City of Highland Park Water Department

Annual Water Quality Report for 2024

PWS ID: MI-0003140

En español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, contáctenos por correo electrónico a hpwaterdepartment@metroca.net o por teléfono al 313-865-1876.

A Message from the Water Department Director

Dear Community,

This is your annual report about your drinking water quality, also called a Consumer Confidence Report (CCR). Having clean, safe water is one of the most important services we provide, and we want you to be as informed as possible about it.

This report is intended to inform you about the quality of your drinking water and help you make informed decisions about the water you drink. Throughout this report, we will explain where your water comes from, the results of the sampling that we performed, and the efforts to protect your water.

If, upon reading this report, you have any questions, please contact the Highland Park Water Department at 313.865.1876 or hpwaterdepartment@metroca.net.

Sincerely,

Damon L. Garrett, PE
Water Director
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Highland Park, MI 48203
313-865-1876 | hpwaterdepartment@metroca.net

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About Your Water

Where Your Drinking Water Comes From

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. The City of Highland Park water comes from the Water Works Park and Springwells Treatment Plants in Detroit.

We Protect the Source

Your source water comes from the Detroit River, situated within the Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, watersheds in the US, and parts of the Thames River, Little River, Turkey Creek, and Sydenham watersheds in Canada. The Michigan Department of Environmental Quality, in partnership with the US 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 of GLWA's Detroit River source water for potential contamination. 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 potential contaminant sources. The report described GLWA's Detroit River intake as highly susceptible to potential contamination.

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. GLWA has a Surface Water Intake protection plan for Belle Isle Intake. The plan has seven elements that include: the 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, sitting of new water sources, public participation, and public education activities. If you would like to know more information about the Source Water Assessment report, please contact GLWA at 313-926-8127.

What is in Your Drinking Water

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, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, 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 may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, 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.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the number 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 public health.

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.

Cryptosporidium and Giardia

GLWA voluntarily monitors Cryptosporidium and Giardia in our source water monthly. The untreated water samples collected from our Belle Isle Intake indicated the presence of one Giardia cyst in November 2024. All other samples collected from the Bell Isle Intake in 2024 were absent for the presence of Cryptosporidium and Giardia. Systems using surface water like GLWA must provide treatment so that 99.9 percent of Giardia lamblia and Cryptosporidium is removed or inactivated. GLWA's drinking water treatment process is designed to remove and inactivate these protozoans.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing a life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Look Out for Special Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people 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 healthcare 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 at (800) 426-4791.

Your Water Quality

Highland Park distributes water treated at the Water Works Park and Springwells Treatment Plants that was treated by the Great Lakes Water Authority (GLWA). Most of the regulated drinking water contaminants and water treatment processes are monitored at the Water Works Park and Springwells Treatment Plants. Highland Park monitors for additional parameters within the community of Highland Park: Bacteria, Chlorine, Disinfection Byproducts, and Lead and Copper.

Bacteria

We collect monthly water samples at 10 locations throughout Highland Park to analyze for bacteria (total coliforms and e. coli) as required by regulations. We did not detect any bacteria in any of the 120 samples we collected in 2024. If bacteria had been detected, more thorough testing, evaluation, and action would have been required.

Chlorine

We analyze samples for chlorine every time we collect a sample to analyze for bacteria. Chlorine should be present in every sample to protect the water traveling in our pipes from potential contamination, but it shouldn't be so high that it creates excess disinfection byproducts. All chlorine samples collected meet these requirements.

Disinfection byproducts (Trihalomethane (TTHM) or Haloacetic Acids (HAA5))

Four times per year, we look for byproducts of the disinfection process. When chlorine, the disinfectant we use to protect against bacteria and viruses, starts to break down in the water, it can form new compounds. These compounds, total trihalomethanes (TTHM) and haloacetic acid (HAA5), have been known to cause cancer at high levels. The legal limit for drinking water is 80 parts per billion and 60 parts per billion, respectively. We tested these compounds at two different locations, 17050 Hamilton Road and 14400 Oakland Avenue, in the water system.

