The City of South Lebanon
Public Water System
Consumer Confidence Report

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Updated May 2023

The City of South Lebanon
Drinking Water Consumer Confidence Report
For *2022*

The City of South Lebanon has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

In *2022* The City of South Lebanon had an unconditioned license to operate our water system.

The City of South Lebanon receives 100% of our drinking water from *Greater Cincinnati Water Works.* In addition to the water testing done by the City of South Lebanon, Greater Cincinnati Water Works also tests the water. We have also included their source water assessment report.
Copies of the source water assessment report prepared for ***Greater Cincinnati Water Works*** are available online at https://www.cincinnati-oh.gov/water/water-quality-and-treatment/water-quality-reports/2022-water-quality-report-updated-march-2023/. Paper copies are available upon request by calling 513-591-7700*.*

Sources of Your 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. As with all surface waters, the Ohio Environmental Protection Administration (OEPA) has classified the Ohio River as highly susceptible to potential contamination. OEPA has also classified our portion of the Great Miami Buried Valley Aquifer as highly susceptible to contamination due to lack of an overlaying protective clay layer, the presence of low levels of nitrate in the

groundwater, and the presence of nearby potential contaminant sources.

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 be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, United States EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (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 calling the Federal Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (1-800-426-4791).

Who needs 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 infection. 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 (1-800-426-4791).

About your drinking water.

OEPA requires regular sampling to ensure drinking water safety. The Village of South Lebanon conducted sampling for *Total Coliform, Trihalomethanes, Haloacetic Acids, Lead, Copper and Chlorine* during *2022*. Samples were collected for a total of 6 different contaminants most of which were not

detected in the City of South Lebanon water supply. OEPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

Monitoring & Reporting Violations & Enforcement Actions

None

Listed below is information on those contaminants that were found in the City of South Lebanon drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MRDLG	MRDL	Avg. Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Disinfectants							
Chlorine (as CL2) ppm	4.0	4.0	.7 mg/L	.4 to 1.17 mg/L	No	2022	Additive used to control microbes
Disinfection By Products							
Contaminants (Units)	**MCLG**	**MCL**	**Level Found**	**Range of Detections**	**Violation**	**Sample Year**	**Typical Source of Contaminants**
(TTHM) ppb Total Trihalomethanes	NA	80	40	33.9 – 61.1	No	2022	By-Product of drinking water disinfection
(HAA5) ppb Halocetic Acids	NA	60	11	<6 – 16.6	No	2022	By-Product of drinking Water disinfection
Lead and Copper							
Contaminants (units)	**Action Level (AL)**	**Individual Results over the AL**	**90% of test levels were less than**		**Violation**	**Year Sampled**	**Typical source of Contaminants**
Lead (ppb)	15 ppb	0	.89		No	2022	Corrosion of household plumbing systems; erosion of natural deposits
	__0__ out of __20__ samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	0	.04		No	2022	Corrosion of household plumbing systems; erosion of natural deposits

	_0_ out of _20_ samples were found to have copper levels in excess of the copper action level of 1.3 ppm.

Greater Cincinnati Water Works Water Table of Detected Contaminants:
Regulated Contaminants (See Table A):

Substances subject to a Maximum Contaminant Level (MCL), Action Level (AL), or Treatment Technique (TT). These standards protect drinking water by limiting the amount of certain substances that adversely affect public health and are known or anticipated to occur in public water systems.

The City of South Lebanon also has an *Emergency* connection with the Warren County Water and Sewer Department. During *2022,* we used zero (0) gallons from this connection over 365 days. On average, this connection is used for approximately zero (0) days each year. This report does not contain information on the water quality received from the Warren County Water and Sewer Department. A copy of their consumer confidence report can be obtained by clicking the following link: https://www.co.warren.oh.us/water/water_quality_reports/2023/2022_Water_Quality_Report.pdf or by contacting Warren County Water and Sewer Department at 513-695-1377.

Turbidity

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the *Greater Cincinnati Water Works* highest recorded turbidity result for 2022 was 0.11 NTU and lowest monthly percentage of samples meeting the turbidity limits was ***100%***.

Lead Educational Information

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. *The City of South Lebanon* 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.
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 (1-800-426-4791).

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of The City of South Lebanon which meets every 1st and 3rd Thursday of each month. For more information on your drinking water contact *Don Justison at 513-494-2296.*

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Definitions of some terms contained within this report.

- Maximum Contaminant Level Goal (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 Contaminant level (MCL): 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.
- Maximum Residual Disinfectant Level (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 (MRDLG): 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.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- Contact Time (CT) means the mathematical product of a “residual disinfectant concentration” (C), which is determined before or at the first customer, and the corresponding “disinfectant contact time” (T).
- Microcystins: Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
- Cyanobacteria: Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
- Cyanotoxin: Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as “algal toxin”.
- Level 1 Assessment is a study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have

been found in our water system.

- Level 2 Assessment is 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.
- 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.
- Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- Parts per Billion (ppb) or Micrograms per Liter (µg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.
- Picocuries per liter (pCi/L): A common measure of radioactivity.

