WRC
WATER RESOURCES COMMISSIONER
Jim Nash

Consumer Confidence Report: 2019 Drinking Water Quality

Keeping water customers informed

Purely Resourceful

2019 Drinking Water Quality Report

Consumer Confidence Report

The Safe Drinking Water Act (SDWA) is the federal law that ensures the quality of Americans' drinking water. Under SDWA, the Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees the state, local municipality and water supplier who implements those standards. Amendments to the SDWA require all public water systems with at least 15 service connections or a system that regularly serves at least 25 individuals to publish and distribute a Consumer Confidence Report (CCR) annually.

The CCR increases the availability of information to water customers. Informed and involved customers can be strong allies of their water systems, large and small, as they take action on water issues. Also, an increase in public awareness can give sensitive sub-populations the information that they may need for their protection.

In order to maintain water quality within your home, it is recommended by the Oakland County Water Resources Commissioner (WRC) that you remove and clean each faucet aerator twice annually and flush stagnant water.

Aerators are the screens that screw into the end of each faucet. In addition, it is also recommended that you annually flush out the water heater and that you regularly maintain any in-home treatment equipment, such as water filters and softeners. Visit www.oakgov.com/water for more information.

Special Health Information

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, 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.

Lead Information

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. WRC 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 and 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 drinking 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 at 800-426-4791 or at www.epa.gov/safewater/lead.

Contaminants

The 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-occuring 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 occuring 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, storm water runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally occuring or be 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. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 simply calling the EPA Safe Drinking Water Hotline at 800-426-4791.

Cross Connection Control Program

The Michigan Department of Environment, Great Lakes and Energy (EGLE) approved WRC Cross Connection Control Program (CCCP) was designed to protect your potable (drinking) water. A cross-connection is a link between a possible source of pollution and a potable water supply. A pollutant may enter the potable water system by backpressure and/or via a back-siphon.

The CCCP helps prevent backflow contamination protecting the quality of the water system, the safety and the public health of all water customers.

Oxford Township Well Water Supply System

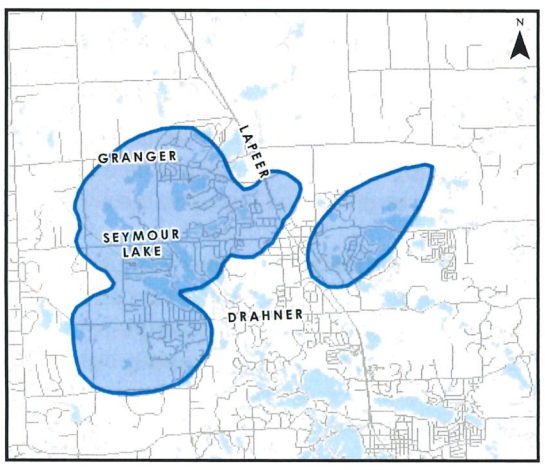
2019 Consumer Confidence Report

Title XIV of the United States Public Health Service Act, (Chapter 373, 88 Stat. 1660), popularly known as The Safe Drinking Water Act, and The Michigan Safe Drinking Water Act (1976 PA399, amended to 1998 PA56) require a supplier of water to provide Consumer Confidence Reports (CCR) to its customers. The Oakland County Water Resources Commissioner (WRC) is pleased to present the Annual Drinking Water Quality Report (CCR) for the year 2019.

This report is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water supply system operation and to protect our water resources. We are committed to ensuring the quality of your water.

The water source is groundwater found in glacial materials. Eleven wells (one 6-inch, three 8-inch and seven 12-inch) provide the pumping capacity for this well water supply system (WSSN 5138). A Wellhead Protection Program is designed to protect the public ground water supply system from potential sources of contamination. Protection includes identifying the area that contributes ground water to the well (delineation) and developing methods to manage the area to minimize the threat to the water supply. Oxford Township and Oxford Village have developed a Wellhead Protection Program. The map below shows the delineated wellhead protection area. A source water assessment has been completed by the Department of Environment, Great Lakes, and Energy (EGLE). Please contact Oxford Township for additional information.

If you have questions about this report, or your water utility, please contact your WRC representative, **Kathryn DiCea, 248-452-9158** or visit our web site at www.oakgov.com/water. We want our valued customers to be informed about their water utility. Please contact Trustee Jack Curtis, through Oxford Township at 248-628-9787, for water and sewer meeting dates.



System Design and Improvements

We work continually to provide high quality water to every tap. In order to maintain a safe and dependable water supply, we may need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. We ask that all our customers help us conserve and protect our water resources, which impact our present life style and our children's future.

