The City of Grand Rapids Water System

Water Quality Report for 2017

CITY OF GRAND RAPIDS

Proudly Serving Residential and Commercial Customers in:

• Ada Township • Cascade Charter Township • City of Grand Rapids • City of East Grand Rapids • City of Kentwood • Grand Rapids Charter Township • Tallmadge Charter Township • City of Walker • Portions of Ottawa County

The Grand Rapids Water System is proud to present our annual Water Quality Report. This report provides important information about your drinking water. We have continued to meet the challenge of providing safe, quality water which meets or exceeds the requirements set forth by the Environmental Protection Agency (EPA) and the Michigan Department of Environmental Quality (MDEQ).

Is my water safe?

Absolutely, yes. The City of Grand Rapids meets or exceeds all of the requirements of the Safe Drinking Water Act. We are excited 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?

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

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 should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available by calling the Safe Water Drinking Hotline (800-426-4791).

2017 Water Quality Data

In order to ensure that tap water is safe to drink, EPA has 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.

Contaminants	MCLG or	MCL, TT, or	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 Cl2) (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 Nitro-gen) (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 chromi-um) (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 con-sumer taps (ppb)	1300	1300	54	ND	215	2016	0	Corrosion of household plumbing systems; Erosion of natural deposits
Lead – action level at risk consumer taps (ppb)	0	15	4	ND	41	2016	1	Corrosion of household plumbing systems; Erosion of natural deposits

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	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.)								
Cyanotoxin (microcystin) (ppb)	NA	NA	ND	NA	NA	2017	NR	Great Lakes algal blooms
Cryptosporidium	0	TT	ND	NA	NA	2017	NR	Contaminated rivers and lakes
Giardia lamblia	0	TT	ND	NA	NA	2017	NR	Contaminated rivers and lakes

Unit Description

Term	Definition
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
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	Not applicable.
ND	Not detected.
NR	Monitoring not required, but recommended.

Important Drinking Water Definition

Term	Definition
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	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	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MRDLG	Maximum Residual Disinfectant 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	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.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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 134 different contaminants/chemicals in 2017; none of which were found at detectable levels.

Why are there contaminants in my drinking water?

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 can be obtained by calling the Environmental Protection Agency's (EPA) 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 can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include all of the following: microbial contaminants, such as viruses and bacteria, that 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and 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, EPA prescribes regulations that 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.

Additional 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. City of Grand Rapids 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.

Infants and children who drink water containing lead 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 kidney problems or high blood pressure.

The Grand Rapids Water System partners and works closely with local entities to address concerns about lead levels in homes. If you have any questions, you may want to consult with the Kent County Health Department (KCHD) at (616)632-7063 or and Healthy Homes Coalition at (616)241-3300. KCHD also provides water testing for residents. For more information, call (616) 632-7063 or visit their webpage at https://accesskent.com/Health/laboratory.htm.

How Can I Get Involved?

Call customer service at 311 or 616-456-3000.

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy Homes Coalition of West Michigan

Get the Lead Out!

Grand Rapids Water System
300 Monroe Ave NW
Grand Rapids, MI 49503

IMPORTANT INFORMATION:
WATER QUALITY REPORT FOR 2017
ALL USERS SHOULD RECEIVE A COPY OF THIS REPORT.
PLEASE CONTACT US FOR ADDITIONAL COPIES.

More Information:

If you have any questions regarding your bill, leaks or other water service related issues, please call customer service at 311 or 616-456-3000.

This report is also available on the internet at: https://www.grandrapidsmi.gov/Government/Departments/Water-System/Water-Quality-Reports

En Español: Este folleto contiene información sobre el agua portable de la cuidad de Grand Rapids. Para más información por favor de llamar a 311 o 616-456-3000.

Take a Lake Michigan Filtration Plant Tour! We encourage you to tour our treatment plant located on Lake Michigan Drive between Holland and Grand Haven. Guests will take a walking tour of the facility to learn more about the people and processes that diligently safeguard your water supply. For a reservation, please call 311 or (616) 456-3000.

Source Water Assessment and its Availability

The 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. Environment contamination is not likely to occur when potential contaminants are used and managed properly. 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. To obtain a copy of this assessment, call customer service at 311 or 616-456-3000.

City of Grand Rapids Customer Service
300 Monroe Ave NW
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Email: water@grcity.us