

Some or all of these definitions may be found in this report:

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (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 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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

Parts per million (ppm) - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - or micrograms per liter, ($\mu\text{g/L}$). One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variations & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

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

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.



Carroll County Water District Water Quality Report 2021

Water System ID: KY0210066

General Manager: Obe Cox

502-347-9500

CCR Contact: Obe Cox

502-347-9500

ocox@carrollcountywater.com

Mailing address:

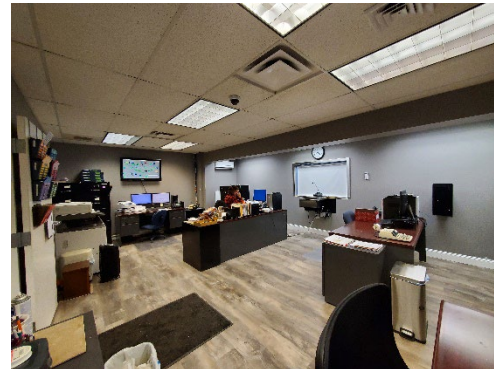
205 Main Cross Street

Ghent, KY 41045

Meeting location and time:

Water Office - 205 Main Cross Street, Ghent, KY

2nd Thursday each month at 3:00 PM



Don't forget to utilize our new drive up pay/service window and overnight drop box.

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product.



The Wheatley tank gets cleaned and painted, inside and out.

Carroll County Water District #1 treats groundwater drawn from a network of wells drilled into the Ohio River alluvial aquifer. An analysis of the susceptibility of the District's water supply to contamination indicates that this susceptibility is generally moderate. There are, however, a few areas of concern in the immediate vicinity of our water wells. These include row crops, underground sewer mains, some permitted operations, and road exposure that cumulatively increase the potential for release of contaminants within the wellhead protection area. The summary of the water systems susceptibility to contamination is part of the completed Source Water Assessment Plan (SWAP) that is available for inspection during normal business hours at our office. A few customers off of Highway 227 are served by water purchased from Carrollton Utilities, which utilizes the same water source as Carroll County. For information regarding your specific provider on Highway 227, please contact our office.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities). In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information About 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. Your local public 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 or at <http://www.epa.gov/safewater/lead>.

To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. **Copies of this report are available upon request by contacting our office during business hours.**

Regulated Contaminant Test Results CC = Carroll County Water District CU = Carrollton Utilities

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection	Date of Sample	Violation	Likely Source of Contamination
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Radioactive Contaminants

Beta photon emitters (pCi/L)	50	0	CC=	5.1	5.1 to 5.1	Jan-21	No	Decay of natural and man-made deposits
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Inorganic Contaminants

Arsenic [1005] (ppb)	10	N/A	CC=	1	1 to 1	Mar-20	No	Natural erosion; runoff from orchards or glass and electronics production wastes
Barium [1010] (ppm)	2	2	CC= CU=	0.047 0.11	0.047 to 0.047 0.11 to 0.11	Mar-20 Jan-20	No No	Drilling wastes; metal refineries; erosion of natural deposits
Fluoride [1025] (ppm)	4	4	CC= CU=	0.78 0.67	0.78 to 0.78 0.67 to 0.67	Mar-20 Jan-20	No No	Water additive which promotes strong teeth
Nitrate [1040] (ppm)	10	10	CC= CU=	5.37 3.7	0.2 to 5.37 1.9 to 3.7	2021 2021	No No	Fertilizer runoff; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectants/Disinfection Byproducts and Precursors

Chlorine (ppm)	MRDL = 4	MRDLG = 4	CC=	0.94 (highest average)	0.79 to 1.15	2021	No	Water additive used to control microbes.
TTHM (ppb) (Stage 2) [total trihalomethanes]	80	N/A	CC=	8 (average)	6 to 8 (range of individual sites)	2021	No	Byproduct of drinking water disinfection.