Lead and Copper

In 2024 Highland Park replaced 12 lead water service lines. All the lead water service lines were replaced from the water main to the water meter inside the home. Highland Park updated its service line inventory in 2024. Highland Park has 2,828 lead service lines and 3,514 total service lines. There are no service lines of unknown material. You can access Highland Park's complete service line inventory at https://lead-service-line-inventory-metroca.hub.arcgis.com/.

After your lead service line is replaced, please read and follow ALL instructions BEFORE using your water.

Safe drinking water is as easy as 1, 2, 3

The Highland Park Water Department will walk you through the steps below.

If they don't, DO NOT USE tap water, filtered water dispensers, or icemakers until you complete the following:

1 Flush Your Pipes

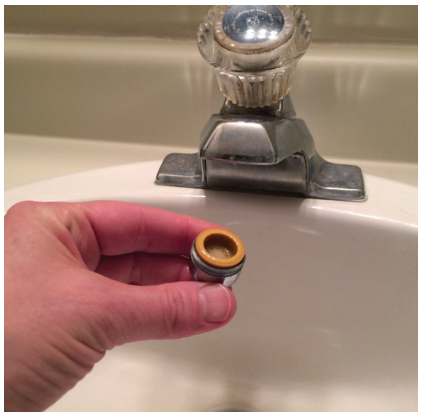
Construction can release lead particles and sediment, **run water through your household plumbing to clear it:**

- **FIRST, remove the aerators** from **all** faucets in your home.
- **THEN, open all the cold water taps in the house, starting at the lowest level of your home.** Continue opening all the cold water taps throughout the house, **opening the highest or farthest faucet last.**
- **Run water for 30 minutes** to flush out lead particles and sediment.
- Turn off each tap, **starting with the first faucet** you opened, finishing with the top floor.

2 Clean Your Aerators

Aerators are located on the end of your faucet. Over time, aerators collect debris and need to be cleaned periodically.

- Unscrew the end of the faucet.
- Brush and rinse the aerator before screwing it back on.



3 Use a Filter

Use the NSF/ANSI Standard 53 filter certified for lead reduction provided by the Highland Park Water Department for 6 months. Use this filter for drinking water, cooking, beverages, and infant formula.

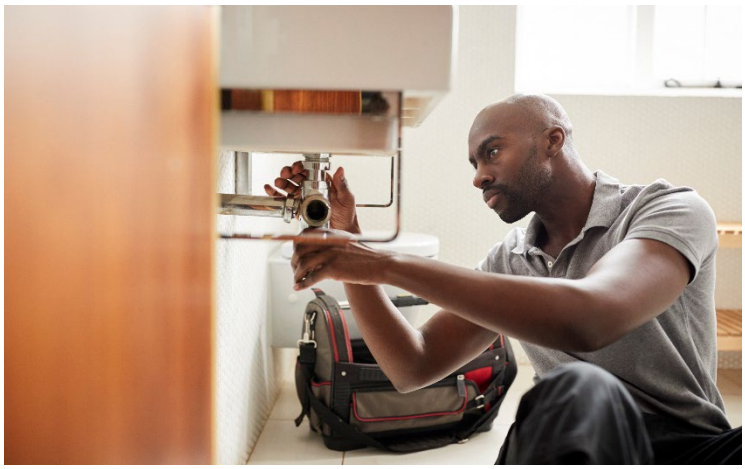
- **Always use cold water** in the filter.
- Remove and **clean faucet aerators** monthly on faucets without filters.
- **Replace cartridges** as instructed by the manufacturer.

Let's work together for SAFER WATER in HP

If you have questions, call the Highland Park Customer Service Center: 313-865-1876

Learn More

What Steps can I take to maintain water quality in my home?