Outdoor Water Use

Outdoor water use, primarily sprinkling of lawns, greatly affects water pressure and sizing of water system infrastructure when sprinkling is scheduled during peak demand times. We recommend customers schedule automatic irrigation equipment to water lawns outside of the 5 to 9 a.m. and 5 to 9 p.m. high demand times. Michigan State University recommends light, frequent irrigation applied in the early afternoon https://www.canr.msu.edu/resources/irrigation-practices-to-preserve-water-quality. Water your lawns or **set your automatic sprinklers to operate outside of the morning and evening high demand periods to improve your water pressure and decrease costs required for water system expansion.**

Your Water Quality

The Oxford Township Well Water Supply System is routinely monitored, in accordance with the Public Acts, for contaminants in your drinking water. The following tables show the results of our monitoring for the period of January 1 to December 31, 2019. In addition, other test results are shown for the year they were required, since annual testing is not required for some contaminants. The most recent test date for the detected contaminant is listed in the table. **In 2018, under the direction of the State of Michigan, community public water supplies were sampled for Per- and Polyfluoroalkyl substances (PFAS). No PFAS was detected in the sampling results for your water system.** Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water and is set at a very stringent level. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

There are two water treatment plants that remove iron and arsenic from the drinking water supplied to your water system. Chlorine is added to the water as part of the treatment process and as required by EGLE. Backup well data was not included in the tables as less than 1% of the total water pumped to the distribution system came from the backup wells. This data is available upon request. As you can see by the tables, the **system had no violations.** We are proud that your drinking water meets or exceeds all Federal and State requirements. The EPA has determined that your water is safe at the levels detected.

NOTICE TO NON-RESIDENTIAL CUSTOMERS

Federal Regulations require that as the billing customer, it is your responsibility to ensure that all water consumers at your facility (whether business, educational institute, apartments, etc…) have access to the report. Please post this CCR in a visible area. Additional copies are available for your distribution by contacting the WRC office at 248-452-9158.

Regulated Contaminants Table

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Detected Level	Range Low	Range High	Major Sources in Drinking Water	Violation
Regulated Inorganic and Volatile Organic Chemicals									
Fluoride	2019	ppm	4	4	0.47	0.33	0.47	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	No
Radioactive Contaminants									
Combined Radium	2016 2019	pCi/L	0	5	1.69	0.37	1.69	Erosion of natural deposits.	No
Disinfectant Residuals and Disinfectant By-Products - Monitoring at Customers' Tap									
Haloacetic Acids (HAA5)	2019	ppb	NA	.60	4.1	4.1	4.1	By-product of drinking water disinfection.	No
Total Trihalomethanes (TTHM)	2019	ppb	NA	80	20	20	20	By-product of drinking water chlorination.	No
Disinfectant (chlorine)	2019	ppm	MRDLG 4	MRDL 4	RAA 0.58	0.37	0.68	Water additive to control microbes.	No

Running Annual Average (RAA) - The average of analytical results for all samples during the previous four quarters.

Copper and Lead Monitoring at Customers' Tap

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level AL	90th Percentile Value*	Range Low	Range High	Number of Samples Over AL	Major Sources in Drinking Water	Violation
Copper	2018	ppm	1.3	1.3	0.4	0	0.4	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	No
Lead	2018	ppb	0	15	6	0	23	1	Corrosion of household plumbing systems; Erosion of natural deposits.	No

*The 90th percentile value means 90 percent of the homes tested have copper and lead levels below the given 90th percentile value. If the 90th percentile value is above the AL, additional requirements must be met.

Lead - Infants and children who drink water containing lead in excess of the AL 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.

Unregulated Contaminants Table

Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level MCL	Average Level	Range Low	Range High	Major Sources in Drinking Water
Chloride	2019	ppm	NA	NA	35	31	39	Naturally occuring due to geological processes.
Hardness	2019	ppm	NA	NA	264	262	266	
Iron	2019	ppm	NA	NA	0.01[1]	0[1]	0.12[1]	
Sodium	2019	ppm	NA	NA	17	14	20	
Sulfate	2019	ppm	NA	NA	38	28	48	

[1]Iron results are from field test kit after water treatment.

Important Definitions:

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

Haloacetic Acids (HAA5) - HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.

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 Contaminant Level Goal (MCLG) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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.

Not Applicable (NA)

Parts Per Billion (ppb) - The ppb is equivalent to microgram per liter. A microgram = 1/1000 milligram. A ppb is equivalent to one penny in $10,000,000.

Parts Per Million (ppm) - The ppm is equivalent to milligram per liter. A milligram = 1/1000 gram. A ppm is equivalent to one penny in $10,000.

Picocurries Per Liter (pCi/L) - A measure of radioactivity.

Total Trihalomethanes (TTHM) - The sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.