Household Plumbing Contaminants

Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	CC=	0.088 (90 th percentile)	0.007 to 0.558	Jul-20	No	Corrosion of household plumbing systems
Lead [1030] (ppb) sites exceeding action level 0	AL = 15	0	CC=	0 (90 th percentile)	0 to 2	Jul-20	No	Corrosion of household plumbing systems

	Average	Range of Detection
Fluoride (added for dental health)	0.9	0.7 to 1.09
Sodium (EPA guidance level = 20 mg/L)	23.9	23.9 to 23.9

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

Manager's Message

As Warned in prior years, Water Rates will Increase Soon

Carroll County Water District (CCWD) continues to enjoy an impressive record with no rate increase; plus, no violations for the past twelve years! As repeated in prior years, this is truly rare in our industry. In 2020, CCWD knew it was getting closer of having to raise the rates for water but postponed because of the Covid 19 virus. This past year in 2021, CCWD took an advantage of opportunity to restructure some of our debt to obtain savings. Before we could do this, CCWD was required to get approval from the Kentucky Public Service Commission. When they formally approved this refinancing strategy they also mandated us to present them with a rate study within nine months because we had gone a long-time without raising water sale rates. However, in 2019, CCWD submitted a rate adjustment on all non-recurring charges which was approved by KY PSC. The non-recurring charges are designed to charge the customers that creates cost directly to the utility such as responding to emergency calls, establishing water services or disconnection fees. Therefore, the customers that do not cost the utility additional cost are not impacted in the sales of water. However, since the mandate came, we had to perform the study based on a completed financial year which was the year 2020. The refinancing project helped to lower the overall rate adjustment on sales to 15% which was an outstanding figure since we had not raised water sales rate for over a decade. Unfortunately, the process is not complete at this time and it appears that PSC will require additional rate increase because they want to change how the non-recurring charges are computed. This changes an estimated 60-year calculation worksheet that included labor. Since CCWD is a stand-alone non-profit utility, we have to recover that cost in a different manner. So as of right now, according to PSC, CCWD will have to charge the "good" rate payers to recover the cost of dealing with the irresponsible customers. Approximately 10% of our customers cost us more in time, material and mileage than the other 90%.

Inflation cost and legislation mandates have impacted the cost of operation; as stated every year, the water district will continue to explore ways to operate efficiently and effectively. In the current month March 2022, we have never seen anything like it before with all cost of goods and services increasing not just an annual increase but several times within a few months. Example, our treatment chemicals have doubled in cost within six months. (Did I tell you that our rate study was based on the fiscal year of 2020 before recent inflation spike?) Even though we must raise rates; remember you can be more cautious and more aware of your consumption which will help to lower your cost. If you suspect a small leak, take a meter reading on a warm day when you are leaving the house, read the meter when you get home, and you will more than likely find your answer. A small leak will add up more than you think over a month's time. Please remember that during warmer weather is the time to make improvements to your plumbing. When you have proper plumbing devices in your system then you have more resources to find pesky leaks much quicker. You should install a shut off valve near your meter base vault. We advise that you DO NOT open our meter pit during the winter months. Doing so instantly loses the earth's warmth within the pit. You take a chance of the meter freezing instantly, and then you must suffer the cost of service fees or the cost of a smart meter. If it is an extreme emergency and you do have to raise the lid, please be prepared to drop an old rug, or insulation bagged in plastic, and close the lid as soon as possible. NEVER use extreme heat, such as a blow torch, to thaw anything in the pit, warm water will suffice. All homeowners please remember to equip your homes with a pressure regulator valve or check the operation of one that has been installed. Pressure regulator valves protect your home plumbing from any surge of water pressure from transmission lines, just like a surge protector for your electronics.

Our infrastructure is aging, but we are continuously doing in house improvement projects to make it stronger. When we do these types of repairs within our staff, the cost is pennies to the dollar versus hiring outside sources and the job quality is exceptionally high. This approach has many positives. We're saving money which translates keeping operating cost down, thus your rates lower, improving the system to reduce failures which equates less outage and minimizing the field crews having to endure inclement weather. We will continue to build this water company to react quickly and have contingency plans during an emergency crisis and streamline workflows on normal daily operations so we can offer the best potable water and services at the most affordable rates. We strongly encourage you to contact us with your preferred contact information. To begin our process, call to verify that your current number is what we have on file. Phone numbers change frequently for some, please be mindful to update your information. We want to be able to help you with any issue you have with your potable water but we need your help to make us better. Proper communication is the key to avoid more havoc.

Water is essential for life, but it does cost to produce it and deliver to your tap. It takes water professionals and we have special people that go above and beyond to do extraordinary measures!!! Let's work together to being better.

Best Regards,



Obe D. Cox, General Manager

