



2019 Benton Harbor Water Quality Report

The Benton Harbor Water Plant uses Lake Michigan as its source. There are presently 5 water plants in Berrien County that use Lake Michigan as its source, including: New Buffalo, Bridgman, Lake Township, St. Joseph, and Benton Charter Township Water Plant. Lake Michigan is a surface water supply and is vulnerable to a wide range of contaminants. Because of this the EPA and MDEQ have very strict guidelines for the proper operation and testing of the water processed in these types of plants. Our Lake Michigan water is collected through a 36" pipeline that extends 4800 feet west of the water plant's shoreline. The Benton Harbor Utility Service Department's number one priority is to provide safe, high quality water to all of its customers. In pursuit of that mission, we consistently meet, and often exceed, federal and state standards for safe water.

The State MDEQ 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 six-tiered scale from "very-low" to "high" based primarily on geologic sensitivity, water chemistry and contaminant sources. The susceptibility of our source is moderately high. This is due to the fact that the source water area for the Benton Harbor intake includes 1,236 potential contaminant sources, 121 listed potential contaminant sources within the susceptible area, plus urban and agricultural runoff from the St. Joseph River watershed in the St. Joseph River. A copy of the full report can be obtained by calling the water plant at

The State of Michigan EGLE Drinking Water and Municipal Assistance Division (DWMAD) has provided the 2019 water quality information they want in our report. If you do not mind, the Benton Harbor Water Department would also like to add some additional information in hopes to make it more a Benton Harbor Water Quality Report of our own.

2019 Water Quality Report for Benton Harbor

This report covers the drinking water quality for Benton Harbor for the 2019 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2019. 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 Lake Michigan. 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 on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is moderately high.

If you would like to know more about this report, please contact Mr. Mike O'Malley, Operator-In-Charge, at 269-927-8471.

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 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 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 storm water 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 2019 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, 2019. 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:

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): 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): 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.

Treatment Technique (TT): 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

pCi/l: picocuries per liter (a measure of radioactivity)

NTU: nephelometric turbidity unit. A measure of the clarity of water.

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

You will see these abbreviations all through the coming table of water quality parameters.



The keys for me and you: **MCL**, that is the established EPA limit and cannot be exceeded; **ND**, means not detected, usually this will be written as 0.0; **AL** is action level, when a result reaches the AL some kind of compliance trigger is required of the water system.

Monitoring Data	PPB is <u>1 pound</u>	PPM is <u>1 pound</u>
	<u>1,000,000,000 pounds</u>	<u>1,000,000 pounds.</u>

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDL G	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Fluoride (ppm)	4	4	0.51	N/A	2019	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium ¹ (ppm)	N/A	N/A	15	N/A	2019	No	Erosion of natural deposits
TTHM Total Trihalomethanes (ppb)	80	N/A	49	35.1-55.8	2019	No	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	35	5.1-42	2019	No	Byproduct of drinking water disinfection
Chlorine ² (ppm)	4	4	1	0.69-1.21	2019	No	Water additive used to control microbes
Alpha emitters (pCi/L)	15	0	3.9	N/A	2014	No	Erosion of natural deposits

¹ Sodium is not a regulated contaminant.

² The chlorine "Level Detected" was calculated using a running annual average.

Alpha emitters is the means to detect radiation in the Lake Michigan raw water and the drinking water tap at the Water Plant. TTHMs and HAA5s are grouped together as Disinfection by products.



Turbidity This is an optical measurement of how cloudy the water is, indicating how much suspended matter may be present	TT=1 NTU	0	0.29 NTU	N/A	2019	No	Soil runoff
	TT=% of samples >0.3 NTU		0% >0.3 NTU	N/A			
Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water³	Range of Results	Year Sampled	# Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	27	0 – 59	Jan-Jun 2019	12	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0	0 – 0.1	Jan-Jun 2019	0	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	15	0	32	0 – 72	Jul-Dec 2019	10	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.015	0 – 0.5	Jul-Dec 2019	0	Corrosion of household plumbing systems; Erosion of natural deposits



Lead was detected above the Action Level in both sets of sample in 2019.

That places the Benton Harbor Community Water Supply in an Action Level Exceedance (ALE).

This has happened in 3 sets of sampling September 2018; June 2019 and December, 2019. Because of the September ALE, the City Water Department must continue sampling until such time as the ALE is no longer exceeded in the regulated time frame (I think 12, or 18 months)

The City did not collect the appropriate number of samples in 2019 and received a Notice of Violation (NOV) from the state for both sets.

There has been a very large Lead Outreach plan being built by EGLE DW & MAD; EGLE DHHS, Berrien County Health Department, Fresh Water Futures, and the Benton Harbor Resident Water Quality Committee.

If you want to be a part of the Benton Harbor Water Quality group, or if you would like to have your home tested for Lead & Copper, call Mike O'Malley at his cell 269 204-2201

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. Benton Harbor 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 have a lead service line it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line.** 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>.