TABLE A: Regulated Contaminants				Miller Water (from the Ohio River)				Bolton Water (from the Great Miami Valley Buried Aquifer)				Typical Source of Contamination
Substance (Unit)		Maximum Allowed (MCL)	MCLG	Highest Compliance Level Detected	Range of Detection	Violation	Year Sampled	Highest Compliance Level Detected	Range of Detection	Violation	Year Sampled	
Fluoride (ppm)		4	4	0.88	0.71 - 1.01	No	2021	0.87	0.71 - 0.98	No	2021	Additive which promotes strong teeth. May come from erosion of natural deposits.
Nitrate (ppm)		10	10	1.00	0.38 - 1.00	No	2021	1.20	na[3]	No	2021	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.
TTHMs (ppb) [Trihalomethanes][1]		80	na	51.8	19.5 - 63.0	No	2021	51.8	19.5 - 63.0	No	2021	Byproduct of drinking water chlorination.
HAA5 (ppb) [Haloacetic Acids][1]		60	na	8.8	2.7 - 17.3	No	2021	8.8	2.7 - 17.3	No	2021	Byproduct of drinking water chlorination.
Turbidity (NTU)		TT1 < 1 NTU Max *and* TT2 < 0.3 NTU 95% of the time	na na	0.19 100% < 0.3 NTU	0.02 - 0.19	No	2021	nr	nr	No	na	Soil runoff.
1st Compliance Period (Jan - June)	Lead[1] (ppb)	AL = 15 (the 90th percentile must be less than 15 ppb)	0	90th percentile 3.00 ppb	nd - 46.4	No	2021	90th percentile 3.00 ppb	nd - 46.4	No	2021	May come from erosion of natural deposits. There is no detectable lead in our water as it leaves the treatment plants. However, corrosion of household plumbing is a source of lead and copper contamination. GCWW tests water samples collected at customers taps, as required by the Safe Drinking Water Act to ensure safe water.
				(2 of 106 samples tested during the first compliance period were > the AL)[4]				(2 of 106 samples tested during the first compliance period were > the AL)[4]				
	Copper[1] (ppm)	AL = 1.3 (the 90th percentile must be less than 1.3 ppm)	1.3	90th percentile 0.019 ppm	nd - 0.035	No	2021	90th percentile 0.019 ppm	nd - 0.035	No	2021	
				(0 of 106 samples tested during the first compliance period were > the AL)				(0 of 106 samples tested during the first compliance period were > the AL)				
2nd Compliance Period (July - Dec)	Lead[1] (ppb)	AL = 15 (the 90th percentile must be less than 15 ppb)	0	90th percentile 8.00 ppb	nd - 79.6	No	2021	90th percentile 8.00 ppb	nd - 79.6	No	2021	
				(7 of 121 samples tested during the second compliance period were > the AL)[4]				(7 of 121 samples tested during the second compliance period were > the AL)[4]				
	Copper[1] (ppm)	AL = 1.3 (the 90th percentile must be less than 1.3 ppm)	1.3	90th percentile 0.015 ppm	nd - 0.058	No	2021	90th percentile 0.015 ppm	nd - 0.058	No	2021	
				(0 of 121 samples tested during the second compliance period were > the AL)				(0 of 121 samples tested during the second compliance period were > the AL)				
Total Organic Carbon[2]		TT	na	1.97	1.89 - 3.21	No	2021	nr	nr	No	na	Naturally present in the environment.
Total Chlorine[1] (ppm)		MRDL = 4	MRDLG = 4	1.10	1.01 - 1.15	No	2021	1.10	1.01 - 1.15	No	2021	Water additive used to control microbes.
Barium (ppm)		2	2	0.03	na[3]	No	2021	0.013	na[3]	No	2021	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries.
Arsenic (ppb)		10	0	1.4	na[3]	No	2021	nd	na[3]	No	2021	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.

Unregulated Contaminants (Table B): Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

TABLE B: Unregulated Contaminants		Miller Water (from the Ohio River)				Bolton Water (from the Great Miami Buried Valley Aquifer)				Typical Source of Contamination
Substance (Unit)	MCLG	Average Level Detected	Range of Detection	Violation	Year Sampled	Average Level Detected	Range of Detection	Violation	Year Sampled	
Chloroform (ppb)[1]	70	8.8	1.6 - 24.7	na	2021	8.8	1.6 - 24.7	na	2021	Byproducts of drinking water disinfection, measured at representative points in the distribution system.
Bromodichloromethane (ppb)[1]	0	10.8	4.6 - 17.7	na	2021	10.8	4.6 - 17.7	na	2021	
Dibromochloromethane (ppb)[1]	60	13.8	6.3 - 23.7	na	2021	13.8	6.3 - 23.7	na	2021	
Bromoform (ppb)[1]	0	6.5	1.0 - 15.2	na	2021	6.5	1.0 - 15.2	na	2021	
Monochloroacetic Acid (ppb)[1]	70	nd	nd - nd	na	2021	nd	nd - nd	na	2021	
Monobromoacetic Acid (ppb)[1]	na	nd	nd - 4.4	na	2021	nd	nd - 4.4	na	2021	
Dichloroacetic Acid (ppb)[1]	0	2.1	nd - 5.5	na	2021	2.1	nd - 5.5	na	2021	
Trichloroacetic Acid (ppb)[1]	20	nd	nd - 2.1	na	2021	nd	nd - 2.1	na	2021	
Dibromoacetic Acid (ppb)[1]	na	3.5	nd - 9.6	na	2021	3.5	nd - 9.6	na	2021	
Sulfate (ppm)	na	54	45 - 67	na	2021	39	38 - 40	na	2021	Erosion of natural deposits.

