



# GEAUGA COUNTY BOARD OF COMMISSIONERS

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## Annual Drinking Water Quality Report Services Center System

We're pleased to present to you the 2017 Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

### YOUR WATER SOURCE

Our water sources are currently two wells. Both wells are drilled into the Sharon Aquifer and are located in the center of "County" property allowing us the protection area around the wells that some systems can't offer due to property lines.

The Ohio Environmental Protection Agency (E.P.A.) completed a study of the Geauga County Services Center System's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer that supplies water to G.C. Services Center System has a high susceptibility to contamination. This determination is based on the following:

- \* Presence of significant potential contaminant sources in the protection area.
- \*The presence of manmade contaminants in the treated water.

The risk of future contamination can be minimized by implementing appropriate protective measures. Some suggestions made by the Ohio E.P.A. in the source water assessment report to improve the protection of the sources have already been implemented.

### FOR MORE INFORMATION

For questions about this report (Consumer Confidence Report), the Source Water Assessment Report (SWAR), or concerning the Department of Water Resources, Water Section please contact the Geauga County Department of Water Resources (GCDWR) at (440) 279-1970. If you would like to learn more, our office hours are Monday-Friday from 7:30 AM to 4:30 PM at 470 Center St. Bldg. 3 Chardon, Oh. 44024. Public participation and comment are encouraged, for information on your drinking water call our main office 440-279-1970.

Available at our offices are some pamphlets explaining what, you the consumer, can do to help protect our sources and minimize water use through leak detection and water conservation. These pamphlets are free to the public and can be picked up or requested to be mailed to our customers by calling the office Monday-Friday at the number listed above.

## WHAT ARE THE SOURCES OF POTENTIAL 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 the 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 from the presence of animals or from human activity.

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 health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791)

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 to public health.

Geauga County Services Center system treats source water to remove contaminants. 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 byproducts of industrial processes and petroleum production, and can also, come from gas stations, urban runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities

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 microbiological contaminants are available from the **Safe Drinking Water Hotline (800-426-4791)**.

We ask that all our customers help us protect our water sources and supplies by reporting any unusual activity around any of our facilities including fire hydrants. All reports should be made to our office during working hours and after hours can be made to our answering service at 1-866-286-7292 or the Geauga County Sheriff's office at (440) 286-1234. Any unauthorized use is against Department Policy, The Ohio Revised Code, and the Federal Law. The possibility of damage, making an area need to boil or worse yet an outage that cannot be repaired quickly, would be a major inconvenience to all.

## **ABOUT YOUR DRINKING WATER**

The EPA requires regular sampling to ensure drinking water safety. Geauga County Services System conducted sampling for bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants during 2017. During the year, samples were analyzed for different and specific contaminants, most of which were not detected in the Geauga County Services System 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.

Gauga County Services Center System is in compliance with all Maximum Contaminant Levels and Treatment Techniques for drinking water. We had no safe Drinking Water Act violations in 2017. Geauga County Services Center System had a 2017 unconditioned license to operate to operate our water system. The license is issued by the Ohio Environmental Protection Agency.

## **IMPORTANT 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. G.C. Services Center Water is responsible for delivering 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 for drinking and 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>

## **REVISED TOTAL COLIFORM RULE (RTCR) INFORMATION**

All water systems were required to begin compliance with the new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule, there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

Thank you for taking the time to read this CCR. We appreciate you as our customer and work very hard for your continued trust and faith in our commitment to the supply of safe drinking water.

Thank you for reading this long report. Please post this in a very public location, inform your staff of its location and copy as required so that all users of our water can be informed. If you would like more copies from The Department of Water Resources, Water Section please call our office, at (440)-279-1970.

## DEFINITIONS

In the table you may find some terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**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** – Are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**Action Level** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level** - The “Maximum Allowed” (MCL) is 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** - The “Goal”(MCLG) is 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 the addition of a disinfectant is necessary for the 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. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**BDL**- Below detectable limits

**Ug/L** – Micrograms per liter ; or parts per billion

TEST RESULTS								
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	Range of Detections	Date of Sample	MCL	Likely Source of Contamination
<b>DISINFECTANTS</b>								
Chlorine	N	1.3 mg/l	ppm	4.0	0.9 – 1.3 Mg/l	2017	4.0	Water additive used to control microbes
<b>INORGANICS</b>								
<b>Barium</b>	N	0.01	Ppm	2	NA	2017	2	Discharge of drilling waste; erosion of natural deposits
<b>LEAD</b>	N	2 ug/l	ppb	0	BDL -2 ug/l	2017	15 ug/l	Corrosion of household plumbing fixtures
0 out of 10 samples were above the lead action level of 15 ppb								
<b>COPPER</b>	N	0.06 mg/l	ppm	1.3 ppm	0.003 0.007 ppm	2017	1.3 mg/l	Corrosion of household plumbing fixtures
0 out of 10 samples were above the copper action level of 1.3ppm								

<b>ORGANICS</b>								
<b>TOTAL XYLENES</b>	N	1.0	ug/l	10000	N/A	2017	10000	Contaminant from Crude oil and petroleum
<b>TTHMS</b> Total Trihalomethanes	N	29.2	ug/l	80	25.0-29.2	2017	80	By-Product of drinking water chlorination
<b>HAA5</b> Haloacetic acids	N	15.3	ug/l	60	14.0-15.3	2017	60	By-Product of drinking water chlorination
<b>Unregulated Contaminates</b>								
<b>Dichloroacetic-acid</b>	N	7.7	ug/l	N/A	7.1-7.7	2017	N/A	By-Product of drinking water chlorination *
<b>Trichloroacetic-acid</b>	N	7.6	ug/l	N/A	6.9-7.6	2017	N/A	By-Product of drinking water chlorination *
<b>Dibromoacetic-acid</b>	N	BDL	ug/l	N/A	Not detected	2016	N/A	By-Product of drinking water chlorination *
<b>Bromodichloro methane</b>	N	9.8	ug/l	N/A	2.2-9.8	2017	N/A	By-Product of drinking water chlorination *
<b>Bromoform</b>	N	2.4	ug/l	N/A	1.6-2.4	2017	N/A	By-Product of drinking water chlorination *
<b>Chloroform</b>	N	12.9	ug/l	N/A	2.2-12.9	2017	N/A	By-Product of drinking water chlorination *
<b>Dibromochloro methane</b>	N	6.5	ug/l	N/A	ND – 6.5	2017	N/A	By-Product of drinking water chlorination *

\* The USEPA sets standards for controlling disinfectants and disinfectant by-products in drinking water. By-products, such as TTHMs and HAA5, form when combining chlorine with naturally occurring organic matter. Locations with elevated disinfection by-product concentrations are being identified and will be used for future compliance monitoring and reporting.