Information about lead:

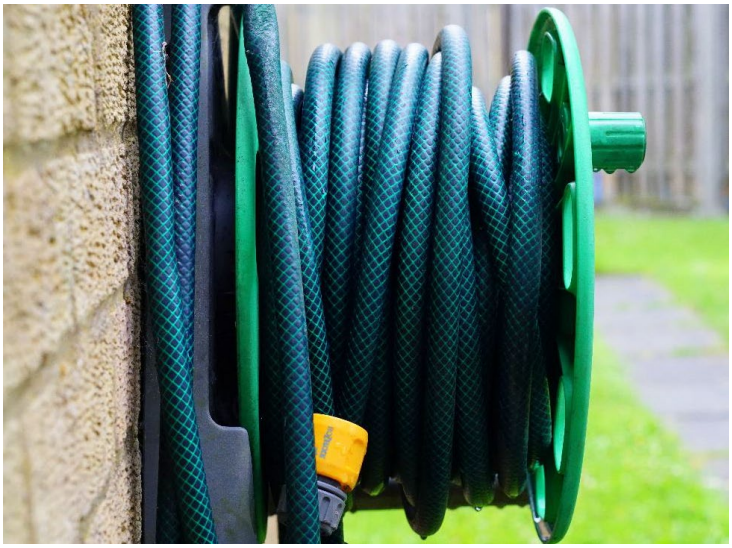
Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and home plumbing. Highland Park is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time.

You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute-accredited certifier to reduce lead is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry, or washing a load of dishes.

If you have a lead service line or a galvanized service line requiring replacement, you may need to flush your pipes 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 and wish to have your water tested, contact the Highland Park Water Department at 313.865.1876 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

Additional beneficial plumbing tips:

- Drain and flush your hot water heater annually.
- Identify and replace plumbing fixtures containing lead. Brass faucets, fittings, and valves leach lead into drinking water. **Drinking water plumbing 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 the electrical system are attached to your pipes. Check with a licensed electrician or your local electrical code to determine if your wiring can be ground elsewhere. **DO NOT** attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.



Safely Connect Outdoor Hoses

Another factor that can influence water quality in your home is connections to the water outside your home. The outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing.

Additional Resources

- Information on lead in drinking water: www.epa.gov/safewater/lead
- Requirements of the Water Quality Report (also known as the Consumer Confidence Report): https://www.epa.gov/ccr/ccr-information-consumers The Safe Drinking Water Act: www.epa.gov/sdwa (opens in a new window)
- CDC Guide to Understanding your CCR: https://www.cdc.gov/drinking-water/about/how-to-read-drinking-water-quality-reports.html
- Michigan Department of Health and Human Services (MDHHS): 844-934-1315 | https://www.michigan.gov/mdhhs/safety-injury-prev/environmental-health/topics/care-for-mi-drinking-water/testing

Highland Park Water Data for 2024

Below is the data collected in 2024. The information following this section explains your water sources.

Chlorine Residual – Monitoring in the Distribution System

Regulated Contaminant	Maximum Disinfectant Residual Level Allowed	Highest Level RAA	Yearly Range	Violation	Source
Chlorine Residual	4 ppm	0.71 ppm	0.23 –1.27 ppm	No	Water additive used to control microbes

Disinfection Byproducts – Stage 2 Disinfection Byproducts Monitoring in the Distribution System

Regulated Contaminant	Highest Level Allowed (MCL) – One-Year Average	Maximum Locational Running Annual Average (Year)	System-Wide Range of Results	Violation	Source
Total Trihalomethanes (TTHMs)	80	34.5 ppm	19 – 46 ppm	No	Byproduct of drinking water chlorination
Total Haloacetic Acids (HAA5)	60	24.5 ppm	13.6 – 41.3 ppm	No	Byproduct of drinking water chlorination

The city collects water samples from June 1st to September 30th at 20 homes in our system every year to test them for lead and copper. More information about lead and copper can be found on page 7

Lead and Copper – Monitoring at the Customer's Tap

Regulated Contaminant	Test Date	EPA's Action Level	Health Goal (MCLG)	90% of customers' homes were less than*	Range of Test Results for the Year	Number of Samples Over AL	Source
Lead (ppb)	June 1 – September 30, 2024	15 ppb	0 ppb	4 ppb	0– 6 ppb	0	Lead services lines, corrosion of household, plumbing, including fittings and fixtures; erosion of natural deposits.
Copper (ppm)	June 1 – September 30, 2024	1.3 ppm	1.3 ppm	0.1 ppm	0 – 0.1 ppm	0	Corrosion of household plumbing system; Erosion of natural deposits; leaching from wood preservatives.

