



# CITY OF GREENVILLE

## 2016 Consumer Confidence Report

This Consumer Confidence Report is intended to provide information to the residents of the City of Greenville regarding the drinking water quality during the calendar year 2016. The Consumer Confidence Report is provided to residents annually in compliance with State and Federal Regulations, and keeps the line of communication open between those of us who operate and maintain the drinking water system and our customers. A staff of three, including two State certified water distribution and limited treatment operators, oversee the Greenville water system.

The source of water for Greenville is groundwater. We have seven (7) wells in a central well field that range in depth from 62 feet to 100 feet. The wells range in capacity from 200 gallons per minute (gpm) to 1,200 gpm. The total capacity of the well field is 4,620 gpm which equals a total daily capacity of 6.7 million gallons per day (mgpd). In 2016 the city of Greenville pumped an average of 1.9 million gallons per day, for a total annual pumpage of 706,436,000 gallons of water.

August 2016 was the month with the highest total pumpage at, 73.7 million gallons, with the highest daily pumpage of 2.9 million gallons.

The City of Greenville adds .55 parts per million (ppm) of Fluoride to the drinking water to aide in the prevention of tooth decay. Also, the City now has the capability to add up to 1.0 ppm of chlorine for disinfection as needed for protection of our water quality in the distribution system.

The City's Water Department staff administers several programs and plans on a continuous basis to protect the quality of our water. Included in these programs and plans is the Wellhead Protection Plan, which aids in identifying the Area of Influence impacting our ground water source of supply. This allows for identifying, monitoring, and controlling any activity which could impact our water quality.

A Cross Connection Control Program actively provides inspection of customer service lines to identify and eliminate any potential sources of contamination.

Staff collected 136 routine water samples in 2016 to test the quality of our water. All sampling results indicated our water is safe and in compliance with all Federal and State regulations.

If you have any questions about this report or concerning your water utility, please contact Tom Pollock, Director of Public Services and Utilities at 754-5098 between 8:00 a.m. and 3:30 p.m. Monday through Friday. We want our valued customers to be informed about their water utility. You are also welcome to attend any regularly scheduled Greenville City Council Meeting held on the first and third Tuesday of each month at 7:30 p.m. at the Greenville City Hall Council Chambers at 411 S Lafayette Street, Greenville.

In the following tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Action Level:** (AL) the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level:** The "Maximum Allowed" (MCL) is 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.

**Maximum Contaminant Level Goal:** The "Goal" (MCLG) is 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.

**Parts per million:** (PPM) or milligrams per liter (mg/l) equals one ounce in 7,350 gallons of water.

**Parts per Billion:** (PPB) or micrograms per liter (ug/l) equals one ounce in 7,350,000 gallons of water.

**Running Annual Average:** (RAA) average between the low and high readings throughout the year.

## How to Read These Tables

The following tables show the results of our water quality tests. Every regulated contaminant we detect in the water, even in the smallest traces, is listed here. The tables contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

The tables do not list hundreds of contaminants we tested for but did not detect.

REGULATED SUBSTANCES WE MEASURED AT THE MUNICIPAL WELLS						
Substance	Unit	MCL	MCLG	Highest Detected Level	Major Sources	Violation?
Chlorine	PPM	4	4	RAA- 0.03 Low: 0.00 High: 0.10	Water additive used to control microbes	No
Fluoride	PPM	4	4	1.1	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	No
Nitrate	PPM	10	10	1.2	Run off from fertilizer use; Leaching from septic tanks, sewage, Erosion of natural deposits	No
Tetrachloroethene	PPM	0.005	0	0.0025	Leaching from PVC pipe; Discharge from factories and dry cleaners	No
Radium-226	pCi	5		0.3	Decaying of metals buried in soils	No
Radium-228	pCi	5		0.8	Decaying of metals buried in soils	No

REGULATED SUBSTANCES WE MEASURED IN HOMES AND BUSINESS						
Substance	Unit	AL	MCCLG	90th Percentile*	Major Sources	Violation?
Copper	PPB	1300	1300	487	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	No
Lead	PPB	15	0	7	Corrosion of household plumbing systems; Erosion of natural deposits	No

**Water Quality Table Footnotes:**

\*9 out of 10 homes tested must show a concentration lower than 1300 ppb

\*9 out of 10 homes tested must show a concentration lower than 15 ppb

**LEAD:** If present, elevated levels of lead can cause serious health problems, especially for pregnant women and your children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Greenville 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>.

**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 personal doctor.

The City did have 1 sample site that was above the Action Level for copper.

**NOTE: Arsenic;** There is a nationwide interest in the arsenic levels in drinking water. The City of Greenville has no detected level of arsenic in drinking water.

**Other testing also showed the following characteristics in our water. Federal and State standards have yet to be established for these substances, but all are well within limits accepted by most public health officials.**

<b>Substance—Non regulated</b>	<b>Amount Detected</b>
Hardness	276 ppm = 16.1 grains/gallon

As you can see from the above test results that the City water supply did not have any contamination violations; the City did however have one sampling violation, in that it was late in collecting a routine VOC sample on its scheduled time. When the sample was collected and tested the results were negative for any contamination.

## General Health Information Provided by EPA

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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791).

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 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:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- B. Inorganic contaminants, such as salts and metals which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- D. Organic chemical contaminants; including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- E. Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk. These people should seek advice about drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

## Source Water Assessments

The State performed an assessment of our source water in 2003 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 primarily on geologic sensitivity, water chemistry, and contaminant sources. The susceptibility of our source is “high”. Potential sources include several industrial sites in the community, none of which are within our well head protection area. Although our susceptibility is high there is no contamination of our source water and the Well Head Protection Plan mentioned on the first page of this report provides the means for the City to protect our source water from contamination. As is the case with all our water system reports, copies of the Source Water Assessment can be obtained through the City of Greenville, 218 E Fairplains, Greenville, Michigan 48838.

We at the Greenville Water Department are dedicated to providing top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children’s future.

Please call our office at 754-5098, if you have any questions.

The Greenville Water Department Staff is available to you whenever you have need for service. During our regularly scheduled working hours (7:00 am to 3:30 pm, Monday—Friday) we can be reached at (616) 754-5645 or (616) 754-5098.

After hours, on weekends, and holidays we can be reached by calling  
Montcalm County Central Dispatch at (989) 831-5253 (ext. 1)

Individual copies of this report will not be sent out, you can request a copy of this report at the following locations.

This report is available at Greenville City Hall, Public Services Department, and on our website: [www.greenvillemi.org/water](http://www.greenvillemi.org/water).