2023 Drinking Water Quality Report

Keeping You Informed!

YCUA provides your drinking water and we are pleased to present you with our 26th annual water quality report. This report follows the guidelines set by the U.S. Environmental Protection Agency (EPA) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Our goal is to provide you with a safe and dependable water supply. This report illustrates that we are achieving our goal.

Information About YCUA

YCUA staff works around the clock to provide you with a safe and reliable supply of water. If you have questions about the YCUA water system, please contact Luther Blackburn, Director, at lblackburn@ycua.org or 734.484.4600 ext. 116. Additional information is available on www.ycua.org. Highlight the tab "Publications," and then click on "GLWA Lab Reports" for more detailed water quality data.

YCUA's annual Drinking Water Quality Report contains important information about the source and quality of your drinking water. This report is also published on our website after June 1, 2024, at www.ycua.org/waterreport.pdf. If you are unable to access the Internet and wish to continue having a paper copy of the report delivered, or if you want additional copies, please call YCUA Administration at 734.484.4600 ext. 107.

YCUA and 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.

2023 Water System Improvements

	Improvements	Cost
YCUA	Completed the US-12, M-17 project, replacing old and undersized mains along Washtenaw Avenue between West Cross Street and Hamilton Street, Hamilton Street between Washtenaw Avenue and I-94, and Huron Street between I-94 and West Cross Street. In addition to replacement of the water mains, a number of the existing water services within the projects limits have been identified as needing to be replaced to satisfy the lead and copper rule mandated by the EGLE.	$7,000,000
	1,000,000 Gallon Radial Arm exterior/interior repaint of Shadford Tower. The scope of work included an abrasive sand blast to a SSPC- SP6 commercial standard within containment followed by a four-coat zinc epoxy urethane coating to the exterior of the tank. The wet interior was also blasted to a SSPC-SP10 near-white metal standard followed by a 3-coat zinc epoxy system.	$1,063,000
	Textile Yard piping project: Installation of 50 feet of 16" diameter pipe and 3, 16" diameter gate valves. The improvements will allow Authority staff to have better control of the water supply and system to isolate the Textile Road booster pump station for operation and maintenance of the facility.	$161,000

Information About GLWA

YCUA obtains your drinking water from the Great Lakes Water Authority (GLWA) water system. Your source water comes from the Detroit River, situated within the Lake St. Clair, Clinton River, Detroit River, Rouge River, and Ecorse River watersheds in the U.S. and parts of the Thames River, Little River, Turkey Creek, and Sydenham watersheds in Canada. With the Great Lakes as our water source and proven treatment technologies, the GLWA consistently delivers safe drinking water to our community. YCUA operates the system of water mains that carries this water to your home's service line.

Drinking water quality is important to our community and the region. YCUA and GLWA are committed to meeting state and federal water quality standards including the Lead and Copper Rule. This year's Drinking Water Quality Report highlights the performance of GLWA and YCUA 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. If you wish to learn more about the plants that treat our water or obtain information regarding GLWA Board meetings, please visit www.glwater.org.

This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

Source Water Assessment

EGLE, 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 and Springwells water treatment plants that draw water from the Detroit River have historically provided satisfactory treatment and meet 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 program and has an emergency response management plan. In 2016, GLWA has an updated Surface Water Intake Protection Plan for the Belle Isle Intake and the Fighting Island Intake, which includes seven elements: roles and duties of government units and water supply agencies, delineation of source water protection areas, identification of potential sources of contamination, management approaches for protection, contingency plans, siting of new water sources, and public participation and education activities. If you would like to know more information about the Source Water Assessment report please, contact GLWA at 313.926.8127.

GLWA Notification

GLWA is required to notify water users of any unresolved significant deficiencies identified by the 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 has been identified
08-02-2022	Inoperable flocculation equipment at the Southwest water plant	07-31-2031	Preliminary procurement phase
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

Minimizing Lead Exposure

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. YCUA 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 two minutes before using water for drinking or cooking. If you have a service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water for at least five 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 at 1.800.426.4791 or at www.epa.gov/safewater/lead.

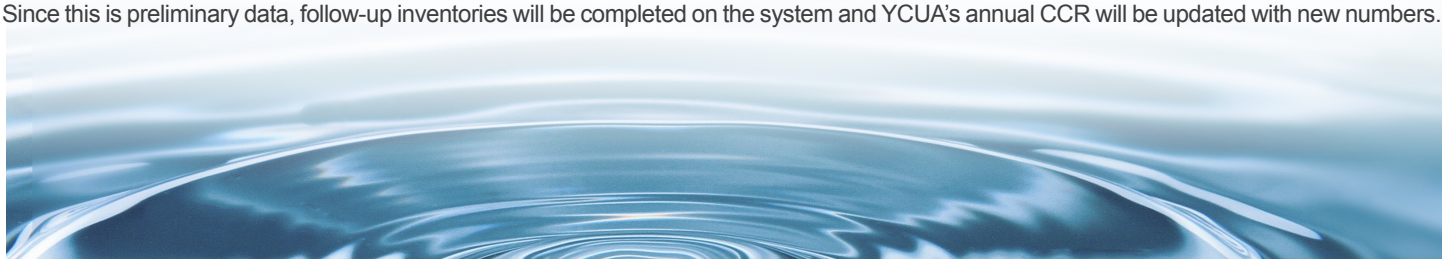
Lead and Copper Facts

Safe drinking water is a shared responsibility. The water that 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 leaching into your water. Ortho-phosphates 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. YCUA 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.

