

# DRINKING WATER

CONSUMER CONFIDENCE REPORT

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2023  
(service year)

# CROSS CONNECTIONS & BACKFLOW PREVENTION

A cross-connection is a physical connection between a possible source of contamination and the drinking water system piping. If the pressure of the source of contamination is greater than the water system pressure, contaminated water may backflow into the drinking water system. Pressure drops in the public water system caused by water line breaks, pump failures and fire fighting can also cause a backflow situation.

Homes with underground irrigation systems and most commercial buildings are required to have a backflow prevention device. This backflow device protects the public water system from any potentially contaminated water flowing back into the public system from the end user.

Backflow prevention devices are required by the state to be tested annually by the owner. The testing must be done by an Ohio-certified tester, with a copy of the results submitted to the Water Division by the tester. Additional information is available on the City website: [www.westerville.org/water](http://www.westerville.org/water).

## Special Health INFORMATION

Some people may be more vulnerable to contaminants in drinking water than others in the general public. Immuno-compromised individuals such as persons with cancer undergoing chemotherapy, people 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/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the **EPA's Safe Drinking Water Hotline (1-800-426-4791)**.

## ADDITIONAL INFORMATION

Westerville City Council, which governs the water system, meets on the first and third Tuesday of each month at 7 p.m. in Council Chambers at City Hall, 21 South State Street. For additional information, contact the Westerville Water Utility Manager at **(614) 901-6770**. You may also obtain information from the City's website [www.westerville.org](http://www.westerville.org).



# Water Quality Report 2023

This annual report provides summary information from 2023 about your drinking water; where it comes from, how it is treated, what it contains and how it compares to the Environmental Protection Agency's (EPA) drinking water quality standards.

Throughout the year, samples were collected and analyzed for more than 100 different contaminants. The majority of the sample results showed no detectable contaminants, and the ones that did are presented in the following tables.

We have a current, unconditional Ohio EPA license to operate our water system.



## How is MY WATER TREATED?

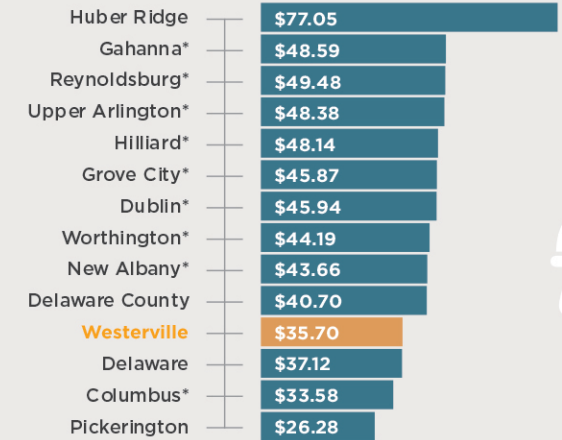
The Westerville Water Treatment Plant, located at 312 W. Main St., operates 24 hours per day and is capable of treating 7.5 million gallons of water daily. A multi-step process is used to treat the source water to effectively meet drinking water standards and protect the public's health.

The process begins with the addition of a coagulant (ferric chloride) to clarify the water. The water is then softened with the addition of lime and caustic soda to remove the minerals calcium and magnesium, followed by the addition of carbon dioxide to adjust the pH. After softening, the water is filtered through rapid sand filters and then through granular activated carbon (GAC) filters. Next, the water is disinfected with sodium hypochlorite (chlorine). The final steps of the treatment process involve the addition of phosphate for corrosion control and fluoride for the prevention of tooth decay. On an as-needed basis, powdered activated carbon and potassium permanganate can be added for taste and odor control.

Following treatment, the water is initially stored in an underground clearwell at the water plant before being pumped to the distribution system and elevated storage tanks for your use. In the event of an emergency, the Water Plant can continue to operate using a diesel-powered generator.

## 2023 RESIDENTIAL AVERAGE WATER BILL (PER MONTH)

Westerville residents enjoy some of the lowest water rates in Central Ohio. See how our Westerville rates compare to other communities in Central Ohio.



\* Columbus Water



## Source Water AND ITS Vulnerability

Westerville's primary source of drinking water is surface water from Alum Creek. To augment this water supply, the City has three wells in the Alum Creek Valley Aquifer that can also provide water to the Westerville Water Treatment Plant. Surface waters by their nature are susceptible to contamination from activities on the surrounding land, and therefore must be properly treated and constantly monitored.

Our source of ground water is also susceptible to contamination due to its shallow depth and thin protective natural clay layer. Land uses in the area around Alum Creek include a number of potential contamination sources such as oil and gas wells, leaking underground storage tanks, gas stations, automotive repair shops, airports, landfills, salt and pesticide storage areas, pharmaceuticals and road

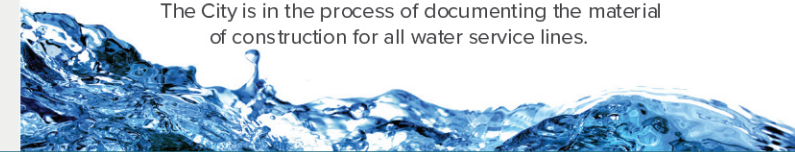
crossings. As a result, both Alum Creek and the aquifer are classified as having a high susceptibility to contamination.

The City is taking steps to help minimize contaminants in source water. Measures include establishing a source water protection plan (available at [www.westerville.org/water](http://www.westerville.org/water)), local zoning regulations, a storm-water management program and the implementation of a water quality action plan by the Friends of Alum Creek and Tributaries (FACT) and the City. Through these efforts and your consideration in the use and disposal of chemicals we can all help protect our water supply. Detailed information is provided in the Drinking Water Source Assessment Report that is available at the Water Plant, or by calling (614) 901-6770.

