City of East Grand Rapids 2015 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 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 the 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:
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 616-456-3200 or water@grcity.us

Water Quality Data of 2015

Regulated at the Treatment Plant

Substance	Units	Range of Detections	Highest Level Detected	MCL	MCLG	Violations	Likely Sources
Barium (tested in 2014)[1]	ppm	0.021	0.021	2	2	No	Erosion of natural deposits
Fluoride[2]	ppm	0.13	0.13	4	4	No	Water additive which promotes strong teeth
Nitrate	ppm	0.7	0.7	10	10	No	Erosion of natural deposits
Turbidity[3]	NTU	0.018 - 0.088	0.088	TT	n/a	No	Soil runoff

1. Barium and Chromium were tested in 2014.Chromium was not detected in 2014. Barium and Chromium are required to be tested every 9 years.
2. Fluoride analysis result of 0.13 ppm, was performed by the Michigan Department of Environmental Quality, a certified laboratory, at a time when the water plants fluoride feed system was being repaired. Our in-house fluoride analysis range of detections was 0.10 - 0.75 ppm with the Highest Level Detected 0.75 ppm.
3. Our treatment for turbidity was in 100% compliance of the regulatory limit. A minimum of 95% compliance is acceptable.

Regulated in the Distribution System

Substance	Units	Range of Detections	Maximum Running Annual Average	MCL or MRDL	MCLG or MRDLG	Violations	Likely Sources
Chlorine Residual	ppm	0.00 - 1.99	1.0	4	4	No	Water additive used to control microbes
Total Coliforms	% Positives	0	0	5	0	No	Naturally present in the environment
Haloacetic Acids	ppb	13 - 27	19.4	60	n/a	No	By-product of drinking water chlorination
Total Trihalomethanes	ppb	2.7 - 52	44.7	80	n/a	No	By-product of drinking water chlorination

Substance	Units	Range of Detections	90th Percentile	AL	MCLG	# of Samples exceeding AL	Likely Sources
Copper (tested in 2013)	ppb	1.6 - 150	55	1300	1300	0	Corrosion of household plumbing system
Lead (tested in 2013)	ppb	n.d. - 12	2.2	15	0	0	Corrosion of household plumbing system

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 dead.

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.

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.

Unregulated Contaminants Tested January 2015-April 2015

Substance	Units	Range of Detections	Average	Likely Sources
Sodium	ppm	9	11	Mineral and nutrient
Sulfate	ppm	32	32	Mineral and nutrient
Chloride	ppb	17	17	Mineral and nutrient
Chlorate	ppb	94 - 130	105	By-product of drinking water chlorination
Hexavalent Chromium (Cr VI)	ppb	0.170 - 0.220	0.193	Industrial runoff
Chromium, Total	ppm	0.25 - 0.31	0.28	Erosion of natural deposits
Molybdenum, Total	ppb	1.2	1.2	Erosion of natural deposits
Strontium, Total	ppb	120-130	125	Erosion of natural deposits
Vanadium, Total	ppb	0.25 - 0.28	0.26	Erosion of natural deposits

In addition to the test results listed in the table, we analyzed the water for 78 different compounds in 2015; none of which were found at detectable levels.

Water Quality Table Key and Definitions:

MCL - Maximum Contaminant Level: This is the highest level of a substance 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 substance in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

MRDL - Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG - Maximum Residual Disinfectant Level Goal: The level of 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.

ppm - Parts per Million: You win a one million-dollar lottery. You give a friend one dollar. That's 1 ppm.

ppb - Parts per Billion: Your rich uncle passes away and leaves you $1O million. However, in counting your inheritance, you discover that 1 cent is missing. That's 1 ppb.

Turbidity - A measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

NTU – Nephelometric Turbidity Unit: Measurements of the minute suspended particles (used to judge water clarity).

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

AL - Action Level: The amount of a substance when exceeded requires a treatment change or other response by a water system.

n/a - Not applicable

n.d. - Not detected

About Contaminants:
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 human activity.

Contaminants that may be present in source water include: Microbial contaminants such as viruses and bacteria which may have come from septic systems, agricultural livestock operations, sewage treatment plants, 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 can be naturally-occurring or be the result of oil and gas production and mining activities.

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 home plumbing. The 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. 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 epa.gov/safewater/lead. 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). In the East Grand Rapids water distribution system, lead levels have decreased from 11.5 ppb in 1998 to 2.2 ppb in 2013.

For concerns regarding other sources of lead levels in homes, including paint and soils, 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: Environmental Health Services: 616-632-6900
Childhood Lead Poisoning Prevention Program: 616-632-7063

Health Homes Coalition of West Michigan-Get the Lead Out Program: 616-241-3300

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.