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illinois

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2025 Water Quality Report

Annual Water Quality Report for the period of January 1 to December 31, 2024

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. This report includes drinking water facts, information on violations (if applicable), and contaminants detected in your drinking water supply during calendar year 2023. Each year, we will provide you a new report. If you need help understanding this report or have general questions, please contact the person listed below.

Contact Name: Stephen Cerven

Telephone Number: 309-836-3916

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

The source of drinking water used by Macomb is **Surface Water from Spring Lake and Groundwater.**

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.
- 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.

Other Facts about 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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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, people 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).

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. The City of Macomb is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact the Macomb Water Treatment Plant at (309)836-3916 for more information. 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>.

Source Water Assessments

Source water protection (SWP) is a proactive approach to protecting our critical sources of public water supply and assuring that the best source of water is being utilized to serve the public. It involves implementation of pollution prevention practices to protect the water quality in a watershed or wellhead

protection area serving a public water supply. Along with treatment, it establishes a multi-barrier approach to assuring clean and safe drinking water to the citizens of Illinois. The Illinois EPA has implemented a source water assessment program (SWAP) to assist with wellhead and watershed protection of public drinking water supplies.

We want our valued consumers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please stop by City Hall, or call our water operator at (309)-836-3916. To view a summary version of the completed Source Water Assessment, including; Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

Source of Water: MACOMB

Source Water Name		Type of Water	Location
INTAKE (58055) SPRING LAE		SW	4.5 Miles NW WTP
WELL 3 (01543)	REVERSE OSMOSIS TREATMENT	GW	South of WTP

Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems; hence, the reason a mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. The watershed areas contain mostly agriculture and woodland, with some urban and industrial areas. The portion of this area considered most critical for water quality concerns at the Macomb intakes is indicated in Figure 1. The critical area is intended to assist in emergency preparedness and contingency planning in the event of a release within this area. The critical area for the intake on the East Fork of the La Moine River is divided into three zones. Zone 1 consists of a quarter mile buffer on either side of the river, extending from a quarter mile downstream of the CWS surface water intake to twenty-five miles upstream (or the five-hour time of travel). Zone 2 is the 14-digit Hydraulic Unit Code (HUC) watershed(s) that contain(s) Zone 1. Zone 3 is the 8-digit HUC watershed that contains Zone 2. The entire zone 3 is shown in figure 3. Figure 2 shows the location of the Macomb community water wells and the Minimum and Maximum Setback Zones associated with each well. In addition, the potential sources of contamination located near the wells are also displayed. Due to the confined nature of the wells and no history of detections, Illinois EPA considers these wells to not be susceptible to contamination.

Water Quality Test Results

The next several tables summarize contaminants detected in your drinking water supply. Here are a few definitions and scientific terms which will help you understand the information in the contaminant detection tables.

Avg	Regulatory compliance with some MCLs is based on running annual average of monthly samples.
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 our water system.
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 has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level or MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goal as feasible using the best available treatment technology.
Maximum Contaminant Level Goal or MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water is below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Residual Disinfectant Level or MRDL	Maximum Residual Disinfectant Level: The highest level of disinfectant allowed in drinking water.
Maximum Residual Disinfectant Level Goal or MRDLG	Maximum Residual Disinfectant Level Goal: The level of disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety.
na	Not applicable
mrem	Millirems per year (a measure of radiation absorbed by the body)
ppb	Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water
ppm	Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water
Treatment Technique or TT	A required process intended to reduce the level of a contaminant in drinking water

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALG's allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Copper Range: <0.003 – 0.086 ppm

Lead Range: <1.0 – 3.6 ppb

The data can be found on the City website at www.CityofMacomb.com. Hardcopies of the report can be requested from the City Clerk at 232 E. Jackson St., Macomb IL.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2023	1.3	1.3	0.051	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2023	0	15	<1.0	0	ppb	N	Corrosion of household plumbing systems; erosions of natural deposits.

Unregulated Contaminants Monitoring Rule

In accordance with 35 IL Admi. Code 611.901(a)(3)(D), Community Water Supplies are required to monitor unregulated contaminants. PWS IL1090350 received this data on May 10, 2024. The data can be found on the City website at www.CityofMacomb.com. Hardcopies of the report can be requested from the City Clerk at 232 E. Jackson St., Macomb IL.

Unregulated Contaminant	Date Sampled	Minimum Reporting Level (ppb)	Average Level (ppb)	Range of Detection (ppb)
Lithium	2024	9	29.6	10.9 – 45.5

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2024	1.6	1 - 1.8	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2024	33	20.34 - 34.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	90	57.9 - 94.5	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2024	0.024	0.024 - 0.024	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2024	0.6	0.631 - 0.631	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2024	3	0.18 - 3.2	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2024	3	2.7 - 2.7	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2024	12	12.4 - 12.4			ppb	N	Erosion from naturally occurring deposits. Used in water softener regeneration.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.335 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Violations Table

Consumer Confidence Rule			
The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of the water delivered by the systems.			
Violation Type	Violation Begin	Violation End	Violation Explanation
CCR ADEQUACY/AVAILABILITY/CONTENT	07/01/2024	09/24/2024	The 2023 CCR was delivered to the public without the URL. The notification containing both the QR code and the URL was reissued on September 24, 2024.
CCR REPORT	07/01/2024	09/24/2024	Corrective action statements were not included in the 2023 CCR.

Public Notification Rule			
The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).			
Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	01/06/2024	01/19/2024	The Public Notice was due to be issued on January 6, 2024. Issue date was January 19, 2024
PUBLIC NOTICE RULE LINKED TO VIOLATION	06/03/2024	6/25/2024	The Public Notice was due to be issued on June 3, 2024. Issue date was June 25, 2024

Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2024	03/31/2024	Water samples showed that the amount of this contaminant was above its standard. Upgrades to the filtration system and increased system flushing has corrected this violation.
MCL, LRAA	04/01/2024	06/30/2024	Water samples showed that the amount of this contaminant was above its standard. Upgrades to the filtration system and increased system flushing has corrected this violation.
MCL, LRAA	07/01/2024	09/30/2024	Water samples showed that the amount of this contaminant was above its standard. Upgrades to the filtration system and increased system flushing has corrected this violation.