2022 GCWW WATER QUALITY REPORT

A Service of The City of Cincinnati

GREATER CINCINNATI
WATER WORKS

Using the most advanced technology to bring you the cleanest, highest quality...

water

Our Most Essential Resource

Where Your Water Comes From

GCWW supplies water from two sources: the Ohio River and the Great Miami Buried Valley Aquifer (GMBVA). Surface water from the Ohio River is treated at the Richard Miller Treatment Plant. This plant, located on the east side of Hamilton County, supplies about 88% of drinking water to GCWW's customers. The Charles M. Bolton Treatment Plant treats groundwater from 13 wells in the GMBVA. It is located in the southern part of Butler County and supplies about 12% of drinking water to GCWW customers.

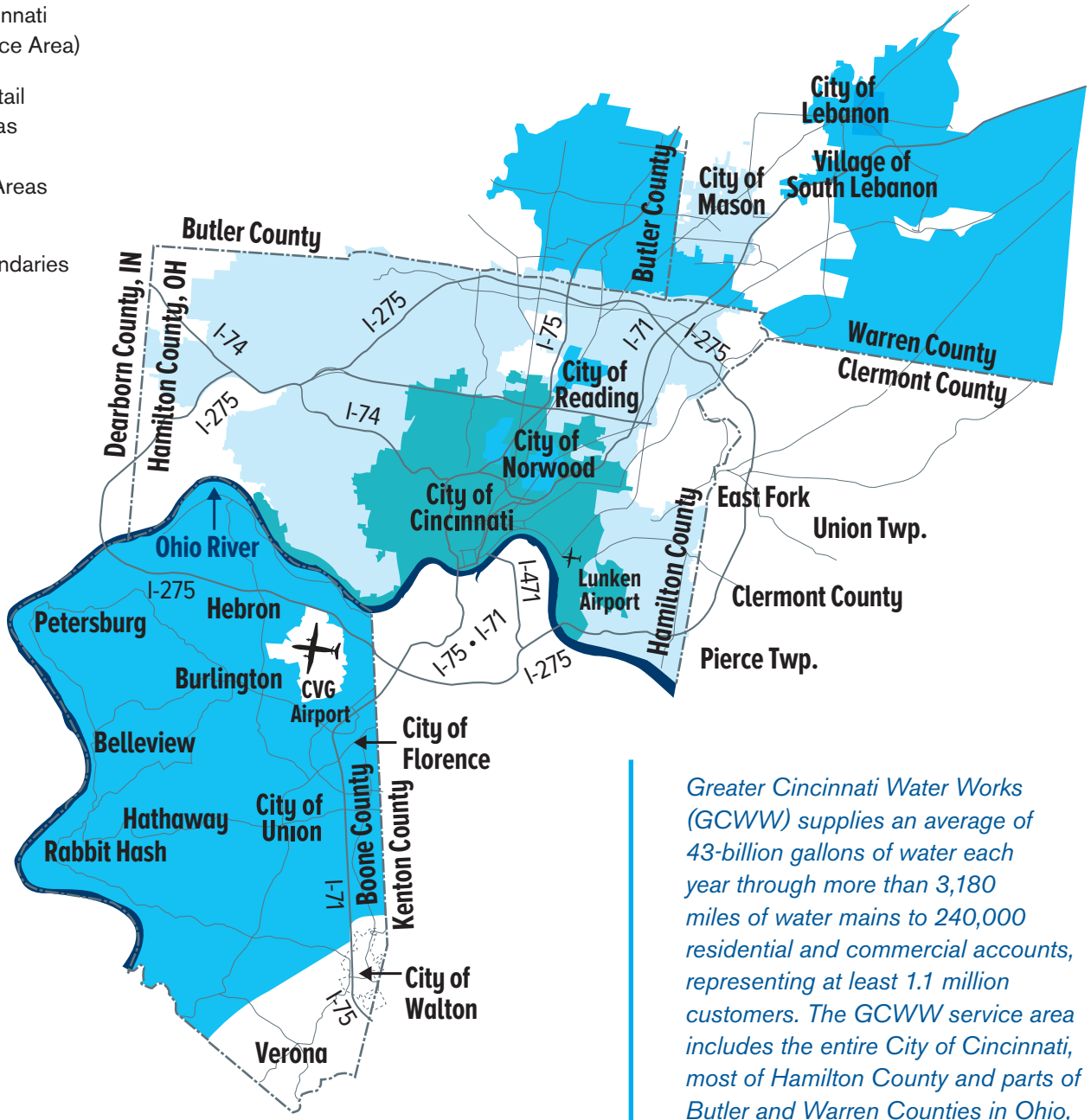
Service Area Map

City of Cincinnati (Retail Service Area)

GCWW Retail Service Areas

Wholesale Areas

County Boundaries



Greater Cincinnati Water Works (GCWW) supplies an average of 43-billion gallons of water each year through more than 3,180 miles of water mains to 240,000 residential and commercial accounts, representing at least 1.1 million customers. The GCWW service area includes the entire City of Cincinnati, most of Hamilton County and parts of Butler and Warren Counties in Ohio, and Boone County in Kentucky.

