



WATER RESOURCES COMMISSIONER

*Jim Nash*

One Public Works Drive • Building 95 West  
Waterford MI 48328-1907



## **Consumer Confidence Report: 2020 Drinking Water Quality**

Keeping water customers informed



 **Purely Resourceful**

# 2020 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](http://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 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/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).

## 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 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>.

## 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-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, 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 occurring 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 back pressure 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.

# City of Farmington Hills Water Supply System



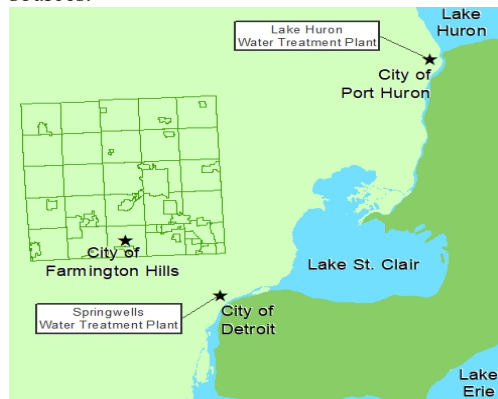
## 2020 Consumer Confidence Report

The City of Farmington Hills has employed the Oakland County Water Resources Commissioner (WRC) to act as the City's water system supply (WSSN #2240) agent. 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 City of Farmington Hills, along with the WRC, is pleased to present the Annual Drinking Water Quality Report (CCR) for the year 2020.

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 treatment process and to protect our water resources. We are committed to ensuring the quality of your water.

Your drinking water is from two separate sources; surface water from the lower Lake Huron watershed via the Lake Huron Water Treatment Plant in Port Huron and surface water from the Detroit River intakes via the Springwells Water Treatment Plant. We purchased the water from the Great Lakes Water Authority (GLWA).

The State has completed source water assessments and categorized the Lake Huron intake as having a moderately low susceptibility to potential contaminant sources and the Detroit River intake as highly susceptible to potential contaminant sources.



The GLWA water treatment plants have historically provided satisfactory treatment of the source water to meet drinking water standards. Please visit [www.glwater.org](http://www.glwater.org) or contact Mary Lynn Semegen at 313-926-8102 or [mary.semegen@glwater.org](mailto:mary.semegen@glwater.org) for more source water information.

GLWA has initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. GLWA participates in the National Pollutant Discharge Elimination System permit discharge program and has an emergency response management plan. In 2016, the Michigan Department of Environmental, Great Lakes and Energy approved the GLWA's Surface Water Intake Plan for the Belle Isle intake. The plan has seven elements that include: roles and duties of government units and water supply agencies, delineation of a source water protection areas, identification of potential sources of contamination, management approaches for protection, contingency plans, siting of new water sources, public participation and public education activities. GLWA is in the process of updating the plan which should be completed by September 2021. If you would like to know more information about the Source Water Assessment report please, contact GLWA at 313- 926-8102.

We are pleased to report that your drinking water is safe and meets federal and state requirements. If you have questions about this report, or your water utility, please contact your WRC representative, **Kathryn DiCea, at 248-452-9158.** We want our valued customers to be informed about their water utility.

### System Design and Improvements

The City of Farmington Hills Water Supply System, like many water systems, is looped to provide a duplicate water supply. This looping is an important way of reducing the possibility of water supply loss to our customers during incidents such as water main breaks or system repairs. 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 lifestyle and our children's future. Please call the WRC office at 248-452-9158 if you have questions or visit our web site at [www.oakgov.com/water](http://www.oakgov.com/water).