** 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.*

AL – Action Level

MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.

MCLG - Maximum Contaminant Level Goal: The goal level of a pollutant in drinking water. Below this amount, there is no known or expected health effect.

PPB - Part Per Billion

PPM - Part Per Million

Water Works Park Monitoring at Plant Finished Tap

Regulated Contaminant	Test Date	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Range of Test Results for the Year	Violation	Source
Fluoride	02/13/2024	4 ppm	4 ppm	0.55 ppm	N/A	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	02/13/2024	10 ppm	10 ppm	0.38 ppm	N/A	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfection By-Product Monitoring at the Waterworks Park Plant – Finished Tap

Regulated Contaminant	Test Date	Unit	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Bromate	2024	ppb	10	0	ND	ND - ND	No	By-product of drinking water ozonation

MCL – Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.
PPB – Part Per Billion
PPM – Part Per Million
ND – No Detection

Total Organic Carbon – Tested at Water Works Park Plant

Contaminant	Test Date	Unit	MCLG	MCL	Level Detected	Range	Violation	Source of Contaminant
Total Organic Carbon	**Samples Taken Monthly**	**ppm**	**N/A**	**Treatment Technique**	**2.03**	**1.80 - 2.03**	**Yes**	**Erosion of natural deposits**
*Health Effects: Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THM) and haloacetic acids (HAA). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.								
Steps taken: GLWA has improved its removal of the total organic carbon (TOC) through optimized coagulation and has incorporated alternative compliance monitoring of specific ultraviolet absorption as a measure of continued compliance with the TOC rule. The 2024 violation duration was in the first calendar quarter of running annual averages of the quarterly averages.								

2024 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
0.1 NTU	100%	No	Soil Runoff
Turbidity is a measure of the cloudiness of the water. 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.			

2024 Special Monitoring

Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	02/13/2024	ppm	N/A	N/A	**5.2**	Erosion of natural deposits

These tables are based on tests conducted by GLWA in the year 2024 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year; only tests that show the presence of a substance or require special monitoring are presented in these tables. 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. The data is representative of the water quality, but some are more than one year old.

2024 Water Works Park Tap Water Mineral Analysis – Yearly Summary

Parameter	Units	Max.	Min.	Average
Turbidity	N.T.U.	0.70	0.03	0.13
Total Solids	ppm	160	121	139
Total Dissolved Solids	ppm	140	97	120
Aluminum	ppm	0.293	0.012	0.075
Iron	ppm	0.3	0.2	0.2
Copper	ppm	0.001	ND	0.000
Magnesium	ppm	8.1	7.4	7.7
Calcium	ppm	28.1	2.6	24.9
Sodium	ppm	6.0	0.5	4.6
Potassium	ppm	1.1	1.0	1.0
Manganese	ppm	ND	ND	0.000
Lead	ppm	ND	ND	0.000
Zinc	ppm	0.003	ND	0.002
Silica	ppm	3.6	1.5	2.2
Sulfate	ppm	37.2	23.6	27.7
Chloride	ppm	11.8	9.5	10.5
Phosphorus	ppm	0.82	0.34	0.52
Free Carbon Dioxide	ppm	11.1	5.7	7.5
Total Hardness	ppm	110	74	99
Total Alkalinity	ppm	81	64	72
Carbonate Alkalinity	ppm	7	0	1
Bi-Carbonate Alkalinity	ppm	81	57	71
Non-Carbonate Hardness	ppm	38	0	26
Chemical Oxygen Demand	ppm	7.8	ND	3.5
Dissolved Oxygen	ppm	19.0	7.7	12.9
Nitrite Nitrogen	ppm	ND	ND	0.0
Nitrate Nitrogen	ppm	0.39	ND	0.25
Fluoride	ppm	0.78	0.43	0.63
pH		7.42	7.06	7.28
Specific Conductance @ 25 °C.	µmhos	226	138	194
Temperature	°C	21.9	6.9	14.4

2024 Springwells Regulated Detected Contaminants Table

2024 Inorganic Chemicals – Annual Monitoring at Plant Finished Tap

Regulated Contaminant	Test Date	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Range of Test Results for the Year	Violation	Source
Fluoride	02/13/2024	4 ppm	4 ppm	0.49 ppm	N/A	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	02/13/2024	10 ppm	10 ppm	0.31 ppm	N/A	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

2024 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
0.13 NTU	100%	Yes	Soil Runoff

Turbidity is a measure of the cloudiness of the water. Turbidity has no health effects, but turbidity can interfere with disinfection and provide a medium for microbial growth.

