



CITY OF COOPERSVILLE CONSUMER CONFIDENCE REPORT (CCR)

For the year of 2018

Annual Drinking Water Quality Report

We're pleased to report that your drinking water meets, and often is better than, all state and federal guidelines for safe drinking water. Our constant goal is to provide you with a safe and dependable supply of drinking water and this report is designed to inform you about the quality of the water we deliver to you every day. 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 and update this report annually. Additional copies of this report are available by calling the Water Department at 616-997-9731 or visiting the city's web site at www.cityofcoopersville.com.

Do I need 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 may seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA)/Center for Disease Control (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.

Why are there contaminants in my drinking water? Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. However, the presence of contaminants in drinking water does not necessarily indicate that the drinking water poses a health risk. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. The City of Coopersville purchases water from the City of Grand Rapids whose source for drinking water is Lake Michigan. 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 including all of the following:

- **Microbial contaminants** such as viruses and bacteria which may have come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
 - **Turbidity.** Turbidity measures clarity (or cloudiness) of the water and has no health effects. However, turbidity can interfere with disinfection and provides 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.
- **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 a variety of sources such as agriculture, urban storm-water runoff, and residential uses.
 - **Nitrate.** Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. As a precaution, we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.
 - **Fluoride.** Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
 - **Copper.** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal

distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their family physician.

- **Lead.** Infants and children who drink water containing in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop problems or high blood pressure. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.
- **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 stormwater runoff and septic systems.
 - **TTHMs** (Total Trihalomethanes). Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.
- **Radioactive contaminants** which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 supplies. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health. More information about contaminants and potential health effects, can be obtained by calling the United States EPA's Safe Drinking Water Hotline at **(800)426-4791**.

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. The City of Coopersville 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.

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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://water.epa.gov/drink/info/lead/index.cfm>.

Source Water Assessment

The Michigan Department of Environmental Quality (MDEQ) completed a Source Water Assessment for the City of Grand Rapids water supply in 2003. This report found that our water supply has a moderately high susceptibility to contaminants. Source water contamination is not likely to occur if potential contaminants are properly used and managed. The Grand Rapids Water Treatment Plant routinely and continuously monitors the water for a variety of chemicals to assure safe drinking water. The Grand Rapids Water System continues to be involved in and supports watershed protection efforts.

Where does my drinking water come from?

Lake Michigan, a surface water source, is the sole source of water treated for the Grand Rapids Water System.

Is my water safe?

Yes. The City of Grand Rapids meets or exceeds all of the requirements of the Safe Drinking Water (SDWA). We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the 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.

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, unless otherwise noted. 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. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old. In this table you may find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions.

TABLE KEY AND DEFINITIONS

90th Percentile – The minimum level of contamination found in the highest 10 percent of samples collected

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

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.

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

MNR – Monitored Not Regulated

MRDL -Maximum Residual Disinfection 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 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 to the use of disinfectants to control microbial contaminants.

NTU - Nephelometric Turbidity Unit: Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

NA - Not Applicable.

ND - Not Detected.

NR – Monitoring not required, but recommended.

ppb - parts per billion or micrograms per liter (ug/l).

ppm - parts per million or milligrams per liter (mg/l).

ppt – parts per trillion, or nanograms per liter (ng/l).

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

ATTENTION: This report will not be mailed to you. If you want a paper copy, please contact Coopersville City Hall at (616)997-9731.

CITY OF COOPERSVILLE'S 2018 WATER QUALITY REPORT
MONITORING RESULTS FROM JANUARY 1 THROUGH DECEMBER 31, 2018

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.								
Chlorine [as Cl ₂] (ppm)	4	4	0.99	ND	1.67	2018	No	Water additive used to control microbes
Haloacetic Acids [HAA5] (ppb)	NA	60	26	15	42	2018	No	By-product of drinking water chlorination
Total Trihalomethanes [THMs] (ppb)	NA	80	54	25	72	2018	No	By-product of drinking water chlorination
Inorganic Contaminants								
Barium (ppm)	2	2	0.019	NA	NA	2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.74	NA	NA	2018	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [as Nitrogen] (ppm)	10	10	0.4	NA	NA	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	NA	NA	11	NA	NA	2018	No	Erosion of natural deposits
Unregulated Contaminants								
Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.								
Chlorate (ppb)	NA	MNR	104	ND	130	2015	No	Runoff from agricultural use; disinfection byproduct
Chromium [total chromium] (ppb)	100	100	0.28	0.21	0.35	2015	No	Discharge from steel and pulp mills; Erosion of natural deposits
Chromium-6 [hexavalent chromium] (ppb)	NA	MNR	0.21	0.17	0.25	2015	No	Erosion of natural deposits; Industrial contaminant
Molybdenum (ppb)	NA	MNR	1.1	ND	1.2	2015	No	Erosion of natural deposits; Industrial contaminant
Strontium (ppb)	NA	MNR	122	120	130	2015	No	Erosion of natural deposits; Industrial contaminant
Vanadium (ppb)	NA	MNR	0.28	0.25	0.32	2015	No	Erosion of natural deposits; Industrial contaminant
Microbiological Contaminants								
Turbidity (NTU)	NA	0.3	100%	NA	NA	2018	No	Soil runoff
100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.142. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Contaminants	MCLG	AL	90 th Percentile	Range		Sample Date	# Samples Exceeding	Typical Source
				Low	High			
Inorganic Contaminants								
Copper [action level at consumer taps] (ppm)	1.3	1.3	0.09	.022	.0865	2018	0	Corrosion of household plumbing systems; Erosion of natural deposits
Lead [action level at consumer taps] (ppb)	0	15	3	ND	.0050	2018	0	Corrosion of household plumbing systems; Erosion of natural deposits
These 2018 sample results are from 5 homes selected as the most at risk for lead and copper contamination. We received a reporting violation for not submitting our Lead & Copper Reporting form on time to the DEQ. We also received a violation for not issuing the results of lead and copper sampling to the residents within 30 days of receiving the results. We returned to compliance for both of these violations in December of 2018. We will work to ensure that this does not happen again.								
Contaminants	MCLG or	MCL, TT, or MRDL	Detected In Your	Range		Sample Date	Violation	Typical Source
				Low	High			
Voluntary Monitoring								
Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.								
<i>Cryptosporidium</i>	0	TT	ND	NA	NA	2018	NR	Contaminated rivers & lakes
<i>Giardia lamblia</i>	0	TT	ND	NA	NA	2018	NR	Contaminated rivers & lakes
Perfluorooctanic Acid + Perfluorooctane Sulfonic Acid [PFOA + PFOS] (ppt)	NA	NA	2.6	ND	3.19	2018	NR	Man-made chemical not naturally found in the environment
Total Tested Per- and Polyfluoroalkyl Compounds [PFAS] (ppt)	NA	NA	3.2	ND	4.74	2018	NR	Man-made chemical not naturally found in the environment
The EPA has set a Lifetime Health Advisory level of 70 ppt in drinking water for separate or combined PFOA and PFOS.								

Note: The data table contains the highest annual test results for all required and voluntary monitoring of regulated substances. The Grand Rapids Water System monitors many regulated substances more frequently than required, and as a consequence, these results are included in the table above. In addition to the test results listed in the table, we analyzed the water for 79 different contaminants/chemicals in 2018; none of which were found at detectable levels.