

# 2018 Water Quality Report for the City of Manton

This Report covers the drinking water quality for the City of Manton 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 Environmental Protection Agency (EPA) and state standards.

Your water comes from 3 groundwater wells, Well #3 at a depth of 100ft. Well #4 at a depth of 265 ft. and Well #5 at a depth of 270 ft. In 2004, 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-tier scale from "very-low" to "very-high" based on geology sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our Well#3 is moderately high. The susceptibility of Well#4 is moderately Low. In 2011 we added an additional well, #5 which is on the same aquifer as Well#4.

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by following all drinking water monitoring requirements, which includes a vast number of water sampling and testing for potential contaminants. We also participate in a Well Head Protection Plan. Details of this plan are available to the public.

We have just finished up 3.1 million dollars water project that just updated 13000 ft of water main. Which help with are over all daily distribution to drop from 130,000 daily down to average of 60,000 daily.



With the winter being back to average temps. We experienced 7 known freeze ups this past winter. We are truly sorry, those of you who suffered as a result of this unfortunate situation. The city did everything possible to resolve each issue as they came up. We have taken the time to review the procedures from last winter and we will be changing some of the procedures that go along with freeze ups for the upcoming winter.

A lot has been done, but there is always so much to do, and we will continue to try and become better at what we do, for you. If you would like to know more about our efforts to protect our water quality, please contact Manton City Offices at 231-824-3572, or visit our website at [www.mantonmichigan.org](http://www.mantonmichigan.org)

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

- **Contaminants and their presence in water:** Drinking Water, including bottled water, may



obtained by calling the **EPA's Safe Drinking Water Hotline (800-426-4791)**.

for contaminants in bottled water which provide the same protection for public health.

- **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. EPA/CDC 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:
  - T **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
  - T **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.
  - T **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
  - T **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
  - T **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.

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 regulations establish limits

## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2017 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 – December 31, 2017. 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 of the data is representative of the water quality, but some are more than one year old.

### Terms and abbreviations used below:

- **Maximum Contaminant Level Goal (MCLG):** 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.
- **Maximum Residual Disinfectant Level (MRDL):** means 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.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** means 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.
- **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 **pCi/l:** picocuries per liter (a measure of radioactivity).
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant
Nitrate(ppm)	10	0	.8	n/a	2/8/2017	no	Erosion of natural deposits; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.03	N/A	2/8/2017	No	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
TTHM - Total Trihalomethanes (ppb)	.080	N/A	0.0005	N/A	7/26/2018	No	Byproduct of drinking water disinfection
Chlorine* (ppm)	<b>MRDL</b>	<b>MRDLG</b>	0.08	0.02-0.29	7/26/2018	No	Water additive used to control microbes
	4	4					
Contaminant Subject to AL	Action Level	MCLG	90% of Samples ≤ This Level		Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb) **	15	0	6ppb		9/26/2018	10	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.36ppm		9/26/2018	10	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Special Monitoring and Unregulated Contaminant ***			Level Detected	Year Sampled	Comments		
Sodium (ppm)			9	2/8/2017	Typical source is erosion of natural deposits		

\* Chlorine was calculated using the running annual average.

\*\* 90 percent of the samples collected were at or below the level reported for our water.

\*\*\* Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

**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 Manton 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>.

Microbial Contaminants	MCL	MCLG	Number Detected	Violation Yes / No	Typical Source of Contaminant
Total Coliform Bacteria	>1 positive monthly sample (>5.0% of monthly samples positive)	0	5	No	Naturally present in the environment

**PFAS Result**

Date	Sample location	PFOS+PFOA	LHA PFOA+PFOS	Total Tested PFAS
10/2/18	TP003	ND	70	ND
10/2/18	TP005	ND	70	ND

Monitoring and Reporting to the DEQ Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety.

**Violation**

During the monitoring period for 2018 we did have a violation of not submitting the certificate of distribution with the CCR report.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Manton City Offices, 231-824-3572, or online at [www.mantonmichigan.org](http://www.mantonmichigan.org). This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. Commission meetings are held on the third Tuesday of every month at 7:00 pm. These meetings are held at the Manton VFW Post on State Street unless otherwise posted at City Hall. For more information about your water, or the contents of this report, contact Manton City Offices at 231-824-3572, or by email at [dpw@mantonmichigan.us](mailto:dpw@mantonmichigan.us). For more information about safe drinking water, visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).

**Quick facts about your water system.**

In the calendar year 2018 the City of Manton pumped 61.37 million gallons of water.

The date of the highest water usage was 5/16/18, where we pumped 407,000 gallons of water.

The date of the lowest water usage was 12/24/18, where we pumped 21,000 gallons of water.

A gallon of water weighs 8.34 pounds, a gallon of milk weighs 8.6 Pounds.

There are 7.48 gallons of water in a cubic foot, which would weigh 62 pounds.

2.31 feet of water equal 1 pound per square inch.