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.

As of 2019, the Safe Drinking Water Act requires water utilities to inventory the service lines in its service area. YCUA's preliminary inventory of its 20,371 total service lines has identified 165 lead service lines and 2,167 of unknown material.

Since this is preliminary data, follow-up inventories will be completed on the system and YCUA's annual CCR will be updated with new numbers.



Health and Safety 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 EPA's Safe Drinking Water Hotline at 800.426.4791.

More Resources

EPA Safe Drinking Water Hotline: 800.426.4791
Website: www.epa.gov/ground-water-and-drinking-water
Michigan Department of EGLE Website: www.michigan.gov/egle

Information for 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 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/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).

Sources of drinking water (tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surfaces 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 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 stormwater 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 stormwater runoff and residential uses.
- 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 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Based on testing results during 2018 - 2023 (Test Results Table), all of these contaminants were below the level of concern for safe drinking water standards set by EPA.

YCUA Water Quality Test Results for 2023

Your drinking water is continuously monitored above and beyond Federal and State regulations. The table below lists all of the contaminants detected in your drinking water during calendar year 2023. All results are reported for the City of Ypsilanti and the Charter Township of Ypsilanti. The presence of contaminants in the water does not necessarily indicate a health risk. This table does not show the hundreds of other contaminants tested for, but not found in your drinking water. The test results confirm that ALL DETECTED CONTAMINANTS WERE BELOW REGULATED LEVELS. THERE WERE NO VIOLATIONS OF STATE DRINKING WATER STANDARDS. Abbreviations are listed on page 6.

Regulated Inorganic Parameters (annual monitoring at plant finished water taps)

Contaminant	Test Date	Unit	Level Detected	MCLG	MCL	Likely Sources
Fluoride	2023	ppm	0.86	4	4	Water additive to promote strong teeth, erosion of natural deposits, discharge from fertilizer and aluminum factories
Nitrate	2023	ppm	0.63	10	10	Fertilizer runoff, leaching from septic tanks, sewage, erosion of natural deposits

Regulated Disinfectant Residuals and Disinfection By-Products (sampled in the distribution system)

Contaminant	Test Date	Unit	Result	Low	High	MCLG	MCL	Likely Sources
TTHMs	2023	ppb	29	13	43	na	80	By-products of drinking water disinfection
Haloacetic Acids	2023	ppb	15	9	22	na	60	

Samples were collected to test for the disinfection by-products TTHMs and Haloacetic Acids in the City of Ypsilanti and the Charter Township of Ypsilanti at the frequencies and times prescribed by Federal regulations. All samples collected throughout the City of Ypsilanti and Ypsilanti Township distribution system during 2023 met the MCL for disinfection by-products.

Contaminant	Test Date	Unit	Result	Low	High	MCLG	MCL	Likely Sources
Disinfectant Chlorine	2023	ppm	0.74	0.55	0.81	4	4	Water additive used to control microbes

Regulated Microbiological Parameters

Contaminant	Test Date	Unit	Highest Result	MCLG	MCL	Likely Sources
Total Coliform	2023	--	0	0	>1 positive sample/month	Naturally present in the environment
E. Coli	2023	--	0	0	>1 positive sample/month	Human or animal fecal waste
Turbidity	2023	NTU	0.09	0	1.0	Soil runoff

Turbidity is a measure of the cloudiness of water. Turbidity is monitored every 4 hours at the plant taps. We monitor it because it is a good indicator of the effectiveness of our filtration system. The rules state that turbidity must never exceed 1.0 NTU (see "highest result") and must not exceed 0.3 NTU in more than 95% of daily samples in any single month. The turbidity in daily samples was below 0.3 NTU 100% of the time. Therefore, we achieved both requirements and remained in compliance.

Copper and Lead Testing (sampled at individual taps)

Contaminant	Test Date	Unit	90th	Samples >AL	Range of Individual Results	MCLG	MCL	Likely Sources
Lead	2023	ppb	7	0	0 ppb - 10 ppb	0	AL=15	Lead services lines, corrosion of household, plumbing including fittings and fixtures, erosion of natural deposits
Copper	2023	ppm	0.2	0	0.0 ppm - 0.9 ppm	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives

Lead and Copper compliance is based on the 90th percentile, where nine out of ten samples must be below the Action Level (AL). If the 90th percentile value is above the AL, additional requirements must be met.

Total Organic Carbon (TOC) Removal

The TOC removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. During 2023, TOC was measured each quarter and because the level was low, there is no TOC removal requirement.