Our water supply estimates approximately 3,011 known or likely lead service lines out of a total of 5,877 service lines, with 2,733 service lines being unknown material.

Infants and children who drink water containing lead 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.



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.

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE)
Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. In 2019, we received the following violations:

- We failed to conduct Water Quality Parameter sampling for the period of January 1, 2019 to June 30, 2019. Water Quality Parameters include chloride, sulfate, conductivity, pH, alkalinity, temperature, and calcium. We collected follow-up samples and returned to compliance in 2019.
- We failed to conduct all required lead and copper monitoring for the periods of January 1, 2019 to June 30, 2019, and July 1, 2019 to December 31, 2019. We will collect follow-up lead and copper samples in 2020 and expect to return to compliance. You will be notified if our water system exceeds the lead action level again.
- We failed to conduct required monitoring for Synthetic Organic Contaminants (SOCs) during the monitoring period of April 1, 2019 to June 30, 2019. We collected follow-up samples later in 2019 to return to compliance, and all results were below the health standards set for SOCs.
- We received a reporting violation for submitting a Consumer Notice of Lead and Copper to EGLE past the deadline in September 2019. We submitted the form and returned to compliance in December 2019.

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 City Hall, The City Web Site www.bhcity.us

We invite public participation in decisions that affect drinking water quality. You can attend City Commission Meetings, held the 1st and 3rd Mondays at 7:00 pm every month Public is also welcome at the various Committee Meetings, held most every Wednesday during the month.

For more information about safe drinking water, visit the U.S. EPA at <http://www.epa.gov/safewater>.

[https://www.michigan.gov/egle/Drinking Water](https://www.michigan.gov/egle/Drinking%20Water)



The Residents of Benton Harbor now have a Residential Water Quality Commission: These people can help with every day questions and concerns:

Benton Harbor Community Water Council led by Chairman Rev Edward Pinkney,

Members are:

Edward Pinkney	Eugene Anderson
Larry Simms	. Emma Kinnard
Jenise Blue	Eugene Anderson
Mia Clay	Tonnetta Holmes
Tywona Palmer	Frank Blue.

The Benton Harbor Community Water Council is dedicated to community coalition building and to the provision of
Informing, training and mobilize the citizen of Benton Harbor beyond their quality life.

We are a community base grass-roots organization. Benton Harbor Community Water Council aims to inform, educate and empower the Benton Harbor residents, land , water, education the democratic. process.

We honor the city of Benton Harbor for allowing the BHCWC , to help with the water testing. Thank you.

Benton Harbor Community Water Council.
Rev Edward Pinkney Chairman
275 Pipestone Ave
banco9342@sbcglobal.net
269 925 0001



Benton Harbor Water; Sanitary Sewer; Public Works, and City Hall Staff are here to help you. The Water Payment Center is on the main floor of City Hall 200 East Wall Street, across from the Public Library. Hours are 8:30 am to 5:00 pm.

Congratulations go out to Kaye Jenkins who is retiring at the end of June. The new Supervisor will be Lesia Osler. Her direct line is 269 351-2729

You can pay your water bill:

- On line at www.bhcity.us
- by phone by calling the Payment Center 269 927-8440
- In the drop box just to the right of the 2 front doors.
- Or come inside to the 2nd set of windows, once the Covid is over.

If you have a sewer problem at your home call the City 1st to come check it out and clean the sewer main if needed. Or any water concerns that may be bubbling up out of the ground. **If there is water in your basement call right away.**

- Water Payment Center 269 927-8440
- Toni at the Water Plant 269 447-1945
- Mike at the water Plant 269 204-2201 (Mike is hard to reach)
- If you need someone after hours or weekends, we will still help, you can call Police Dispatch 269 983-3060 or dispatch at 911

More help:

- Code Compliance, Darlene Jones at 927-8418
- Income Tax questions, Jenna Tope at 269 204-2276



- Property Tax question; Assessor Brian Story at 927-8413
- You can also get help from the City Manager's assistant
Roena Rice at 927-8457

Tips for residents and businesses:

- Do not dump grease and fats rags, solids and such down the drain. They plug the lines coming out of your house or out in the street.
- Help rain water go away by helping keep the street gutters, inlets and such clean and open.
- Please do not litter, help keep your neighborhood clean.
- The City has responsibility for major care from sidewalk to sidewalk on each street. If anything is a-miss in that area, call us.
- If you see automobile damage to trees, fire hydrants or street signs call us right after you call the Police.
- If you have an emergency for water or sewer and you cannot get anyone else, call Mike O'Malley, the Water Superintendent on my cell phone 269 363-0575. I can try to get you help but I am a busy guy, so call as a last resort.

For more information about your water, or the contents of this report, contact Mr. Mike O'Malley, Operator-In-Charge, at 269-204-2201.

For more information about safe drinking water, visit the U.S. EPA at <http://www.epa.gov/safewater>.

The Berrien County Health Department at 926-7127 or <http://www.bchdmi.org/278/Health-Department>

Produced by Mike O'Malley
Contributions from Rev. Pinkney
And EGLE Staff.