City of East Grand Rapids 2017
Water Quality Report

Prepared in conjunction with the City of Grand Rapids Water System

The City of East 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).

Why do you get this report?
The Environmental Protection Agency (EPA) requires every community water supply throughout the United States to report specific details regarding water quality along with any contaminants which may be found in our tap water and source water. In order to ensure this information reaches all of our customers, the EPA requires this report to be mailed to each household and business we supply.

The City of East Grand Rapids Water System in conjunction with the City of Grand Rapids is committed to providing you with high quality water. We also understand that occasionally a concern may arise. At times water may appear cloudy or rusty, or may have an unusual odor. This change in water quality could be caused by various reasons including construction in the area, in-house water filtration, water system maintenance, recent plumbing work done in your home/business, or seasonal weather related changes. These are just a few possibilities. Whatever the reason, we want to address those concerns, which may be conveyed by calling: The City of East Grand Rapids Department of Public Works-Operations Division at 616-940-4870.

Source water assessment and its availability:
Lake Michigan is the sole source of water treated for the Grand Rapids Water System. The City of East Grand Rapids purchases our drinking water from this system. This is considered a surface water source. 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. Industrial chemicals have not been detected in our source or treated water. The Grand Rapids Water System continues to be involved in and supports watershed protection efforts. If you would like information about the Source Water Assessment or have questions concerning the water quality testing results in this report, please contact: City of Grand Rapids Water System at 311, 616-456-3000 or water@grcity.us

Water Quality Data of 2017 (Data Table-See Next Page):
In order to ensure that tap water is safe to drink, the EPA has regulations which limit the amount of contaminants in water provided by public water systems. The table on the next page 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.

Disinfectants & Disinfection By-Products

Contaminants	Units	Range of Detection Low - High	Highest Running Annual Average	MCL or MRDL	MCLG or MRDLG	Violation	Likely Sources
Chlorine Residual (as Cl2)	ppm	.28 - 1.57	0.97	4	4	No	Water additive used to control microbes
Total Coliforms	% Positives	n.d. - 1	0.0	5	0	No	Naturally present in the environment
Haloacetic Acids	ppb	18.4 - 49.5	30.05	60	n/a	No	By-product of drinking water chlorination
Total Trihalomethanes	ppb	26.2 - 44.2	36.28	80	n/a	No	By-product of drinking water chlorination

*This is convincing evidence that addition of a disinfectant is necessary for conrol of microbial contaminants

Inorganic Contaminants

Contaminant	Units	Range of Detection Low - High	Level Detected	MCL, TT or MRDL	MCLG or MRDLG	Violation	Likely Sources
Barium	ppm	0.02 - 0.027	0.027	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	ppm	n/a	0.67	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	ppm	n/a	0.4	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	ppm	n/a	10	NA	NA	No	Erosion of natural deposits; Leaching

Unregulated Contaminants

Contaminant	Units	Range of Detection Low - High	Level Detected	MCL, TT, MRDL or MNR	MCLG or MRDLG	Violation	Likely Sources
Chromium-6 (Hexavalent Chromium)	ppb	n/a - n/a	0.16	MNR	n/a	NR	Erosion of natural deposits, Industrial Contaminant

*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.

Microbiological Contaminants

Contaminant	Units	Range of Detection Low - High	Level Detected	MCL, TT or MRDL	MCLG or MRDLG	Violation	Likely Sources
Turbidity	NTU	n/a - n/a	100%	0.3	n/a	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.

Inorganic Contaminants (Lead & Copper Testing done in 2016)

Substance	Units	Range of Detection Low - High	90th Percentile	MCL	MCLG or MRDLG	# of Samples exceeding MCL	Likely Sources
Copper - Action level at risk consumer taps	ppb	10 - 66	50	1300	1300	0	Corrosion of household plumbing; Erosion of natural deposits
Lead - Action level at risk consumer taps	ppb	n.d. - < 3	0	15	0	0	Corrosion of household plumbing; Erosion of natural deposits

Voluntary Monitoring

Substance	Units	Range of Detections		Level Deteced	MCL, TT, or MRDL	MCLG or MRDLG	Violations	Likely Source
Perfluorinated Compounds (PFOA, PFOS)	ppb	n/a	n/a	n.d	n/a	n/a	NR	Industrial Contaminant
Cyanotoxin (microcystin)	ppb	n/a	n/a	n.d	n/a	n/a	NR	Great Lakes Algal Blooms
Cryptosporidium	-	n/a	n/a	n.d	TT	0	NR	Contaminated Rivers and Lakes
Giardia lamblia	-	n/a	n/a	n.d	TT	0	NR	Contaminated Rivers and Lakes

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.