UNREGULATED PARAMETERS (No established EPA drinking water standards)

Contaminant	Test Date	Unit	Level Found	EPA Health Guidance	Likely Sources
Sodium	2023	ppm	7.0	20	Erosion of natural deposits

7.0 ppm equates to about 1.66 milligrams of sodium per 8-ounce glass of water. EPA Health Guidance is for people restricted to taking in less than 500 mg of sodium per day according to "Drinking Water Advisory: Consumer Acceptability Advice and Health Effects Analysis on Sodium," US EPA, EPA 822-R-03-006, February 2003.

Unregulated Contaminant Monitoring Rule 4 (sampled in the distribution system)

Contaminant	*Test Date*	*Unit*	*Ave*	*Min*	*Max*	*Likely Sources*
Bromochloroacetic acid	2018-19	ppb	2.52	1.70	3.74	By-products of drinking water disinfection
Bromodichloroacetic acid	2018-19	ppb	4.43	3.06	7.21	By-products of drinking water disinfection
Chlorodibromoacetic acid	2018-19	ppb	1.05	0.66	1.49	By-products of drinking water disinfection
Dibromoacetic acid	2018-19	ppb	0.35	<0.3	0.47	By-products of drinking water disinfection
Dichloroacetic acid	2018-19	ppb	7.13	4.43	13.50	By-products of drinking water disinfection
Monobromoacetic acid	2018-19	ppb	0.31	<0.3	0.36	By-products of drinking water disinfection
Trichloroacetic acid	2018-19	ppb	10.8	5.55	21.1	By-products of drinking water disinfection
Manganese	2018-19	ppb	10.8	1.86	17.2	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient

Additional Information: 2023 GLWA Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Avg.
Turbidity	NTU	1.8	0.01	0.18
Total Solids	ppm	174	115	138.5
Total Dissolved Solids	ppm	165	97	128
Aluminum	ppm	0.084	0.018	0.042
Iron	ppm	0.5	0.2	0.3
Copper	ppm	0.003	ND	0.001
Magnesium	ppm	8.8	7.2	7.9
Calcium	ppm	33.3	25.2	27.15
Sodium	ppm	9.4	4.6	5.45
Potassium	ppm	1.3	0.9	1.1
Manganese	ppm	0.002	ND	0
Lead	ppm	0	ND	0
Zinc	ppm	0.003	ND	0.0005
Silica	ppm	2.9	1.1	2.1
Sulfate	ppm	36	22.5	25.7
Chloride	ppm	14.5	7.5	10.35

Parameter	Units	Max.	Min.	Avg.
Phosphorus	ppm	0.73	0.37	0.51
Free Carbon Dioxide	ppm	13.9	4.4	9.0
Total Hardness	ppm	166	90	118
Total Alkalinity	ppm	94	70	79
Carbonate Alkalinity	ppm	ND	ND	ND
Bi-Carbonate Alkalinity	ppm	94	70	79
Non-Carbonate Hardness	ppm	72	10	40
Chemical Oxygen Demand	ppm	11.7	ND	4.5
Dissolved Oxygen	ppm	20	7.2	11.0
Nitrite Nitrogen	ppm	ND	ND	ND
Nitrate Nitrogen	ppm	1.47	0.29	0.44
Fluoride	ppm	0.86	0.1	0.61
pH	s.u.	7.52	7.05	7.26
Specific Conductance @ 25 °C	µmhos	297	180	202
Temperature	°C	23.4	2.3	12.9

Definitions

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

Haloacetic Acids (HAA5) - 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 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 a contaminant in drinking water below which there is no known or expected health risk. MCLGs provide a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - 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.

Maximum Residual Disinfectant Level Goal (MRDLG) - Level of 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.

na - Not applicable.

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

Parts per billion (ppb) (One in one billion) - Equivalent to micrograms per liter. A microgram = 1/1000 milligram.

Parts per million (ppm) (one in one million) - Equivalent to milligrams per liter. A milligram = 1/1000 gram.

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

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

YCUA Board Meetings

If you have questions specific to your community's water distribution system, please contact Luther Blackburn, Director: lblackburn@ycua.org or 734.484.4600 ext. 116. YCUA's Board Meetings are held on the fourth Wednesday of the month at 3:00 pm at the YCUA Eldon P. Ahles Administration Building at the corner of State and McGregor Roads.

EMERGENCY NOTIFICATION SYSTEM

PLEASE SIGN UP TODAY!
YCUA is participating with Washtenaw County in utilizing its Everbridge Notification System. Everbridge is a secure and identity-certified communication service that allows public safety and service organizations throughout the County to connect with local residents over cell phone, email, and the internet. YCUA is utilizing this service for directly issuing emergency notices to impacted customers regarding water main breaks and boil water advisories. The Everbridge System will allow YCUA to directly reach out to enrolled customers regarding emergencies that impact their water service with current and detailed information.

Signing up for the service will also allow customers to stay up-to-date on happenings in their neighborhood through email and text messages sent by the Washtenaw County Sheriff's Office. Please visit www.washtenaw.org/alerts to sign up today!

Stay informed on emergencies that affect your water services

Water main break notifications and boil water advisories are sent directly to affected homes

Notifications can be sent to landline phones, cell phones, and e-mail accounts. Registered users can also download the Everbridge app from Google Play and Apple Store.

Contact 734-484-4600 ext. 316 with any questions or concerns.