



June 2024
Joliet, IL

2023 JOLIET DRINKING WATER QUALITY REPORT

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

WHERE DOES YOUR WATER COME FROM?

The City of Joliet draws its groundwater supply from twenty-one deep (bedrock) wells (pumping from 1,000 feet below the surface) and five shallow (gravel) wells (pumping from 80 feet below the surface) located throughout the City. The source water naturally contains radium, iron, manganese, fluoride, and other minerals. The City of Joliet has invested in the construction of eleven water treatment plants to remove the naturally occurring radium from the water supply. All water delivered in 2023 met the federal and state guidelines for safe drinking water.

The water is treated using a Hydrous Manganese Oxide (HMO) Treatment process. HMO chemical is added to the water which binds with the radium like a magnet. Then, the treatment equipment removes the combined HMO chemical and radium. This process removes up to 90% of the radium as well as iron and manganese, which contribute to other water quality issues.

Dear City of Joliet Water Customers,

This Consumer Confidence Report is required by the Safe Drinking Water Act (SDWA) and is intended to inform all water customers about the quality of the drinking water provided to them. Tap water was tested according to all drinking water regulatory standards.

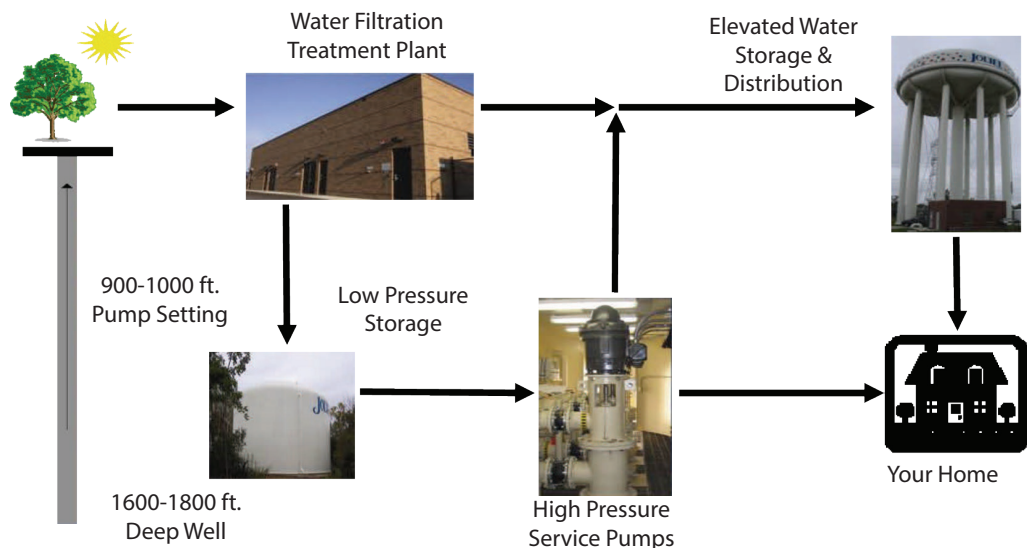
Providing a quality drinking water supply is the critical mission of the Department of Public Utilities. Please spend some time reading this report to learn more about our water, where it comes from, and what the City does to provide a safe source of drinking water to our customers.

Additional information about our water is provided on our website at www.Joliet.gov/Water. Your comments on this report are welcomed to help us improve our communications regarding the City's water system in future years. The City of Joliet Department of Public Utilities can be contacted at 815-724-4230.

Sincerely,

Allison M.W. Swisher, PE.
Director of Public Utilities
City of Joliet

WATER SYSTEM DIAGRAM



Before the water is sent to the distribution system it is treated with a blended ortho-phosphosphate for corrosion control. This reduces rusty water in the distribution system and provides a barrier between the water and metal pipes in your home or business. Sodium hypochlorite (NaClO) is also added for disinfection of the water. Disinfection chemicals are required by the EPA, and sodium hypochlorite, while more expensive, represents the safest disinfection method for City workers and all water customers.

The treated water is then pumped to the distribution system and ultimately to your taps. For more information about the water treatment process or to schedule a group tour of the water supply or wastewater treatment facilities, please contact the Deputy Director of Plant Operations at (815) 724-3675.