Only Your Tap Water Delivers These Protective Benefits

Protection of Public Health and Welfare

A safe water supply is critical to protecting public health. In the United States, water utilities monitor for more than 100 contaminants and must meet close to 90 regulations for water supply and quality. The same system of water mains, pumps and storage tanks transports water to home faucets and fire hydrants.

GCWW also takes great care to protect your water supply from chemical spills into the Ohio River that may contaminate the drinking water supply. GCWW has the ability to shut down river intake pumping, utilize stored and supplementary water until the spill passes, and use advanced treatment systems to remove contaminants.

Sources of Your Drinking Water

The sources of drinking water - both tap and bottled - 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 (in some cases radioactive material) and can pick up substances resulting from the presence of animals or from human activity. As with all surface waters, the Ohio EPA has classified the Ohio River as highly susceptible to potential contamination. The Ohio EPA has also classified our portion of the Great Miami Buried Valley Aquifer as highly susceptible to contamination due to lack of an overlaying protective clay layer, the presence of low levels of nitrate in the groundwater, and the presence of nearby potential contaminant sources.

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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides, which may come from variety of sources such as agriculture, urban stormwater 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 stormwater runoff, and septic systems; and
- Radioactive contaminants, which can be naturally-occurring or the result of oil and gas production and mining activities.

Protecting Your Drinking Water

GCWW actively participates in two regional collaborative source water protection programs:

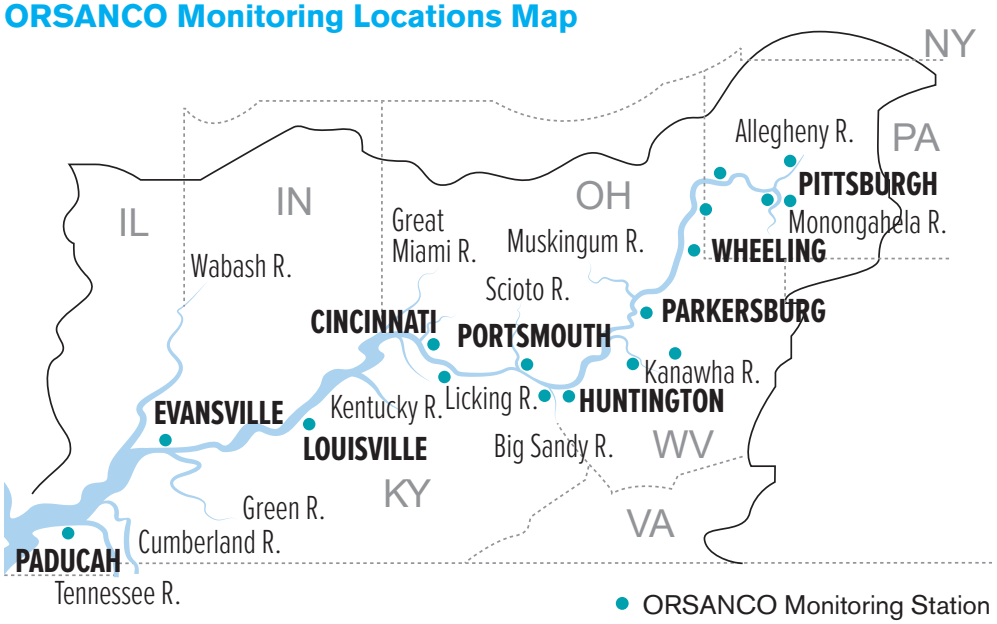
1. Protection of the Ohio River in the Cincinnati Area

GCWW has partnered with the Northern Kentucky Water District and the Ohio River Valley Water Sanitation Commission (ORSANCO) to implement an Ohio EPA-endorsed source water protection program for the Ohio River near Cincinnati. ORSANCO maintains 17 monitoring stations strategically placed along the Ohio River to detect and warn drinking water treatment plants about spills. GCWW participates as one of the monitoring stations for this program by analyzing Ohio River water multiple times a day, every day of the year.

2. Protection of the Great Miami Buried Valley Aquifer

The Hamilton to New Baltimore Groundwater Consortium is comprised of seven public and industrial ground water producers/suppliers in southwest Ohio. The Consortium maintains a network of early-warning monitoring stations, works with facilities that store hazardous substances to minimize the risk of spills, and educates the public on what they can do to protect groundwater.

ORSANCO Monitoring Locations Map



For more information about source water protection or to find out what you can do to help, visit myGCWW.org, email info@gcww.cincinnati-oh.gov, call Greater Cincinnati Water Works at 513.591.7700, or call the Groundwater Consortium at 513.785.2464.