### Your Water Quality

The City of Farmington Hills 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, 2020. 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 detected contaminants is listed in the tables. **Per- and polyfluoroalkyl substances (PFAS) were analyzed in 2020 and were not detected.** 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. 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	Highest Detected Level	Range of Detection	Major Sources in Drinking Water	Violation	
<b>Inorganic Chemicals - Monitoring at Plant Finished Water Tap</b>									
Barium	2017	ppm	2	2	0.01	0.01	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	No	
Fluoride	2020	ppm	4	4	0.72	0.63-0.72	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	No	
Nitrate	2020	ppm	10	10	0.37	0.30-0.37	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	No	
<b>Disinfectant Residuals and Disinfectant By-Products - Monitoring in Distribution System</b>									
Haloacetic Acids (HAA5)	2020	ppb	NA	60	LRAA 36	14-24	By-product of drinking water disinfection.	No	
Total Trihalomethanes (TTHM)	2020	ppb	NA	80	LRAA 35	19-37	By-product of drinking water chlorination.	No	
Disinfectant (chlorine)	2020	ppm	MRDLG 4	MRDL 4	RAA 0.79	0.67-0.87	Water additive to control microbes.	No	
<i>Locational Running Annual Average (LRAA)</i> - The average of analytical results for samples at a particular monitoring location during the previous four quarters. <i>Running Annual Average (RAA)</i> - The average of analytical results for all samples during the previous four quarters.									
<b>2020 Turbidity - Monitored every 4 hours at Plant Finished Water Tap</b>									
<b>Highest Single Measurement Cannot Exceed 1 NTU</b>			<b>Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)</b>			<b>Major Sources in Drinking Water</b>		<b>Violation</b>	
0.21 NTU			100%			Soil runoff.		No	
<i>Turbidity</i> has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. <i>The total organic carbon (TOC)</i> removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured each quarter and because the level was low, there is no requirement for TOC removal.									
<b>Copper and Lead Monitoring at Customers' Tap</b>									
Contaminant	Test Date	Units	Health Goal MCLG	Allowed Level AL	90th Percentile Value*	Range Low High	Number of Sites Over AL	Major Sources in Drinking Water	Violation
Copper	2020	ppm	1.3	1.3	0.1	0 0.2	0	Corrosion of household plumbing systems; Erosion of natural deposits.	No
Lead	2020	ppb	0	15	0	0 0	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; 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.									

## Special Monitoring

Contaminant	Test Date	Units	MCLG	MCL	Highest Level Detected	Range of Detection	Major Sources in Drinking Water
Sodium	2020	ppm	NA	NA	5.37	4.91-5.37	Erosion of natural deposits.
<i>Unregulated contaminants</i> are those for which the EPA has not established drinking water standards. Monitoring helps EPA determine where certain contaminants occur and whether it needs to regulate those contaminants. In 2018-2019, WRC monitored quarterly for unregulated contaminants in the Farmington Hills water system under the Unregulated Contaminant Monitoring Rule 4 (UCMR4). All detected UCMR4 contaminants are listed below.							
HAA9	2018-2019	ppb	NA	NA	32.4	19-32.4	By-product of drinking water disinfection.
<i>Cryptosporidium</i> - Giardia Statement: GLWA voluntarily monitors our source water for the presence of Cryptosporidium and Giardia In 2020. The presence of Cryptosporidium and Giardia were detected in the source water at the Belle Isle Detroit River Intake serving Water Works Park, Springwells and the Northeast treatment plants. Cryptosporidium was detected once in March and Giardia once in April. All other samples monitored in 2020 were absent for the presence of Cryptosporidium and Giardia. Current test methods do not enable us to determine if these organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. Cryptosporidium must be ingested for it to cause disease and may be passed through other means than drinking water. Surface water treatment systems like GLWA must provide treatment so that 99.9% Giardia is removed or inactivated.							

## 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/HAA9)** - HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total. HAA9 include the five listed above and tribromoacetic, bromochloroacetic, chlorodibromoacetic, and bromodichloroacetic acids.

**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. 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.

**Maximum Contaminant Level Goal (MCLG)** - The level of contaminant in drinking water below which there is no known or expected risk to health.

**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.

**Nephelometric Turbidity Units (NTU)** - Measures the cloudiness of the water.

**Not Applicable (NA)**

**Not Detected (ND)** - Laboratory analysis indicates the contaminant is not present.

**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.

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