Where can I get more information or provide comments?

For general questions:
Department of Public Utilities
150 W. Jefferson Street
Joliet, IL 60432
Phone: (815) 724-4230
Hours: 8:00 AM - 4:30 PM

For maintenance questions or to report water emergencies:
Department of Public Utilities
Phone: (815) 724-4220
Hours: 24 Hours

For billing questions:
Customer Service
150 W. Jefferson Street
Joliet, IL 60432
Phone: (815) 724-3820
Hours: 8:00 AM - 4:30 PM

EPA Safe Drinking Water Hotline:
Phone: (800) 426-4791
www.epa.gov/ground-water-and-drinking-water



Smart Message Community Alert Network:

By enrolling you can receive outage notifications from the Department of Public Utilities in the event of an emergency which requires water to be turned off, along with emergency information from the Joliet Police and Fire Departments regarding pending threats to public safety. The Smart Message Network will send out a text message or e-mail notification. Visit Joliet.gov/smartmessage to sign up.

WATER QUALITY

In order to ensure tap water is safe to drink, the USEPA prescribes regulations that limits the amount of certain contaminants in water provided by public water supply systems. 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 USEPA's Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as persons 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. USEPA / CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at (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 dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Because of this, some level of treatment is required for all water.

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 may 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 may be naturally-occurring or be the result of oil and gas production and mining activities.

SYSTEM MANAGEMENT

The Joliet public water supply is owned by the City of Joliet. The City of Joliet Mayor and City Council establish the policies that control the operations of the water supply. The public is welcome to attend regular City Council meetings on the first and third Tuesday of every month at 6:30 p.m. in the City Council Chambers at the Joliet Municipal Building, 150 West Jefferson Street, Joliet, Illinois. If you would like to address the City Council at a meeting, please contact the City Clerk at (815) 724-3780.

Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are chemicals produced in the United States since the 1940s. They are used for applications ranging from firefighting to stain and waterproofing of consumer products, such as carpet, clothing, and food packaging. Some PFAS are no longer made due to environmental and human health concerns, but they persist in the environment and may contaminate surface waters and groundwaters near sites where they were made or used. Newer PFAS continue to be produced in the U.S., even though little is known about their potential effects on human health and the environment.

Most of what is known about PFAS-related health effects comes from studies of humans and animals exposed to perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). PFOA and PFOS are no longer produced in the U.S. but continue to be detected in human blood. Newer PFAS that remain in production are also detected in human blood. Exposure to high levels of PFAS in contaminated drinking water may result in the following health effects:

- Increased cholesterol levels
- Changes in liver enzymes
- Hormone disruption and increased risk for thyroid disease
- Decreased odds of women becoming pregnant
- High blood pressure or pre-eclampsia during pregnancy
- Small decreases in infant birth weights
- Decreased vaccine response in children
- Increased risk of kidney or testicular cancers

For more information, please visit <https://epa.illinois.gov/topics/water-quality/pfas.html>

In 2020, the Illinois Environmental Protection Agency sampled the City's treated water for 18 PFAS chemicals and found that none of the contaminants were present at concentrations greater than or equal to the minimum reporting levels. Complete sampling results are available on the City's website at <https://www.joliet.gov/government/departments/public-utilities/news-information/our-water>

GET THE LEAD OUT!

Important information about drinking water and lead



Where can I get more information?

Visit our website at www.Joliet.gov/GetTheLeadOut or call us at 815-724-4220.

For information on reducing lead exposure around your home or building and the health effects of lead, visit the EPA's Website at www.epa.gov/lead or contact the Will County Health Department Lead Poisoning Prevention Program at 815-727-8830.

What is lead and how are we exposed to it?