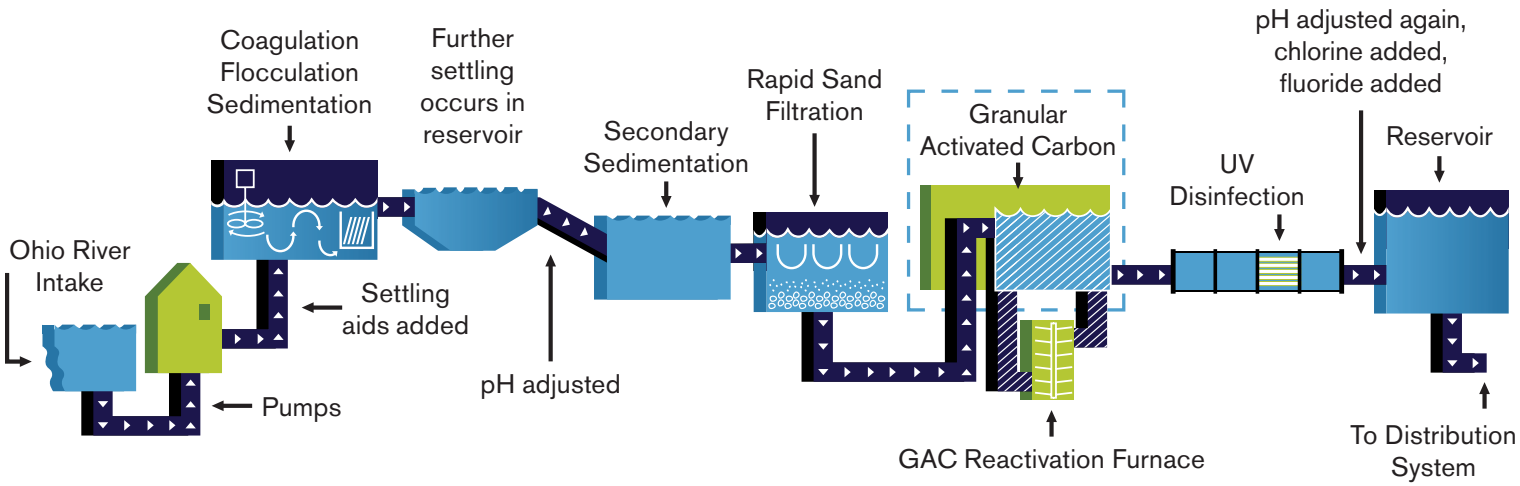
A Leader in Water Quality Treatment and Technology

GCWW uses state-of-the-art water treatment processes that create multiple barriers to protect public health. GCWW treatment processes include Coagulation/Flocculation/Sedimentation, Sand Filtration, Granular Activated Carbon (GAC), ultraviolet (UV) light and chlorine to remove and treat for natural and man-made contaminants from our drinking water. It is one of the first in the nation to use a combination of all these treatment methods.

GCWW typically treats about 120 million gallons of water a day, and ensures that all the treatment processes are effective by using more than 600 daily tests.

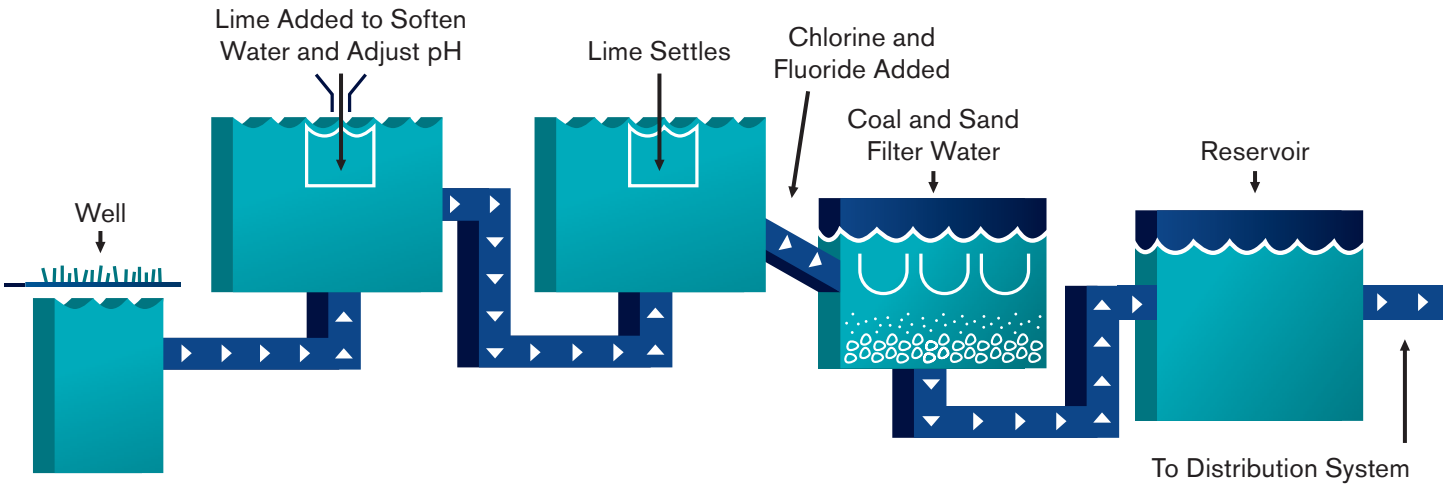
GCWW also treats the drinking water specifically to minimize the amount of lead that may leach into the drinking water from home plumbing — this treatment process is called corrosion control. There is no lead in the water as it leaves GCWW treatment plants, and this process minimizes the chance that lead can be picked up from home plumbing. Page 5 illustrates the treatment processes at the Richard Miller and Charles M. Bolton Plants.

