



Return to Excellence

Drinking water quality is important to our community and the region. The City of Highland Park and the Great Lakes Water Authority (GLWA) are committed to meeting state and federal water quality standards including the Lead and Copper Rule. The Great Lakes Water Authority (GLWA) treats water sourced from the Great Lakes and currently provides this water on an emergency basis to our community. The City of Highland Park operates the system of water mains that carries this water to your home. This year's Water Quality Report highlights the performance of GLWA and Highland Park water professionals in delivering some of the nation's best drinking water. Together, we remain committed to protecting public health and maintaining open communication with the public about our drinking 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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

Your Source Water

Your source water comes from the Detroit River, situated within Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, watersheds in the U.S., and parts of the Thames River, Little River, Turkey Creek, and Sydenham watersheds in Canada. **Highland Park water comes from the Water Works Park Treatment Plant in Detroit.** The Michigan Department of Environmental Quality, in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department, and the Michigan Public Health Institute, performed a source water assessment in 2004 to determine the susceptibility rating is based on a seven-tiered scale and ranges from "very low" to "very high" determined primarily using geologic sensitivity, water chemistry, and contaminant sources. The report described GLWA's Detroit River intakes as highly susceptible to potential contamination. However, all four GLWA water treatment plants that service the City of Detroit and draw water from the Detroit River have historically pro-

vided satisfactory treatment and drinking water standards.

GLWA has initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. GLWA participates in a National Pollutant Discharge Elimination System permit discharge program and has an emergency response management plan. In 2016, the Michigan Department of Environmental Quality approved the GLWA Surface Water Intake Protection Program plan. The programs include seven elements that include the following: roles and duties of government units and water supply agencies, delineation of source water protection area, identification of potential of sources of contamination, management approaches for protection, contingency plans, siting of new water sources, public participation, and public education activities. If you would like to know more information about Source Water Assessment report, please contact GLWA at (313) 926-8102.

Drinking Water Sources and 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, urban storm water runoff, and residential uses.

Published June 2021 ELECTED OFFICIALS

Hubert Yopp, Mayor

Brenda Green, City Clerk

Janice B. Bibbs, City Treasurer

CITY COUNCIL

Carlton Clyburn, Council President

Rodney Patrick, President Pro Tem

Deblon Jackson, Council Member

Derrick Armstrong, Council Member

Kendrich Bates, Council Member

COMMENTS OR QUESTIONS, CONTACT:

**City of Highland Park
Water Department
14110 Woodward Ave.
Highland Park, MI 48203
313-865-1876**

**Damon Garrett, PE
Water Director
Metro Consulting Associates**

- 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 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.

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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for human health.



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Immunocompromised Individuals

Some people may be more vulnerable to contaminants in drinking water than is 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.

Information about Lead

Safe drinking water is a shared responsibility. While water in the distribution mains typically does not contain lead, **lead can leach into drinking water through lead service lines and home plumbing fixtures.** Corrosion control reduces the risk of lead and copper from leaching into your water. Orthophosphates are added during the

treatment process as a corrosion control method to create a protective coating in service pipes throughout the system, including in your home or business. The City of Highland Park performs required lead and copper sampling and testing in our community. Water consumers also have a responsibility to maintain the plumbing in their homes and businesses and can take steps to limit their exposure to lead.

Lead Contamination in Drinking Water

When present, lead in water can cause serious health problems, especially for pregnant women, infants, and young children. Lead in drinking water is primarily from materials and components associated with lead service lines and home plumbing. The City of Highland Park is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing.

When your water has been sitting for several hours, you can minimize the potential for lead exposure. The amount of time you should run cold water to flush your internal plumbing depends on whether you have a lead service line, the length of the lead service line and amount of plumbing in your home. Running your water until you feel temperature change will indicate the water is from outside your premises' plumbing. Once that has occurred, flush 1 to 2 minutes to ensure you are receiving water from the water main and not your service line. If you do not have a lead service line, flush 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 at (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

Symbol	Abbreviation	Definition/Explanation
>	Greater than	
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
Level 1	Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
Level 2	Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
LRAA	Locational Running Annual Average	The average of analytical results for samples at a particular monitoring location during the previous four quarters.
MCL	Maximum Contaminant Level	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.
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health.
MRDL	Maximum Residual Disinfectant Level	The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRLDG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	not applicable	
ND	Not Detected	



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Symbol	Abbreviation	Definition/Explanation
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
pCi/L	Picocuries Per Liter	A measure of radioactivity.
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
RAA	Running Annual Average	The average of analytical results for all samples during the previous four quarters.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.
µmhs	Microhms	Measure of electrical conductance of water.