Lead is a common, naturally occurring metal found throughout the environment that can be toxic to humans when ingested or inhaled. There is no safe level of lead exposure. Exposure can cause behavior problems and learning disabilities in young children and also negatively impact the health of adults. Lead seldom occurs naturally in water supplies like rivers, lakes, and groundwater aquifers. Lead is not present in Joliet's source water or distribution system but can enter tap water through corrosion of plumbing materials. Lead was no longer used as a water service material in Joliet after the late 1940s but plumbing fixtures manufactured prior to 2014 still contained some levels of lead. The City of Joliet adds polyphosphates to the drinking water to minimize corrosion of the pipes which reduces residents' risk of exposure to lead via drinking water. Learn more about lead in water and what the City is doing about it by reviewing the Frequently asked Questions available on the City's website at www.Joliet.gov/GetTheLeadOut.

What is Joliet doing?

The City of Joliet is completing an inventory of water service line materials. An interactive water service line material map is available on the City's website at www.Joliet.gov/GetTheLeadOut. Please use this map to find out, when available, the material of the water service at your house. The City of Joliet has proactively been replacing lead water service lines since 2019. The City offers a full water service line replacement program at no cost to property owners whose lead water service line is disturbed during a leak repair or if water testing determines a home with a lead water service line has lead levels greater than regulatory limits. If a water service line is determined to be lead, but is not disturbed and water testing does not indicate high lead levels, the service line will be replaced as part of the City's water main rehabilitation program at no cost to the homeowner. Please review the Lead Water Service Line Replacement Program Brochure on the City's website at www.Joliet.gov/GetTheLeadOut for more information.

Customer Water Portal



All City of Joliet residents with a water bill are encouraged to sign up for the Customer Water Portal. Early detection of water issues can save you money and prevent potential damage to your property. Don't wait for a problem...Sign up for this free access today!

Benefits include:

- ◆ View water usage in gallons or cubic feet
- ◆ Monitor water usage hourly, daily, weekly, or monthly
- ◆ Set alerts if usage is nearing previous month usage
- ◆ Set vacation alerts so you know if water was used when you are not there
- ◆ Find possible leaks quickly by monitoring usage during overnight hours or while away from the property. See Checklist for chasing down leaks under the Leak Detection Guide at www.joliet.gov/customerwaterportal
- ◆ Monitor your water usage to make decisions about water conservation

How do I sign up? Go to www.joliet.gov/customerwaterportal

Creating your account is easy. You will need your most recent water bill number (which is found on your water bill). Watch the short video to learn how to sign up. All information to sign up is available in English and Spanish. Any questions, please contact the Public Utilities office at 815-724-4220.



ReThink Conservation Incentive Program

In the fall of 2023 the ReThink Conservation Incentive Program began. Check in each quarter for the chance to enter for prizes. Kids ages 5-12 can participate too! Learn more at www.rethinkwaterjoliet.org/incentive-program

Low Flow Toilet Rebate Program

Was your house built prior to 1994? Do you have a toilet installed prior to 1994 that is a 3.5 gallon flush toilet or higher? Please check out our rebate program to replace a high flow toilet with a WaterSense 1.2 gallon flush toilet at www.joliet.gov/toiletrebate

Rain Barrel Subsidy Program

ReThink Water by installing a rain barrel outside of your home or business using the City's subsidy program! Joliet Water Customers are allowed to purchase up to three barrels with the subsidy pricing through the life of the program. Learn more by visiting www.joliet.gov/rainbarrel

Water Ambassador Program

The ISAWWA Water Ambassador Program awarded the City of Joliet the Gold Level Award for our public educational and outreach efforts for 2023. Learn more at www.isawwa.org

SOURCE WATER ASSESSMENT

The Safe Drinking Water Act (SDWA) has established the criteria for determining the vulnerability of source water to potential sources of contamination. To determine Joliet’s susceptibility to groundwater contamination, a Well Site Survey and a Source Inventory, performed by Illinois Rural Water Association, inside the recharge areas were conducted. During the survey of Joliet’s source water protection area, Illinois EPA, and Illinois Rural Water Association staff recorded potential sources, routes or possible problem sites within the minimum setback zones of 200 or 400 feet and within the 1,000 foot maximum setback zones around the wells. The tool used to apply these criteria is the source water assessment. The source water assessment for our water supply was prepared by the Illinois EPA. The City of Joliet’s source water assessment is as follows:

“The Illinois EPA considers the gravel wells of this facility to be susceptible to Synthetic Organic Contaminant (SOC) contamination and does not consider the bedrock wells to be susceptible to Inorganic Contaminant (IOC), Synthetic Organic Contaminant (SOC) or Volatile Organic Contaminant (VOC) contamination. This determination is based on a number of criteria including: monitoring conducted at the wells, monitoring conducted at the entry point to the distribution system, the available hydrogeologic data on the wells, and the land-use activities in the recharge area of the wells.” The Illinois Environmental Protection Act established minimum protection zones for Joliet’s active community water supply wells. The twenty-one bedrock wells have minimum setback zones of 200 feet and the five gravel wells have minimum setback zones of 400 feet. These minimum protection zones are regulated by the Illinois EPA. In addition to the minimum setback zones, five-year recharge areas have been delineated for the five gravel wells. To request additional information on our community’s water supply source water assessment, please contact the Department of Public Utilities at (815) 724-4220 or via our website at www.Joliet.gov/Water.

GLOSSARY OF TERMS

N/A	not applicable	mg/L	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water	pCi/L	picocuries per liter, used to measure radioactivity
µg/l	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water	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
AL	Action Level, or the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.				
MCL	Maximum Contaminant Level, or 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.				
MCLG	Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG’s allow for a margin of safety.				
MRDL	Maximum Residual Disinfectant Level, or 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, or the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.				
HMO	Hydrous Manganese Oxide, or the treatment chemical used for the removal of radium from drinking water.				
EPA	Environmental Protection Agency, or the regulatory agency which establishes standards for drinking water at the Federal level (USEPA) or at the State level (IEPA).				

LEAD AND COPPER

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. We 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 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

LEAD AND COPPER	DATE SAMPLED	MCLG	ACTION LEVEL (AL)	90TH PERCENTILE	NO. SITES OVER AL	Units	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Lead	2023	0	15	5.52	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	2023	1.3	1.3	0.981	4	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

INORGANIC CHEMICALS (IOCs)

Inorganic chemicals (IOCs) include salts, metals, minerals, and nutrients that can be naturally occurring or which can result from storm water runoff, industrial or domestic wastewater discharges, or farm activities. Because our source of drinking water is groundwater, a significant amount of naturally occurring minerals are dissolved in the water. These dissolved minerals can account for the “hardness” of the water.

INORGANIC CONTAMINANTS	COLLECTION DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Arsenic	2023	10.1	0.356 - 10.1	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics productions wastes.
Barium	2023	0.0404	0.00921 - 0.0404	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2023	2.99	1.8 - 2.99	100	100	ppb	No	Discharge from steel and pulp mills; Erosion of natural deposits.
Flouride	2023	1.25	0.99 - 1.25	4	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese	2023	17.4	0.467 - 17.4	150	150	ppb	No	This contaminant is not currently regulated by the USEPA but is regulated by IEPA. Erosion of natural deposits.
Selenium	2023	16.4	1.15 - 16.4	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Sodium	2023	87600	37800 - 87600	n/a	n/a	ppm	No	Erosion from naturally occurring deposits. Used in water softener regeneration.
Zinc	2023	0.00172	0.00119 - 0.00172	5	5	ppm	No	This contaminant is not currently regulated by the USEPA but is regulated by IEPA. Naturally occurring; discharge from metal.

RADIONUCLIDES

Radionuclides are man-made or natural elements that emit radiation. A picocurie per liter is a unit of radioactivity. A curie is the amount of radioactivity in a gram of radium. A picocurie is one trillionth of a curie.

RADIOACTIVE CONTAMINANTS	COLLECTION DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCLG	MCL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Gross alpha excluding radon & uranium	2023	19	0.999 - 19.3	0	15	pCi/L	No	Erosion of natural deposits
Combined radium 226/228	2023	7	0.462 - 7.18	0	5	pCi/L	No	Erosion of natural deposits
Uranium	2023	1.06684	1.06684 - 1.06684	0	30	ug/l	No	Erosion of natural deposits

DISINFECTANTS AND DISINFECTION BY-PRODUCTS

Disinfection of drinking water is one of the major public health advances in the 20th century. One hundred years ago, typhoid and cholera epidemics were common throughout American cities and disinfection was a major factor in reducing these epidemics. However, the disinfectants themselves can react with naturally occurring materials in the water to form unintended by-products that may pose health risks.