Treatment Process at the Richard Miller Plant on the Ohio River



Backwash water from the sand filters and plant recycle water is returned to the beginning of the treatment process.

Treatment Process at the Charles M. Bolton Plant on the Great Miami Buried Valley Aquifer



Granular Activated Carbon

GCWW's Richard Miller Treatment Plant is one of only a few water treatment plants in the nation that incorporates granular activated carbon (GAC) with on-site reactivation into its water treatment process. This state-of-the-art technology uses granular carbon, which contains numerous microscopic cavities. When water is passed through the GAC, impurities adhere to the carbon and are removed from the water. Benefits of GAC include: barrier against chemical spills in the Ohio River; barrier against impurities in raw source water; less chlorine required for disinfection; reduced disinfection-byproducts; and improved control of taste and odor.

Ultraviolet Disinfection

GCWW is the largest water utility in North America to use UV disinfection following rapid sand filtration and GAC adsorption. UV disinfection, which uses rays of intense light to disinfect water, is one of the most effective methods used to protect against microorganisms such as *Cryptosporidium*.

GCWW Meets or Exceeds All State and Federal Health Standards

GCWW is proud to say that our water meets or exceeds every health standard developed by both the USEPA and Ohio EPA. In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health. The tables on pages 6-9 show the substances detected in GCWW drinking water while performing the most up-to-date monitoring required by the EPA. The Ohio EPA requires GCWW to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Because of this, some of our data, though accurate, is more than one year old. For a complete listing of GCWW test results and additional water quality information, visit cincinnati-oh.gov/water/water-quality-and-treatment or call 513.591.7700.

TABLE A: Regulated Contaminants				Miller Water (from the Ohio River)			
Substance (Unit)		Maximum Allowed (MCL)	MCLG	Highest Compliance Level Detected	Range of Detection	Violation	Year Sampled
Fluoride (ppm)		4.0	4.0	0.87	0.65 - 0.98	No	2022
Nitrate (ppm)		10	10	0.94	0.64 - 0.94	No	2022
TTHMs (ppb) [Total Trihalomethanes][1]		80	na	48.0	14.4 - 52.8	No	2022
HAA5 (ppb) [Total Haloacetic Acids][1]		60	na	10.8	2.2 - 12.6	No	2022
Turbidity (NTU)		TT1 < 1 NTU Max *and* TT2 < 0.3 NTU 95% of the time	na na	0.11 100% < 0.3 NTU	0.03 - 0.11	No	2022
1st Compliance Period (Jan - June)	Lead[1] (ppb)	AL = 15 (the 90th percentile must be less than 15 ppb)	0	90th percentile 4.00 ppb	nd - 38	No	2022
				(2 of 111 samples tested during the first compliance period were > the AL)[4]			
	Copper[1] (ppm)	AL = 1.3 (the 90th percentile must be less than 1.3 ppm)	1.3	90th percentile 0.025 ppm	nd - 0.108	No	2022
				(0 of 111 samples tested during the first compliance period were > the AL)			
2nd Compliance Period (July - Dec)	Lead[1] (ppb)	AL = 15 (the 90th percentile must be less than 15 ppb)	0	90th percentile 4.67 ppb	nd - 17	No	2022
				(1 of 109 samples tested during the second compliance period were > the AL)[4]			
	Copper[1] (ppm)	AL = 1.3 (the 90th percentile must be less than 1.3 ppm)	1.3	90th percentile 0.018 ppm	nd - 0.056	No	2022
				(0 of 109 samples tested during the second compliance period were > the AL)			
Total Organic Carbon[2]		TT	na	1.68	1.60 - 3.49	No	2022
Total Chlorine[1] (ppm)		MRDL = 4.0	MRDLG = 4.0	1.12	1.04 - 1.2	No	2022
Barium (ppm)		2	2	0.04	na[3]	No	2022

Regulated Contaminants (Table A): Substances subject to a Maximum Contaminant Level (MCL), Action Level (AL), or Treatment Technique (TT). These standards protect drinking water by limiting the amount of certain substances that can adversely affect public health and are known or anticipated to occur in public water systems.

Refer to pages 8-9 for definitions, abbreviations, and footnotes.