Cryptosporidium and Giardia

Cryptosporidium and Giardia are microscopic organisms that are commonly found in surface water throughout the U.S. Historical sampling of the Lake Michigan Filtration Plant source water indicates it is a low risk for contamination from these organisms. The current test methods are not capable of determining if detected organisms are alive and capable of causing illness or death.

Source Water - There were no Cryptosporidium or Giardia detected in our source.

Treated Tap Water – There were no Cryptosporidium or Giardia detected in any treated tap water samples.

Key

ppm = parts per million	n.d. = not detected	TT = Treatment Technique	MCLG = Maximum Contaminant Level Goal	MRDLG = Maximum Residual Disinfection Level Goal
ppb = parts per billion	n/a = not applicable	NTU = Nephelometric Turbidity Units	MCL = Maximum Contaminant Level	MRDL = Maximum Residual Disinfection Level
MNR = Monitored Not Regulated	AL = Action Level	NR = Monitoring not required, but recommended		

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.

Do I need to take special precautions?
The EPA sets legal limits and regulates the amount of contaminants allowed in drinking water provided by all public water systems. Sources of drinking water worldwide (both tap and bottled) may reasonably be expected to contain at least small amounts of some contaminants. Though contaminants are present it does not necessarily indicate that the water poses any kind of health risk. We treat our water according to EPA regulations.

While EPA's health-based standards for drinking water are generally safe, some people may be more sensitive to contaminants in drinking water than the general population. Some infants, children or elderly, individuals who have undergone organ transplants, people with HIV/AIDS or persons receiving chemotherapy can be at risk for infections. These people should seek advice from their health care providers. More information on potential health effects of specific contaminants can be obtained by contacting the EPA's Safe Drinking Water Hotline at 1-800-426-4791 or their website at:
www.epa.gov/safewater/dwhealth.

Lead and Drinking Water:
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 internal plumbing in a home. The East Grand Rapids Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. Water that has been sitting for several hours has the potential to pick up these contaminants. In order to minimize the potential exposure you can flush the tap 30 seconds to 2 minutes before using water for drinking or cooking. Use only water from the cold-water tap for drinking, cooking and especially for making baby formula. Hot water is likely to contain higher levels of lead.

If you are concerned about lead in your water, you may wish to have your water tested. The Kent County health Department provides water testing for residents and there are also private DEQ certified labs available in the Grand Rapids area. 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 1-800-426-4791 or their website at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water. The City of Grand Rapids Water Plant (EGR's source) implemented a corrosion control program in 1994 to reduce the amount of lead possibly leaching from household plumbing and is monitored following EPA guidelines. The federal maximum limit for drinking water for lead is 15 parts per billion (ppb).

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.

For concerns regarding other sources of lead levels in homes, including paint and soils hat are more prevalent around older homes, please contact the Kent County Health Department to discuss your specific concern. Healthy Homes Coalition-Get the Lead Out is also a resource that can assist with lead related concerns.

Kent County Health Department: Kent County Health Department Lab: 616-632-7210
https://www.accesskent.com/Health/laboratory.htm

Childhood Lead Poisoning Prevention Program: 616-632-7063
https://www.accesskent.com/Health/Lead/

Healthy Homes Coalition of West Michigan-Get the Lead Out Program: 616-241-3300
http://gettheleadoutgr.org/

More Information:
If you have any questions regarding your bill, please contact the City of East Grand Rapids Finance Department at 616-949-2110. For questions regarding water leaks or water service related issues, please contact the City of East Grand Rapids Department of Public Works-Operations Division at 616-940-4870. For additional copies of this report, please contact the City of East Grand Rapids Department of Public Works-Administration at 616-940-4817 or in the lower level of City Hall at 750 Lakeside Dr. The report is also posted online at: http://www.eastgr.org/DocumentCenter/View/1548/2017-City-of-East-Grand-Rapids-Water-Quality-Report-Final