DISINFECTANTS	COLLECTION DATE	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MRDLG	MRDL	UNITS	VIOLATION	LIKELY SOURCE OF CONTAMINATION
Chloramines	12/31/2023	2	1 - 2	4	4	ppm	No	Water additive used to control microbes.



Construction Zone 2024 Water Main Replacement Projects

In 2024, improvements to the water distribution system are taking place across the City. 33 miles of water mains are being replaced as part of the City’s non-revenue water reduction plan as required by the Illinois Department of Natural Resources to comply with our Lake Michigan allocation permit. Between 2022 and 2030 we will be replacing or abandoning all water mains construction prior to the 1970s.

To keep up to date with current water, sewer, and roadway projects under construction and to view projects anticipated for construction in 2025 visit our website at www.Joliet.gov/construction-zone.



Alternative Water Source Program

Why do we need to find another source of water?

The City currently obtains its water from the Ironton Galesville aquifer. This is a deep aquifer located 1000 feet beneath the ground. We have known since the 1960s that the water being taken out of this aquifer is greater than the amount being recharged. However, it wasn't until recently that we knew the timeframe that depletion of the aquifer would impact our water supply. Modeling completed in the Fall of 2018 and updated in Spring 2020 indicated the aquifer will not meet the City's maximum day demands by 2030. Therefore, the City conducted an alternative water source study that was completed in Fall 2020.

What alternative water sources were examined?

Initially, fourteen alternative water sources were evaluated during Phase I of the study. During Phase II, five sources were studied in more detail to replace the existing water source in Joliet. This included Lake Michigan - DuPage Water Commission, Lake Michigan - City of Chicago, Lake Michigan - New Indiana Intake, the Kankakee River, and the Illinois River. In January 2020, the Joliet City Council selected Lake Michigan water and directed staff to simultaneously evaluate the New Indiana Intake and City of Chicago alternatives as part of the 2020 Evaluation. In January 2021, the City Council approved the selection of purchasing finished water from the City of Chicago.

What are the benefits of Lake Michigan water versus Joliet's existing well water supply?

The new Lake Michigan Water supply will have a more aesthetically pleasing water quality, with lower hardness and less potential for scaling of water fixtures. For water customers that have home water softeners, these will no longer be necessary.

What is the Regional Water Commission?

Other communities in our region also face water quantity and water quality issues. In February 2022, the City Council approved a Preliminary Agreement Regarding Formation of a Regional Water Commission. This agreement was also approved by Channahon, Crest Hill, Minooka, Romeoville, and Shorewood. The member communities will share the costs of bringing Lake Michigan water to the region reducing rate impacts to all residents. In 2023, the name "Grand Prairie Water Commission" was selected for the new regional water commission which is anticipated to officially form in June 2024. For more information about the water commission, visit www.gpwc-il.org

When will construction begin?

Construction of improvements will be completed in phases. The initial phases of construction are anticipated to begin in Fall 2024 at sites located within Chicago. Construction in Joliet will begin in 2025.

When will I have Lake Michigan water at my tap?

The current construction schedule indicates Lake Michigan water will be flowing at your tap in May 2030.

How will this affect my water bill?

The current average monthly water bill is approximately \$40.00. In 2030, with Lake Michigan water purchased from the City of Chicago, it is estimated the average water bill will increase by an additional \$40-\$50 per month. These bill increases are being further studied and refined as the program progresses.

Where can I get more information?

www.RethinkWaterJoliet.org

Join our mailing list by providing your email address in the upper right corner of the website homepage and subscribe to keep up to date.



The following water restrictions are in place for the City of Joliet water customers year-round per City of Joliet Code of Ordinances, Sec. 31-126:

Lawn watering may only occur between 6:00 a.m. and 10:00 a.m.

or 6:00 p.m. and 10:00 p.m. at even numbered addresses

on even numbered days and at odd numbered addresses on odd numbered days.