Bolton Water (from the Great Miami Valley Buried Aquifer)				**Typical Source of Contamination**
Highest Compliance Level Detected	Range of Detection	Violation	Year Sampled	
0.86	0.74 - 0.97	No	2022	Additive which promotes strong teeth. May come from erosion of natural deposits.
1.79	nd - 1.79	No	2022	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.
48.0	14.4 - 52.8	No	2022	Byproduct of drinking water chlorination.
10.8	2.2 - 12.6	No	2022	Byproduct of drinking water chlorination.
nr	nr	No	na	Soil runoff.
90th percentile 4.00 ppb	nd - 38	No	2022	May come from erosion of natural deposits. There is no detectable lead in our water as it leaves the treatment plants. However, corrosion of household plumbing is a source of lead and copper contamination. GCWW tests water samples collected at customers taps, as required by the Safe Drinking Water Act to ensure safe water.
(2 of 111 samples tested during the first compliance period were > the AL)[4]				
90th percentile 0.025 ppm	nd - 0.108	No	2022	
(0 of 111 samples tested during the first compliance period were > the AL)				
90th percentile 4.67 ppb	nd - 17	No	2022	
(1 of 109 samples tested during the second compliance period were > the AL)[4]				
90th percentile 0.018 ppm	nd - 0.056	No	2022	
(0 of 109 samples tested during the second compliance period were > the AL)				
nr	nr	No	na	Naturally present in the environment.
1.12	1.04 - 1.2	No	2022	Water additive used to control microbes.
0.014	na[3]	No	2022	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries.

Unregulated Contaminants (Table B): Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

TABLE B: Unregulated Contaminants		Miller Water (from the Ohio River)			
Substance (Unit)	MCLG	Average Level Detected	Range of Detection	Violation	Year Sampled
Chloroform (ppb)[1]	70	9.0	1.2 - 25.2	na	2022
Bromodichloromethane (ppb)[1]	0	8.9	3.6 - 14.3	na	2022
Dibromochloromethane (ppb)[1]	60	10.1	4.0 - 17.7	na	2022
Bromoform (ppb)[1]	0	4.5	nd - 19.4	na	2022
Monochloroacetic Acid (ppb)[1]	70	nd	nd - nd	na	2022
Monobromoacetic Acid (ppb)[1]	na	0.3	nd - 1.7	na	2022
Dichloroacetic Acid (ppb)[1]	0	2.1	nd - 5.1	na	2022
Trichloroacetic Acid (ppb)[1]	20	0.8	nd - 3.1	na	2022
Dibromoacetic Acid (ppb)[1]	na	3.0	1.5 - 6.4	na	2022
Sulfate (ppm)	na	59	43 - 74	na	2022
Perfluorooctanoic Acid (PFOA) (ppt)	na	nd	na	na	2022
Perflourooctanesulfonic Acid (PFOS) (ppt)	na	nd	na	na	2022
Ammonium salt of Perfluoro-2-propozypropanoic acid (GenX) (ppt)	na	nd	na	na	2022
Potassium salt of Perfluorobutane sulfonic acid (PFBS)(ppt)	na	nd	na	na	2022

Definitions

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 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.

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

Treatment Technique or TT:
A method for treating water to achieve acceptable levels of the contaminants in lieu of establishing a maximum contaminant level.

Maximum Residual Disinfection Level or MRDL:
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfection Level Goal or MRDLG:
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.

Turbidity:
Utilities who treat surface water are required to report on turbidity as an indication of the effectiveness of the filtration system. Turbidity is a measure of the cloudiness of water. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month, and shall not exceed 1 NTU at any time. As reported in the table, GCWW's highest turbidity result for 2022 was 0.11 NTU (Miller Water) and lowest monthly percentage of samples meeting the turbidity limits was 100%.

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

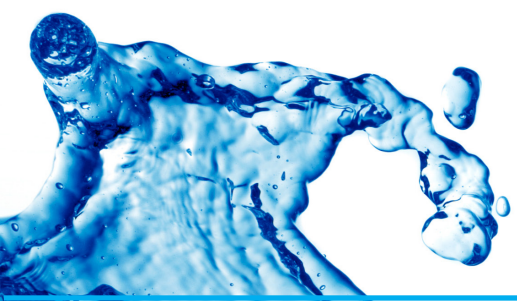
Lead Threshold Level:
The concentration of lead in an individual tap water sample. The lead threshold level is exceeded at 0.015 milligrams per liter (15 ppb) concentration of lead in an individual tap water sample.

Bolton Water (from the Great Miami Buried Valley Aquifer)				Typical Source of Contamination
Average Level Detected	Range of Detection	Violation	Year Sampled	
9.0	1.2 - 25.2	na	2022	Byproducts of drinking water disinfection, measured at representative points in the distribution system.
8.9	3.6 - 14.3	na	2022	
10.1	4.0 - 17.7	na	2022	
4.5	nd - 19.4	na	2022	
nd	nd - nd	na	2022	
0.3	nd - 1.7	na	2022	
2.1	nd - 5.1	na	2022	
0.8	nd - 3.1	na	2022	
3.0	1.5 - 6.4	na	2022	
42	40 - 43	na	2022	Erosion of natural deposits.
nd	na[3]	na	2022	Research into the harm that perfluoralkyl and polyfluoralkyl substances (PFAS compounds) may cause to human health is ongoing. PFAS compounds are manufactured chemicals that have been used in consumer products since the 1940s, usually in the manufacture of non-stick coatings, clothing, carpet, and food wrappers. GCWW's water does not violate any drinking water regulations. GCWW will be working with the Ohio EPA to investigate source water quality and operational or treatment modifications to minimize PFAS levels in the drinking water.
nd	na[3]	na	2022	
nd	na[3]	na	2022	
nd	na[3]	na	2022	

