

# **Carroll Water & Sewer District**

## **2017 Consumer Confidence Report**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

### **Where does my water come from?**

The Carroll Water Treatment Plant receives its drinking water from an intake in Lake Erie, which is located 1100 feet off the shore of Locust Point. Lake Erie is considered a surface water source and requires extensive treatment before it can be used as drinking water.

An auxiliary or back-up water source is installed at Turtle Creek Marina. This source was not utilized at any time in the reporting period. Furthermore, the District's distribution system is interconnected with Ottawa County's and this back-up system was not used during 2017.

### **Source water assessment and its availability**

The Carroll Water and Sewer Public Water System uses surface water drawn from an intake in Lake Erie. For the purposes of source water assessments, in Ohio, all surface waters are considered to be susceptible to contamination. By their nature, surface waters are accessible and can be readily contaminated by chemicals and pathogens, with relatively short travel times from source to intake. Although the water system's surface water intake is located in Lake Erie, the proximity of several onshore sources increases the susceptibility of the source water to contamination. The Carroll Water and Sewer Public Water system's drinking water source protection area is susceptible to contamination from leaking underground storage tanks, municipal waste-water treatment discharges, industrial waste water discharges, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating.

The Carroll Water and Sewer Public Water System treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect Lake Erie. More information is provided in the Carroll Water and Sewer Public Water System's Drinking Water Source Assessment report, which can be obtained by calling Henry Biggert at 419-898-5028.

### **What are sources of contamination to 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:

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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

### **About your drinking water.**

The EPA requires regular sampling to ensure drinking water safety. The Carroll Water & Sewer District conducted sampling for bacteria; inorganic, radiological; synthetic organic; volatile organic during 2017. Samples were collected for many different contaminants most of which were not detected in the Carroll Water & Sewer District water supply. The Ohio EPA 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**

Monitoring requirements were not met for the Carroll Water and Sewer Public Water System.

The December 24, 2017 source water sample for E. coli counts was not collected in the time frame allowed by OAC Rule 3745-81-65(I)(2).

We are required to collect these samples to determine if additional treatment of our source water is necessary. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

What Should I Do?

- There is nothing you need to do at this time. You do not need to boil your water or take other corrective action.

What is being done?

Upon being notified of this violation, the water supply was directed to revise the sampling schedule to add an E. coli count sample in October 2018 to replace the missed December 24, 2017 sample. The water supplier will take steps to ensure that adequate monitoring will be performed in the future. For more information, please contact Henry Biggert at (419) 898-5028 or 10340 W State Route 2.

### **How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of Board of Trustees for the Carroll Water & Sewer District which meets on the third Tuesday of each month at the Carroll Water Treatment Plant at 8am. For more information on your drinking water contact Henry Biggert at 419-898-5028.

### **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

### **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

### **License to Operate (LTO) Status Information**

In 2017 we had an unconditional license to operate our water system.

### **Additional Information for 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. Carroll Water & Sewer District 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>.

# Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one-year-old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants (Units)	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Microbiological Contaminants</b>								
Total Organic Carbon (% Removal)	NA	TT	1.0	1.0	1.0	2017	No	Naturally present in the environment
Turbidity (NTU)	NA	1.0	0.21	0.05	0.21	2017	No	Soil runoff
Turbidity (% meeting Standard)	NA	TT	100%			2017	No	
<p>Turbidity has no health effects. However, turbidity can interfere with the disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Turbidity is the 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 samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the highest recorded turbidity result for 2017 was 0.21 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 100%.</p>								
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L)	0	15	3	NA		2016	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	1	NA		2016	No	Erosion of natural deposits
<b>Inorganic Contaminants</b>								
Barium (ppm)	2	2	0.022	NA		2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	4.98	0.53	4.98	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Contaminants (Units)	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL		Typical Source
Copper - action level at consumer taps (ppm)	1.3	1.3	.627	2016	0	No	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0	2016	0	No	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Volatile Organic Contaminants</b>								
Haloacetic Acids (HAA5) (ppb)	NA	60	21.6	7.9	34.9	2017	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	51.2	18.6	62.9	2017	No	By-product of drinking water disinfection
<b>Residual Disinfectants</b>								
Total Chlorine (ppm)	MRDLG=4	=4	1.52	1.13	1.85	2017	No	Water additive used to control microbes.

## Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Violation	Typical Source
Bromate (ppb)	0	10	ND	No	By-product of drinking water disinfection

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, 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.
ppb	ppb: parts per billion, 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.
<>	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.
pCi/L	pCi/L: picocuries per liter (a common measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.

**For more information, please contact:**

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