

# 2024 Water Quality Report

Drinking water quality is important to our community and the region. The City of Taylor and the Great Lakes Water Authority (GLWA) are committed to meeting state and federal water quality standards including the Lead and Copper Rule. With the Great Lakes as our water source and proven treatment technologies, the GLWA consistently delivers safe drinking water to our community.

Taylor operates the system of water mains that carry this water to your home's service line. This year's Water Quality Report highlights the performance of GLWA and Taylor 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.

Safe drinking water is a shared responsibility. The water that the GLWA delivers to our community does not contain lead. Lead can leach into drinking water through home plumbing fixtures, and in some cases, customer service lines. Corrosion control reduces the risk of lead and copper from leach into your water. Orthophosphates are added during the treatment process as a corrosion control method to create a protective coating in the service pipes throughout the system, including your home or business.

The City of Taylor 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 exposure to lead.

## Where does my water come from?

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 U.S. 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 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 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 intakes as highly susceptible to potential contamination. GLWA's Southwest water treatment plant that draws water from the Detroit River has historically provided satisfactory treatment and meets drinking water standards.

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 an updated Surface Water Intake Protection plan for the Fighting Island 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. If you would like to know more information about the Source Water Assessment Report, please contact GLWA at (313) 926-8127.

## Important health information

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 (800-426-4791).

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 can dissolve naturally occurring minerals and, in some cases, radioactive materials, 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.

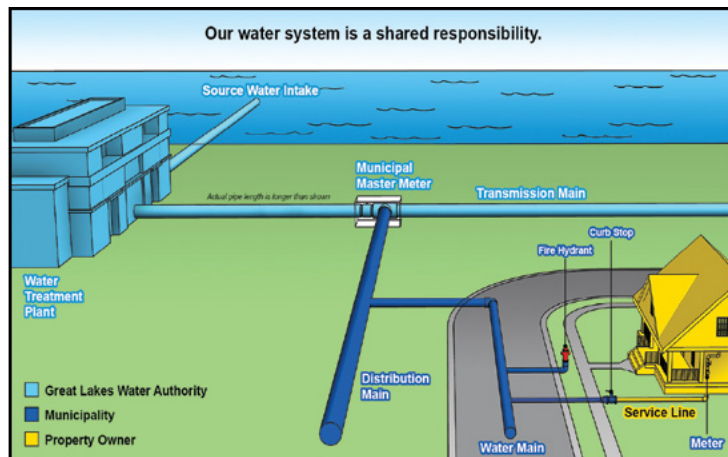
**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for



contaminants in bottled water which must provide the same protection for human health.

## 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 in home plumbing. The City of Taylor 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 a load of dishes. If you have a lead service line or galvanized requiring replacement service line, 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 City of Taylor (734) 287-6550 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/>.

"There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of persons who are exposed to lead before or during pregnancy can have increased risk of these adverse



If you would like to know more about this report, need additional copies or have other water-related issues, please contact the Taylor Water and Sewer Department: (734) 374-1373, [www.cityoftaylor.com](http://www.cityoftaylor.com)

health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.”

The City of Taylor has 124 of known lead lines. With an approximately 1000 homes that are unknown, out of 19,505 service lines in the City of Taylor. You can view our Complete Distribution System Materials list at <https://www.cityoftaylor.com/227/Water-Sewer-Department>

### People with special health concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person 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).

Taylor and the GLWA 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.

## 2024 Southwest Regulated Detected Contaminants Table

2024 Inorganic Chemicals - Annual Monitoring at Plant Finished Tap								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Fluoride	02-13-2024	ppm	4	4	0.66	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	02-13-2024	ppm	10	10	0.31	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper Monitoring at the Customer's Tap in 2024								
Regulated Contaminant	Unit	Year Sampled	Health Goal MCLG	Action Level AL	90 <sup>th</sup> Percentile Value*	Range of Individual Samples Results	Number of Samples Over AL	Major Sources in Drinking Water
Lead	ppb	2024	0	15	15	1.1 -35.6	4	Lead services lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits.
Copper	ppm	2024	1.3	1.3	.1338	0-0.3	0	Corrosion of household plumbing systems; Erosion of natural deposits.

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

2024 Disinfection Residual - Monitoring in the Distribution System								
Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Chlorine Residual	2024	ppm	4	4	0.70	0.52-0.80	no	Water additive used to control microbes

2024 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System								
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level LRAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Trihalomethanes (TTHM)	2024	ppb	n/a	80	27.5	17-48	no	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	2024	ppb	n/a	60	16.2	7.4 - 32	no	By-product of drinking water chlorination

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. We monitor it because it is a good indicator of the effectiveness of our filtration system

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

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
08-02-2022	Improper rapid mixing and coagulant feed location at the Southwest water plant	12-31-2027	Contractor is in place and the work has been initiated.
08-02-2022	Inoperable flocculation equipment at the Southwest water plant	07-31-2031	Review stage of procurement process.

### For more information, please contact City of Taylor (734) 287-6550

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

## What do these tables mean?

These tables show the results of our water quality analyses. Every regulated and unregulated detected contaminant in the water is listed here. The tables contain contaminant names, the highest detected levels, health goals, the sources in drinking water and if a violation has occurred. Key definitions and/or explanations for each symbol used are listed to the right of the tables.

GLWA voluntarily monitors for Cryptosporidium and Giardia in our untreated source water monthly. The untreated water samples collected from our Southwest plant indicated the presence of one Giardia cyst in March. In addition, monitoring indicated the presence of one Giardia cyst and one Cryptosporidium oocyst in the untreated water from the Southwest plant in July. Additional testing was performed on the treated water at the Southwest plant and Cryptosporidium was absent. All other samples collected in the year 2018 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 is removed or inactivated.

Cryptosporidium is a microbial parasite found in surface water throughout the United States. Although Cryptosporidium can be removed by filtration, the most commonly used filtration cannot guarantee 100% removal. Current test methods do not enable us to determine if these organisms are dead or alive. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy persons can overcome the disease within a few weeks. However, immuno-compromised people (such as those with AIDS, undergoing chemotherapy or recent organ transplant recipients) are at a greater risk of developing a severe, life-threatening illness. Immuno-compromised persons should contact their doctor to learn about appropriate precautions to prevent infection. Cryptosporidium may be taken in through the mouth to cause disease and it may be passed by other means than drinking water.

### Definitions

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

**Maximum Contaminant Level (MCL):** 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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Parts per billion (ppb):** equivalent to micrograms per liter. A microgram = 1/1000 milligram.

**Parts per million (ppm):** equivalent to milligrams per liter. A milligram = 1/1000 gram.

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

**Not Detected (ND)**

**Treatment Technique (TT):** required process intended to reduce the level of a contaminant in drinking water.

**Action Level (AL):** concentration of a contaminant which, if exceeded, triggers treatment or other requirements the water system must follow.

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

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

**pCi/l:** Picouries per liter is a measure of radioactivity.

**Location running annual average (LRAA)**

**Micromhos (µmhos):** Measure of electrical conductance of water.

**Celsius (°C):** A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.

**n/a = not applicable**

**> = greater than**