



Coldwater Board of Public Utilities 2018 Water Quality Report

The Coldwater Board of Public Utilities (CBPU) is pleased to present the 2018 Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a dependable supply of drinking water. This report will help you understand the efforts we make to continually improve the water treatment process and protect our water resources. The CBPU is committed to ensuring the quality of your water.

Your water comes from four deep well groundwater wells, each over 130 feet deep drawing water between the Coldwater River Basin and the St. Joseph River Basin watershed. The State performed an assessment of our source water in 2018 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 “moderate”. Significant sources of contamination include the Coldwater Board of Public Utilities Power Plant, the former Midwest Foundry site, Associated Truck Lines, and an oil spill at the American Truck Driving School that may have pushed into the storm drain. We are making efforts to protect our sources by being one of the first communities in the state of Michigan to have an approved Wellhead Protection Program. Furthermore, in 2005 the Coldwater Board of Public Utilities was awarded by the Michigan Department of Environmental Quality for being the first public water system in Michigan to update their wellhead or source water protection plan. If you would like to know more about the report or what the utility does about source water protection please contact Brian Musselman at (517) 279-4805 or our website at www.coldwater.org

We encourage our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the Tuesday preceding the fourth Monday of each month at 5PM located at the Henry Brown Building, One Grand Street.

The Coldwater Board of Public Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2018. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.



In this table 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:

Parts per million (ppm) or Milligrams per liter (mg/l) – one part per million – or one ounce in 7,813 gallons of water.

Parts per billion (ppb) or Micrograms per liter - one part per billion – or one ounce in 7,813,000 gallons of water.

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.

Running Annual Average (RAA) - a number obtained by adding quantities or measurements and dividing the sum or total by the number of quantities or measurements every three months.

Although the following is a listing of detected contaminants found in the water supply the CBPU has tested for over 130 different contaminants.

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, urban stormwater runoff, and residential uses.
- 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 stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Contaminant	Violation Y/N	Units Of Measurement	Level Detected	Highest Level Detected	Range of Detection	Likely Source of Contamination	MCL	AL
Inorganic Contaminants Regulated								
* Barium 5/29/14	N	mg/l	0.24	0.24		Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	2.0 mg/l	
Copper 7/26/18	N	ppb	970 <i>Based on 90th percentile</i>	1100	30-1100	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		1300ppb
Fluoride 7/9/18	N	mg/l	0.42	0.42		Erosion of natural deposits; water additive which promotes strong teeth	4.0 mg/l	
Lead 7/26/18	N	ppb	5.5 <i>Based on 90th percentile</i>	68	<1 – 68	Corrosion of household plumbing systems, erosion of natural deposits		15ppb
Sodium 6/26/18 Non-Regulated Substance	N	mg/l	22	22		Erosion of natural deposits		
Organic Contaminants Regulated in the Distribution System								
TTHM Total-trihalomethanes 2018	N	mg/l	0.016-0.051	0.051		By-product of drinking water chlorination		
HAA5 Haloacetic Acids 2018	N	mg/l	0.007-0.015	0.015		By-product of drinking water chlorination		

* These samples are taken every 108 months.

TTHM Compliance 2018

Site Code	Sample Site Code	Date		TTHM	HAA5
				mg/L	mg/L
DBP1	Sample Site #1.	2018	1st quarter DBP average February	0.030	0.015
		2018	2nd quarter DBP average May	0.051	0.011
		2018	3rd quarter DBP average August	0.040	0.008
		2018	4th quarter DBP average November	0.050	0.007

LRAA	0.043	0.010
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DBP2	Sample Site #2.	2018	1st quarter DBP average February	0.016	0.010
		2018	2nd quarter DBP average May	0.026	0.011
		2018	3rd quarter DBP average August	0.021	0.008
		2018	4th quarter DBP average November	0.033	0.010

LRAA	0.024	0.010
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DBP3	Sample Site #3.	2018	1st quarter DBP average February	0.021	0.012
		2018	2nd quarter DBP average May	0.045	0.015
		2018	3rd quarter DBP average August	0.039	0.010
		2018	4th quarter DBP average November	0.032	0.010

