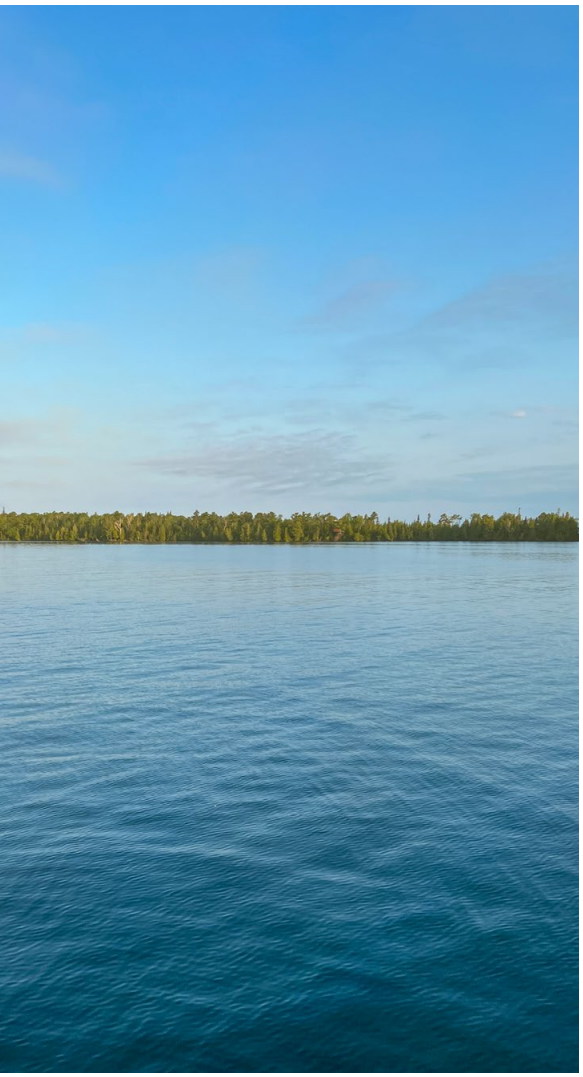
ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By

City of Youngstown

PWS ID#: 5002303

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

How do I participate in decisions concerning my drinking water?

Public participation and comments regarding water are encouraged at regular city council meetings, which are scheduled on the first and third Wednesday of every month at 5:30 p.m. on the sixth floor of Youngstown City Hall, 26 South Phelps Street. To request permission to address city council, please contact City Council Chambers at (330) 742-8708.

Source Water Assessment

For the purpose of source water assessments in Ohio, all surface waters are susceptible to contamination. By nature, surface waters are accessible and can be contaminated by chemicals and disease-causing organisms that may rapidly arrive at the public drinking water intake with little warning or time to prepare.

The Mahoning Valley Sanitary District's drinking water source protection area is susceptible to runoff from row crop agriculture and animal feedlot operations, oil and gas wells, failing home and commercial septic systems, road/rail crossings, and new housing and commercial development that could raise runoff from roads and parking lots.

The Mahoning Valley Sanitary District water system treats the water to meet drinking water water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can further be decreased by implementing measures to protect Meander Creek Reservoir and its watershed. More detailed information is provided in the Mahoning Valley Sanitary District's Drinking Water Source Protection Plan, which can be obtained by calling Jonathan Jamison at (330) 652-3614 or visiting meanderwater.org and selecting District Info, Water Quality.

Information on the Internet

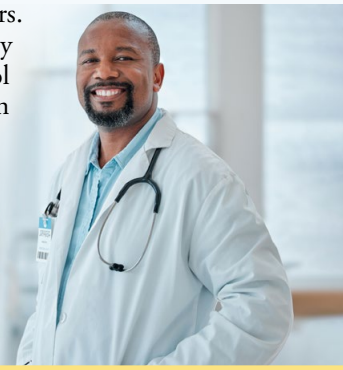
- **Link to the CCR:** https://youngstownohio.gov/water#quality
- **Backflow Prevention:** https://youngstownohio.gov/water#backflow
- **Lead Awareness:** https://youngstownohio.gov/water_lead

How Is Your Drinking Water Treated?

The Mahoning Valley Sanitary District treats approximately 21 million gallons per day of raw water from Meander Creek Reservoir and pumps it to Youngstown, Niles, and McDonald. These communities distribute the water to residents and surrounding areas. Treatment includes chemical addition for softening, disinfection, fluoridation, taste and odor control, mixing, settling, filtration, and pumping.

Important Health 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, 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. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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 (800) 426-4791 or epa.gov/safewater.



Questions?

