# 2018 Water Quality Report for Eaton Rapids

This report covers the drinking water quality for City of Eaton Rapids for the 2018 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2018. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

Your water comes from 6 groundwater wells, each over 60ft deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is "high" to "moderate".

There are no significant sources of contamination include in our water supply. We are making efforts to protect our sources by participation in the DEQ approved Well head Protection program and participation in DEQ Abandon Well Management program.

If you would like to know more about the report, please contact: Mark Lease, City Water Dept. at (517) 663-8118 ext. 8117 or mlease@cityofeatonrapids.com

Contaminants and their presence in 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 U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

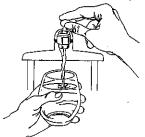
Vulnerability of sub-populations: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. U.S. EPA/Center for Disease

Control 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).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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:

- Microbial contaminants, such as viruses and bacteria, which 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 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 and residential uses.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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.



In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of

certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled

water which provide the same protection for public health.

## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2018 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2018. 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 the data is representative of the water quality, but some are more than one year old.

### Terms and abbreviations used below:

- <u>Maximum Contaminant Level Goal (MCLG)</u>: 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.
- Maximum Contaminant Level (MCL): 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.
- <u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.
- <u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.
- <u>Treatment Technique (TT)</u>: A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not applicable
- ND: not detectable at testing limit
- ppb: parts per billion or micrograms per liter
- ppm: parts per million or milligrams per liter
- <u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- <u>Level 1 Assessment</u>: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- <u>Level 2 Assessment:</u> A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions

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. The City of Eaton 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

1Monitoring Data for Regulated Contaminants

Regulated Contaminant	MCE, TT, of MRDE	WCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Barium (ppm)	2	2	0.12		9/12/18	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.76		9/12/18	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
TTHM Total Trihalomethanes (ppb)	80	N/A	5.4		6/12/18	°N <sub>o</sub>	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	09	N/A	1.8		6/12/18	S S	Byproduct of drinking water disinfection
Chlorine¹ (ppm)	4	4	0.24		6/12/18	S.	Water additive used to control microbes
Total Coliform (total number or % of positive samples/month)	F	N/A	N/A	N/A	2018	S S	Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note <sup>2</sup>	0	0	N/A	2018	No	Human and animal fecal waste
Fecal Indicator – E. coli at the source (positive samples)	Ш	N/A	0	N/A	2018	No	Human and animal fecal waste
Inorganic Contaminant Subject Action to Action Levels (AL)	Action Level	MCLG	Your Water <sup>3</sup>	Range of Results	Year	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	2ppb	0	2018	No	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.98	0	2018	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup> The chlorine "Level Detected" was calculated using a running annual average.

<sup>&</sup>lt;sup>2</sup> E. coli MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is E. coli-positive, or (2) the supply fails to take all required repeat samples following E. coli-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for E. coli.

<sup>&</sup>lt;sup>3</sup> Ninety (90) percent of the samples collected were at or below the level reported for our water.

# Additional Monitoring

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. Monitoring helps the U.S. EPA determine where certain contaminants occur and whether regulation of those contaminants is needed.

Unregulated Contaminant Name	Average Level Detected	Range	Year Sampled	Comments
PFOS + PFOA (ppt)	ON		2018	Results of monitoring are available upon request
PFAS (ppt)	ΩN		2018	Results of monitoring are available upon request