Lead and Copper Monitoring at the Customer's Tap in 2020

Regulated Contaminant	Test Date	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Samples Over AL	Range of Individual Samples Results	Major Sources in Drinking Water
Lead (ppb)	Jan 1- Jun 30, 2020	0	15	10	3	0-40	Lead services lines, corrosion of household, plumbing including fittings and fixtures; erosion of natural deposits"
	July 1- Dec 31, 2020			8	3	0-28	
Copper (ppm)	Jan 1- June 30, 2020	1.3	1.3	0.1	0	0.0-0.7	Corrosion of household plumbing system; Erosion of natural deposits; leaching from wood preservatives.
	July 1- Dec 31 2020			0.1	0	0.0-0.2	

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

2020 Inorganic Chemicals - Annual Monitoring at Plant Finished Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Fluoride	3-10-2020	ppm	4	4	0.71	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	3-10-2020	ppm	10	10	0.39	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	5-16-2017	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.



2020 Disinfection Residual - Monitoring in the Distribution System								
Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	MRDL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Chlorine Residual	2020	ppm	4	4	0.77	0.63-0.87	no	Water additive used to control microbes

2020 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	MCL	Highest Level LRAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
(TTHM) Total Trihalomethanes	2020	ppb	n/a	80	30	10-41	no	By-product of drinking water chlorination
(HAA5) Haloacetic Acids	2020	ppb	n/a	60	18	9-24	no	By-product of drinking water chlorination

2020 Disinfectant By-Product - Monitoring at the Waterworks Park Plant Finished Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	MCL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Bromate	2020	ppb	0	10	ND	ND	no	By-product of drinking water ozonation

2020 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap			
Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation	Major Sources in Drinking Water
0.19 NTU	100%	no	Soil Runoff
Turbidity 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.			

Regulated Contaminant	Treatment Technique	Typical Source of Contaminant
Total Organic Carbon ppm	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC is measured monthly there is no requirement for TOC removal.	Erosion of natural deposits

2020 Special Monitoring						
Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	3-10-2020	ppm	n/a	n/a	5.87	Erosion of natural deposits

These tables are based on tests conducted by GLWA and Highland Park in the year 2020 or the most recent testing done within the last five calendar years. GLWA and Highland Park conduct tests throughout the year. Only tests that show the presence of a substance or require special monitoring are presented in these tables.



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Estimated Number of Service Connections by Service Line Material

Any Portion Contains Lead	Contains Galvanized Previously Connected to Lead	Unknown		Contains neither Lead, nor Galvanized Previously Connected to Lead	Total
		Likely Contains Lead	Material(s) Unknown		
104	1	1121	1337	282	2845

1. Highland Park Water Response
During 2020 the City of Highland Park replaced 216 lead water service lines. The lead water service line replacements were done as part of the Emergency Water Restoration Initiative and the DWRP 2020 water main replacement project part B. All of the lead water service lines were replaced from the water main to the water meter inside the home. The process of replacing these lead water service lines removed them entirely from the water system of Highland Park. This action has lowered the chances of lead exposure from the cities water system into the home.

2. What steps can I take to maintain drinking water quality in my home?

Residents can take steps to protect water quality in their home. Actions that help to preserve water quality include:

- Use cold water for drinking and preparing food.
- Flush your tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than 6 hours. Flushing the tap means running the cold water for 30 seconds to 2 minutes until it gets noticeably colder.
- Clean faucet aerators and strainers monthly. Replace aerators in poor condition.
- Clean and disinfect sinks and faucets regularly.

Replace your refrigerator and ice maker filters according to the manufacturer’s recommendations. Flushing tap water is a simple and inexpensive measure you can take to protect your family’s health. When water stands in lead pipes or pipes with lead solder for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the

tap in the morning, or later in the afternoon after returning from work or school, may contain higher levels of lead.

Additional beneficial plumbing tips include:

- Drain and flush your hot water heater annually.
- Identify and replace plumbing fixtures containing lead. Brass faucets, fittings and valves may leach lead into drinking water. Products sold after January 4, 2014, must by law contain very low levels of lead.
- Be sure backflow protection devices are installed properly.
- Corrosion may be greater if grounding wires from electrical system are attached to your pipes. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. DO NOT attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.

3. How do I flush my internal plumbing?

The amount of time you should run cold water to flush your internal plumbing depends on whether you have a lead service line, the length of the lead service line and amount of plumbing in your home. Running your water until you feel a temperature change will indicate the water is from outside your premises’ plumbing. Once that has occurred, flush 1 to 2 minutes to ensure you are receiving water from the water main and not your service line.

Note: At one gallon per minute, a 2-minute flush for a 50-foot service line is the recommended standard.

Public Participation

The City of Highland Park and the Great Lakes Water Authority are committed to safeguarding our water supply and delivering the highest quality drinking water to protect public health. Please contact us with any questions or concerns about your water to the Highland Park Water Department at (313) 865-1876.

4. Lead Health Effects

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.

2020 GLWA Cryptosporidium – 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 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



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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.