Abbreviations

ppt: *parts per trillion or nanograms per liter;*
ppb: *parts per billion or micrograms per liter;*
ppm: *parts per million or milligrams per liter;*
nr: *not regulated;*
na: *not applicable;*
NTU: *Nephelometric Turbidity Unit (used to measure clarity in drinking water);*
nd: *not detectable at testing limits;*
TTHMs: *Total Trihalomethanes;*
HAA5: *Haloacetic Acids*

Footnotes: 1. *Miller and Bolton were considered as one distribution system for regulatory purposes by Ohio EPA during 2022. Data listed for each system represents the combined distribution system.* **2.** *The value reported under "Highest Compliance Level Detected" for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.* **3.** *GCWW collects one sample per year.* **4.** *2 of 111 samples were found to have lead levels in excess of the lead threshold level of 15 ppb during the first compliance period of 2022 (Jan-June): 1 result between 15-20 ppb; 1 result between 30-40 ppb. 1 of 109 samples were found to have lead levels in excess of the lead threshold level of 15 ppb during the second compliance period of 2022 (July-Dec): 1 result between 15-20 ppb.*



Frequently Asked Questions

1 If there are reported contaminants, how can my water be safe?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk.

However, 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 healthcare providers. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline at 800.426.4791.

2 What is *Cryptosporidium*?

Cryptosporidium (Crypto) is a microscopic organism, that when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. Crypto is found in surface waters and comes from animal and human waste.

GCWW routinely tests for Crypto and did not detect it in our finished water in 2022. GCWW also tested for Crypto in the Ohio River surface water and it was not detected in 9 samples during 2022. USEPA/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.

3 Why is fluoride added to my water?

Fluoride is added to the water to protect teeth as required by a state law passed in 1969. According to the American Dental Association, persons who drink fluoridated water have a 20% to 40% reduction in the amount of cavities that would have occurred without fluoride. Some home filtration devices remove fluoride. Bottled water may not contain fluoride.

4 How much sodium is in my water?

GCWW has tested for sodium in treated water as it leaves the treatment plants and has found 30 mg (milligrams) per liter in the Richard Miller Water and 28 mg per liter in the Charles M. Bolton Water. There are approximately four cups in a liter.

5 Is there lead in my water?

There is no detectable lead in drinking water as it leaves the treatment plants. 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. GCWW 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 3 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 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 800.426.4791 or at epa.gov/safewater/lead.

GCWW tests customer's water for lead at no cost. Lead information, including a lead service line lookup map and request for test kits, can be found at Lead.myGCWW.org or by calling 513.651.LEAD (5323).

6 Sometimes my water is reddish-brown. What should I do?

The reddish-brown color can be caused by rust from corrosion in GCWW's pipes, the pipes in your home or from corrosion in your home's water heater. If you have rusty water, try running cold water for several minutes.

If you have questions or your laundry is stained from rusty water, call GCWW at 513.591.7700. We will deliver a laundry aid to remove the rust. Do NOT put stained laundry in the dryer.

7 Why does drinking water sometimes look cloudy?

Cloudy water that clears quickly from the bottom up is caused by tiny air bubbles in the water similar to gas bubbles in soda. The bubbles rise to the top and disappear. This cloudiness occurs more often in the winter when drinking water is cold. Air does not affect the safety of water.

8 How hard is GCWW's water?

Hard water is water that contains more minerals, such as calcium and magnesium. Water from GCWW's Richard Miller Plant has an average hardness of 122 mg per liter or 7 grains per gallon. Water from the Charles M. Bolton Plant averages 134 mg per liter or 8 grains per gallon. Hardness does not affect the safety of water.

For More Information About...

Lead Awareness
Website: lead.myGCWW.org
Phone: 513.651.LEAD (5323)

USEPA Safe Drinking Water
Website: epa.gov/ground-water-and-drinking-water
Safe Drinking Water Hotline: 800.426.4791

The Food and Drug Administration (FDA)
Website: fda.gov
Phone: 888.463.6332

NSF International
Website: nsf.org
Phone: 800.673.6275

Contact GCWW

For more information about water quality, customer billing, or to request additional copies or submit comments about this report, call 513.591.7700 or visit myGCWW.org.

Attend the Following Meetings to Participate in Water Decisions:

City of Cincinnati Council
Website: cincinnati-oh.gov
Phone: 513.352.3246

ORSANCO
Website: orsanco.org
Phone: 513.231.7719

OKI Regional Council of Governments Groundwater Committee
Website: oki.org
Phone: 513.621.6300

Educational Resources

Two online Teacher Resource areas are available for teachers, students and parents. These sites are full of educational resources, videos, activity ideas, links, and more -- schedule a group tour of the Water Museum or Historic Old River Station online as well!

Water Quality
Website: cincinnati-oh.gov/water/about/teacher-resources

Stormwater
Website: cincinnati-oh.gov/stormwater/teacher-resources

Our lead program is being used to meet a portion of the notification requirements in OAC Rule 3745-83-02. This report meets the Ohio and USEPA's National Primary Drinking Water Regulation for Consumer Confidence Reports. GCWW has a current unconditioned license to operate from the Ohio Environmental Protection Agency.

city of CINCINNATI