



CITY OF COOPERSVILLE CONSUMER CONFIDENCE REPORT (CCR)

For the year of 2017

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.

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 sometimes picks up substances resulting from the presence of animals or from human activity. Some of the substances which can make their way into Lake Michigan are: viruses and bacteria from animal, agricultural, and human activities, salts, metals, pesticides and herbicides, as well as by-products of industrial processes, and radioactive contaminants, which occur naturally or may be the result of oil and gas production and mining activities.

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. For more information about contaminants and potential health effects, call the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at **1-800-426-4791** or visit their website at <http://www.epa.gov/safewater/dwhealth.html>.

Lake Michigan is the sole source of water treated for the Grand Rapids Water System. The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential contamination. The potential risk of contamination is based on several factors including geologic sensitivity, water chemistry and contaminant sources. Risk assessment is critical in protecting the source water from future contamination. Environmental contamination is not likely to occur when potential contaminants are used and managed properly.

The Source Water Assessment for surface waters uses a 7-tiered rating scale ranging from "moderately low" to "very high." The susceptibility of our source water to potential contamination was given a rating of moderately high. This rating is typical for surface water sources in the region. The geographic area in this assessment covers 708 square miles and includes several watersheds from Holland to Muskegon. The current or historical industrial, residential or agricultural use, production, storage, transport or disposal of any potential contaminants within this entire area requires a moderately susceptibility ranking.

Grand Rapids Water Treatment Plant routinely and continuously monitors the water for a variety of chemicals to assure safe drinking water. Industrial chemicals have not been detected in our source or treated water. The Grand Rapids Water System continues to be involved and supports watershed protection efforts.

If you want to know more about the 2003 Source Water Assessment, you may contact the City of Grand Rapids Customer Service at (616)456-3000 or email: water@grcity.us.

CITY OF COOPERSVILLE'S 2017 WATER QUALITY REPORT
MONITORING RESULTS FROM JANUARY 1 THROUGH DECEMBER 31, 2017

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	0.97	0.1	1.98	2017	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	31	2.4	43	2017	No	By-product of drinking water chlorination
TTHMs (Total Trihalomethanes) (ppb)	NA	80	66	20	74	2017	No	By-product of drinking water chlorination
Inorganic Contaminants								
Barium (ppm)	2	2	0.027	0.02	0.027	2017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.67	NA	NA	2017	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	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	NA	NA	10	NA	NA	2017	No	Erosion of natural deposits; Leaching
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.)								
Chromium-6 (hexavalent chromium) (ppb)	NA	MNR	0.16	NA	NA	2017	NR	Erosion of natural deposits; Industrial contaminant

Microbiological Contaminants								
Turbidity (NTU)	NA	0.3	100%	NA	NA	2017	No	Soil runoff
100% of the samples were below the TT value of .3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.117. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
Contaminants	MCLG	AL	90th Percentile	Range		Sample Date	# Samples Exceeding AL	Typical Source
				Low	High			
Inorganic Contaminants								
Copper – action level at risk consumer taps (ppb)	1300	1300	121	14	161	2015	0	Corrosion of household plumbing systems; Erosion of natural deposits
Lead – action level at risk consumer taps (ppb)	0	15	0	ND	ND	2015	0	Corrosion of household plumbing systems; Erosion of natural deposits

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, called Maximum Contaminant Levels (MCLs), which limit the amount of certain contaminants in your drinking water. Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Contaminants that may be present in source water include:

- **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.
- **Pesticides and herbicides** which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Volatile 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.
 - THMs (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** can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Unregulated Monitoring -**
 - Sodium. Federal and State standards have yet to be established and all are well within limits accepted by most public health officials.

- **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.
 - **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.

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. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water and testing methods is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

TABLE KEY AND DEFINITIONS

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.

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.

n.a. - Not Applicable.

n.d. - Not Detected.

NTU - Nephelometric Turbidity Unit: measurements of minute suspended particles, used to judge water clarity.

PCi/1 - picocuries per liter.

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

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

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