Summary of Violation: Great Lakes Water Authority (GLWA) did not monitor individual filter turbidity for five hours on September 2, 2024, due to an interruption of power at the GLWA Springwells Water Treatment Plant. The issue was resolved.

Total Organic Carbon – Tested at Springwells Water Treatment Plan

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 each quarter and because the level is low, there is no requirement for TOC removal.	Erosion of natural deposits

2024 Special Monitoring

Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	2/13/2024	ppm	N/A	N/A	5.2	Erosion of natural deposits

These tables are based on tests conducted by GLWA in the year 2024 or most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. 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. The data is representative of water quality, but some are more than one year old.

2024 Springwells Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Average
Turbidity	NTU	0.78	0.03	**0.13**
Total Solids	mg/L	148	126	**136**
Total Dissolved Solids	mg/L	150	92	**120**
Aluminum	mg/L	0.088	0.020	**0.037**
Iron	mg/L	0.3	0.2	**0.2**
Copper	mg/L	0.002	ND	**0.001**
Magnesium	mg/L	8.6	6.7	**7.8**
Calcium	mg/L	29.8	25.6	**27.4**
Sodium	mg/L	8.9	0.5	**4.8**
Potassium	mg/L	1.2	0.9	**1.1**
Manganese	mg/L	ND	ND	**0.000**
Lead	mg/L	ND	ND	**0.000**
Zinc	mg/L	0.002	ND	**0.000**
Silica	mg/L	3.7	1.7	**2.3**
Sulfate	mg/L	35.9	24.8	**28.8**
Chloride	mg/L	13.2	9.9	**11.1**
Phosphorus	mg/L	0.81	0.35	**0.52**
Free Carbon Dioxide	mg/L	13.6	6.2	**10.3**
Total Hardness	mg/L	110	88	**101**
Total Alkalinity	mg/L	82	66	**73**
Carbonate Alkalinity	mg/L	9	0	**1**
Bi-Carbonate Alkalinity	mg/L	82	56	**71**
Non-Carbonate Hardness	mg/L	36	12	**28**
Chemical Oxygen Demand	mg/L	8.3	ND	**4.2**
Dissolved Oxygen	mg/L	14.3	6.7	**10.5**
Nitrite Nitrogen	mg/L	ND	ND	**0.0**
Nitrate Nitrogen	mg/L	0.40	0.17	**0.27**
Fluoride	mg/L	0.65	0.43	**0.54**
pH		7.39	7.02	**7.15**
Specific Conductance @ 25 °C.	µmhos	233	147	**200**
Temperature	°C	23.2	1.9	**13.7**

Definitions

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 that a water system must follow.
HAA5	Haloacetic Acids	HAA5 is total bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
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 allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Goal	The level of a contaminant in drinking water below which there is no known or expected risk to health.
MRDL	Maximum Residual Disinfectant Level	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of Drinking water disinfectant below which there is no known or expected risk to health. MRLDGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	Not applicable	
ND	Not detected	
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligrams.
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 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.
µomhs	Microhms	Measure of electrical conductance of water.

Great Lakes Water Authority (GLWA) is required to notify water users of any unresolved significant deficiencies identified by the Michigan Department of Environment, Great Lakes, and Energy, Drinking Water and Environment Health Division (EGLE). Below is the status of significant deficiencies in the GLWA water system identified by EGLE:

Date Identified by EGLE	Description	Compliance Agreement Deadline	Status
05-25-2022	Inoperable rapid mixing equipment at the Springwells 1930's water plant	12-31-2023	Completed in December 2023.
05-25-2022	Inoperable flocculation equipment at the 1958 Springwells water plant	11-11-2027	Phase I - Construction phase in progress and is scheduled to be completed in 2025