For technical water quality information, contact the Mahoning Valley Sanitary District (MVSD) at (330) 652-3614. For information regarding water distribution, pressure, discolored water, or lead and copper sampling, contact the chief engineer's office at (330) 743-5338. This information is also available at youngstownohio.gov/water.

Substances That Could Be in Water

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 occur naturally in the soil or groundwater or may result from urban stormwater 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 synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/ wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit bit.ly/3Z5AMm8.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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, you may wish to have your water tested. A list of laboratories certified in Ohio to test for lead may be found at epa.ohio.gov/ddagw or by calling (614) 644-2752. 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 epa.gov/safewater/lead.

Per the Lead and Copper Rule, public water systems were required to develop and maintain a service line inventory. A service line is the underground pipe that supplies your home or building with water. The service line inventory, which lists the material type for your location, is available for download here: https://youngstownohio.gov/sites/default/files/forms/OEPA-SL-Inventory.xlsx. Additionally, you can learn more about our efforts on lead by visiting: https://youngstownohio.gov/water_lead.

BY THE NUMBERS

3.4 BILLION

The daily volume in gallons of water recycled and reused in the U.S., reducing waste and conserving resources.

28%

The percent reduction in per capita water use in the U.S. since 1980, thanks to efficiency improvements.

99.99%

The percent effectiveness of modern water treatment plants in removing harmful bacteria and viruses from drinking water.

1.2 MILLION

The length in miles of drinking water pipes in the U.S. delivering clean water to millions of homes and businesses daily.

1.7 MILLION

The number of jobs supported by the U.S. water sector.

Individual Lead Samples Exceeding AL

Lead and copper sampling is reported as Round 1, January to June 2024, and Round 2, July to December 2024. Round 1 had 108 individual samples, and Round 2 had 104 individual samples, for a total of 212 samples for 2024.

Of the 212 samples tested for lead, five had concentrations above the action level of 15 parts per billion (ppb), three samples in Round 1 and two in Round 2.

SIX-MONTH LEAD AND COPPER SAMPLING

	ROUND 1, JANUARY-JUNE 2024	ROUND 2, JULY-DECEMBER 2024
LC221	216 (ppb)	
LC369	98.5 (ppb)	
LC420	41.8 (ppb)	
LC346		16.0 (ppb)
LC400		21.0 (ppb)

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit https://bit.ly/3IeRyXy.

Your Water Supply

The Mahoning Valley Sanitary District public water system uses surface water drawn from the Meander Creek Reservoir. Youngstown distributes approximately 16 million gallons per day through 750 miles of pipelines to residents of Youngstown, Austintown, Boardman, Canfield Township, and Liberty and sells bulk to Mahoning County (Jackson and Milton Townships), and the cities of Girard and Canfield.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

Note that we have a current, unconditioned license to operate our water system.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Fluoride[1] (ppm)	2024	4	4	0.99	0.85–1.15	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	34.2	12.0–44.1	No	By-product of drinking water disinfection
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	70.35	42.9–95.1	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1st Half 2024	1.3	1.3	58.06	<10–77.6	0/108	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	2nd Half 2024	1.3	1.3	53.02	<10–89	0/103	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	1st Half 2024	15	0	0.4380	<2–216	3/108	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits
Lead (ppb)	2nd Half 2024	15	0	<2	<2–21	2/103	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane[1] (ppb)	2024	8.16	4.7–11.9	NA
Chloroform[1] (ppb)	2024	51.95	31.3–72.9	NA
Perfluorobutanesulfonic Acid [PFBS][2] (ppt)	2024	2.0	1.5–2.0	NA
Perfluorobutanoic Acid [PFBA][2] (ppt)	2024	6.8	4.1–6.8	NA
Perfluoroheptanoic Acid [PFHpA][2] (ppt)	1/2024, 4/2024	1.3	<1.1–1.3	NA
Perfluorohexanesulfonic Acid [PFHxS][2] (ppt)	2024	5.6	3.9–5.6	NA
Perfluorohexanoic Acid [PFHxA][2] (ppt)	2024	3.1	1.6–3.1	NA
Perfluorooctanesulfonic Acid [PFOS][2] (ppt)	2024	15.1	7.0–15.1	NA
Perfluorooctanoic Acid [PFOA][2] (ppt)	2024	2.7	1.6–2.7	NA
Perfluoropentanoic Acid [PFPeA][2] (ppt)	2024	1.8	1.3–1.8	NA

[1] Detected contaminants results are from Mahoning Valley Sanitary District from 2024.
[2] Range is calculated from January and April sampling data. Amount is the highest level of detection from January.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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.

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.

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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ppb (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (ng/L) (parts per trillion): One part substance per trillion parts water (or nanograms per liter).