	No	2016	Runoff from herbicide used on row crops

## Definitions

**Master Meter:** A master meter is a one that connects a wholesale public water system to consecutive public water system(s). This type of meter monitors the amount of water being sent to the consecutive system(s) and can also be used to determine the quality of water being delivered to the consecutive system(s).

**MCLG – Maximum Contaminant Level Goal:** 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.

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

**PPM – Parts per Million or Milligram per Liter (mg/l):** are units of measure for concentration of a contaminant.

**PPB – Parts per Billion or Micrograms per Liter (ug/l)** are units of measure for concentration of a contaminant.

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

“<” – A symbol, which means less than. The result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

“>” – A symbol, which means greater than or number of samples above an Action Level.

**ND – Not Detectable**

**pCi/l** – Picocuries per Liter (measure of radioactivity)

**NTU** – Nephelometric Turbidity Unit: is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

**MRDLG** – Maximum Residual Disinfectant Level Goal: The level of 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.

**MRDL** – Maximum Residual Disinfectant Level: 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.

**TTHM** – Total Trihalomethanes. The level detected is the highest annual average. MCL compliance is based on the highest annual average.

**HAAS** – Haloacetic Acids. The level detected is the highest annual average. MCL compliance is based on the highest annual average.

**TOC** – Total Organic Carbon.

### **Turbidity**

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of the Toledo’s filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. In 2022, 100% of the daily samples were below 0.3 NTU.

### **TOC**

The value reported under “Level Found” for TOC is the lowest running annual average ratio between the percent of TOC actually removed to the percent of TOC required to be removed. A value of greater than 1.0 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1.0 indicates a violation of TOC removal requirements.

### **Nitrate**

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in the drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short period of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

### **Microcystin**

Microcystin is a toxin produced by harmful algal blooms. Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin. The following thresholds were developed by the United States Environmental Protection Agency (USEPA). The 0.3 ppb Do Not Drink Advisory Threshold is for children 6 and under. While the 1.6 ppb Do Not Drink Advisory Threshold is for anyone 6 and older. For information on Harmful Algal Bloom Response Strategy go to <https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters/public-water-systems/harmful-algal-blooms> and click on the “[Public Water System Harmful Algal Bloom Response Strategy](#)” on the right

### **PFAS**

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing. In 2022, Toledo water system was sampled as part of the State of Ohio’s Drinking Water PFAS Sampling Initiative. Six PFAS compounds were sampled, and none were detected in the finished drinking water. For more information about PFAS, please visit <http://pfas.ohio.gov>.

### **Bacteriological**

The total coliform regulation is based on the presence and absence of total coliform. A public water system is in compliance if the following criteria are met:

A. No more than 5% of samples collected during the month can be positive.

B. No resamples collected during the month can be positive.

Northeast Water System had no positive samples collected out of 24 total samples through the year 2022.

### **Total Trihalomethanes & Haloacetic Acids**

Some people who drink water containing Trihalomethanes (TTHM) & Haloacetic Acids (HAA5) 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. Based on the 2023 samples, the Northeast Water System has maintained the TTHM & HAA5 below the MCL levels.

### **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. Northeast Water System 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

### **License to Operate**

In 2023, we had an unconditional license to operate our water system.

### **Drinking Water Concerns**

Public interest and participation in our community's decisions affecting drinking water is encouraged. Regular Fulton County Board of Commissioners meetings occur on Tuesdays and Thursdays, at 9:00 a.m. The Commissioners' office is located at 152 S. Fulton St., Suite 270, Wauseon, Ohio. For more information about this Consumer Confidence Report or water quality, please contact the Northeast Water System at (419) 337-9263.