LRAA	0.034	0.012
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DBP4	Sample Site #4	2018	1st quarter DBP average February	0.029	0.015
		2018	2nd quarter DBP average May	0.050	0.013
		2018	3rd quarter DBP average August	0.041	0.009
		2018	4th quarter DBP average November	0.043	0.007

LRAA	0.041	0.011
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Starting 2014 The Michigan DEQ changed our TTHM (Total Trihalomethanes) and HAA5 (Haloacetic Acids) sampling requirements from one sample taken yearly from one location to four samples taken quarterly and figuring a LRAA (locational running annual average) for each sample location site.

Chlorine Residual Compliance (mg/l) 2017	JA	FE	MA	AP	MA	JU	JL	AU	SE	OC	NO	DE	MCL
Bacteriologic sample site	.50	.52	.54	.50	.42	.63	.54	.46	.51	.55	.63	.63	4.0 Mg/l
Average of all measurements taken in the month	.50	.52	.54	.50	.42	.63	.54	.46	.51	.55	.63	.63	
Chlorine Residual Compliance (mg/l) 2018													
Bacteriologic sample site	.60	.63	.55	.50	.44	.70	.56	.52	.59	.55	.51	.52	
Average of all measurements taken in the month	.60	.63	.55	.50	.44	.70	.56	.52	.59	.55	.51	.52	
RAA calculated quarterly of 12 monthly averages			** .59			.52			.55			.54	

*** Indicates the highest RAA (running annual average)*

Information about Lead. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, Infants, and young children who drink water containing lead in excess of the action level 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. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Coldwater Board of Public Utilities 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 1-800-426-4791 or at <http://water.epa.gov/drink/info/lead>.

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 system disorders, some elderly, 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 microbiological contaminants are available from the Safe Drinking Water Hotline.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. The substances can be microbes, inorganic or organic chemicals, pesticides and herbicides and radioactive substances. All 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.

The Coldwater Board of Public Utilities operates and maintains a water treatment plant designed to process up to 6.0 million gallons of water per day for our customers. The plant is also designed to remove iron and manganese contaminants from the raw water before distribution to our customers. 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.

For more information please visit our website at www.coldwater.org or by sending an email to bmusselman@coldwater.org Please call the water treatment plant at (517) 279-4805 if you have questions.

UNREGULATED CONTAMINANT MONITORING 2013

CONTAMINANT	UNIT OF MEASUREMENT	AVERAGE	RANGE OF DETECTION
Chromium	Ug/L	<0.2	<0.2
Cobalt	Ug/L	<1.0	<1.0
Molybdenum	Ug/L	3.35	3.3-3.4
Strontium	Ug/L	160	160
Vanadium	Ug/L	<0.2	<0.2
Chromium, Hexavalent	Ug/L	<0.03	<0.03
Chlorate	Ug/L	<20	<20
1,4-Dioxane	Ug/L	<0.07	<0.07
Bromochloromethane	Ug/L	<0.06	<0.06
Bromomethane	Ug/L	<0.02	<0.02
1,3-Butadiene	Ug/L	<0.1	<0.1
Chlorodifluoromethane	Ug/L	<0.08	<0.08
Chloromethane	Ug/L	<0.2	<0.2
1,1-Dichloroethane	Ug/L	<0.03	<0.03
1,2,3-Trichloropropane	Ug/L	<0.03	<0.03
Perfluoroheptanoic acid(PFBS)	Ug/L	<0.09	<0.09
Perfluoroheptanoic acid(PFHpA)	Ug/L	<0.01	<0.01
Perfluorohexanesulfonic acid(PFHxS)	Ug/L	<0.03	<0.03
Perfluorononanoic acid (PFNA)	Ug/L	<0.02	<0.02
Perfluorooctane sulfonate(PFOS)	Ug/L	<0.04	<0.04
Perfluorooctanoic acid(PFOA)	Ug/L	<0.02	<0.02

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. Monitoring helps the U.S. EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. We monitored for these contaminants and the results of monitoring are available on request.