## Lead AND Drinking Water

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. Westerville 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 two 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. A list of laboratories certified in the state of Ohio to test for lead may be found at [www.epa.ohio.gov/ddagw](http://www.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 1-800-426-4791 or [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The City is in the process of documenting the material of construction for all water service lines.



# PRIMARY DRINKING Water Standards

Parameter (Units)	Year Sampled	MCL	MCLG	RANGE OF DETECTION			Meet EPA Requirements	Typical Source
				Minimum	Average	Maximum		
Barium (ppm)	2023	2	2	0.01	0.01	0.01	YES	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2023	4 (MRDL) (RAA)	4 (MRDLG)	1.3	1.6 (RAA)	1.9	YES	Water additive used to control microbes
Fluoride (ppm)	2023	4	4	0.82	0.91	1.04	YES	Water additive that promotes strong teeth
Haloacetic Acids (ppb)	2023	60 (LRAA)	NA	9.30	19.6 (LRAA)	26.7	YES	By-product of drinking water chlorination
Nitrate (ppm)	2023	10	10	0.3	0.6	1.2	YES	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks
Total Coliform (% Positive)	2023	5% per Month	0	0	0	0	YES	Naturally present in the environment
Total Organic Carbon (Ratio Removal)	2023	TT = Removal Ratio > 1	NA	1.00	2.32	4.17	YES	Naturally present in the environment
Total Trihalomethanes (ppb)	2023	80 (LRAA)	NA	24.4	61.8 (LRAA)	80.3	YES	By-product of drinking water chlorination
Turbidity (NTU)	2023	TT < 1 NTU TT = 95% of samples < 0.3 NTU	NA	0.02	0.06	0.94	YES	Soil Runoff

## WATER PUMPING DATA

Total (Gallons)	1,179,710,000
Average Day (Gallons)	3,231,000
Maximum Day (Gallons)	5,925,000
Gallons per Capita per Day	95.0

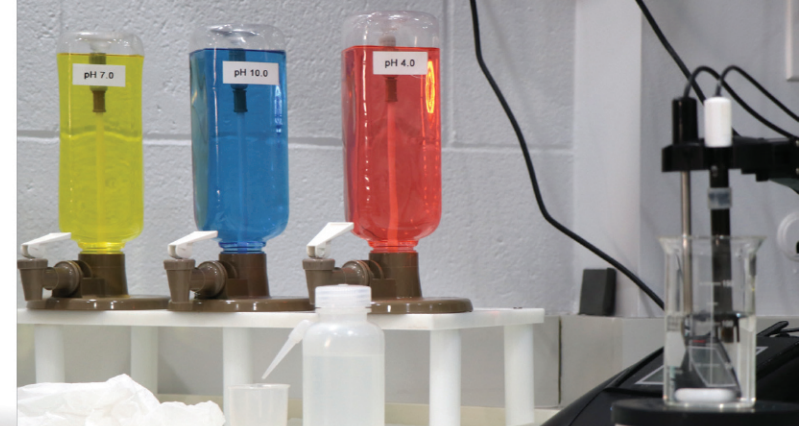
Parameter (Units)	Year Sampled	Action Level	Lead Threshold Level	MCLG	90th Percentile	# of samples exceeding AL*	Minimum Detected	Maximum Detected	Meet EPA Requirements?	Typical Source
Copper (ppm)	2023	1.3	NA	1.3	0.0479	0 of 37	0.0040	0.0670	YES	Corrosion of household plumbing systems.
Lead (ppb)	2023	15	15	0	1.5	0 of 37	BDL (<0.6)	3.0	YES	Corrosion of household plumbing systems.

\*AL: 90% of the samples from customers' taps must be at or below this level. The data presented in this table is from the most recent testing done in accordance with the regulations for lead & copper monitoring.

## Additional Water Quality DATA

Parameter (Units)	Minimum	Average	Maximum	Parameter (Units)	Minimum	Average	Maximum
Total Hardness (ppm)	87	106	154	Lead (ppb)*	BDL	BDL	0.8
Total Hardness (grains/gal.)	5.1	6.2	9.0	Iron (ppb)*	1.0	3.3	6.0
Sodium (ppm)*	19	25	35	Calcium (ppm)*	30	33	40
Sulfate (ppm)*	38.7	160	511	Chloride (ppm)*	46	51	65

\*Quarterly plant tap results



## DEFINITIONS AND TERMS

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

**BDL (Below Detection Limits):** The sample result was lower than the detection limits of the approved test method.

**Lead Threshold Level:** The concentration of lead in an individual tap water sample as specified in rule 3745-81-80 of the Administrative Code (0.015 milligrams per liter).

**LRAA (Locational Running Annual Average):** The average of the last four quarters of data for one location.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close as possible 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 contamination.

**NA (Not Applicable):** Does not apply.

**NTU (Nephelometric Turbidity Unit):** Used to measure cloudiness in drinking water.

**ppb (Parts per Billion):** A unit of measurement equivalent to a microgram per liter (µg/L).

**ppm (Parts per Million):** A unit of measurement equivalent to a milligram per liter (mg/L).

**RAA (Running Annual Average):** The average of the last four quarters of data.

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

**Turbidity:** A measure of the cloudiness of drinking water. Turbidity is a good indicator of the effectiveness of the treatment and filtration processes. 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. As reported above the City of Westerville's highest recorded turbidity result for 2023 was 0.94 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.

## Contaminants IN Drinking 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, which in some cases are radioactive material and can pick up substances resulting from the presence of animal or 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 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 a result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA prescribes regulations that 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 shall 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).