

Utilities Services of Illinois, Inc.
Lake Marian
PWS# 0895200

Your Annual Water Report

We are pleased to provide you with the 2016 Water Quality Report. This report is designed to inform you of the quality of water we delivered to you over the past year. Our goal is to provide you a safe and dependable supply of drinking water.

Sources of Drinking Water

The City of Carpentersville supplies the drinking water for Lake Marian through a purchased water agreement.

Source Water Assessment

The source water assessment for our supply has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl> or by contacting the Groundwater Section of the Illinois EPA at 217-785-4787.

To determine Carpentersville's susceptibility to groundwater contamination, the following document was reviewed: a Well Site Survey, published in 1990 by the Illinois EPA. Based on the information obtained in this document, there are 3 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by Carpentersville's community water supply. These include 1 auto repair shop, 1 store/sales, and 1 below ground fuel storage tanks. Information provided by the Carpentersville community water supply indicates that the following potential sources listed in the table are currently inactive (below ground storage of petroleum has been removed): In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated sites with on-going remediation that might be of concern. Based upon this information, the Illinois EPA has determined that the Carpentersville Community Water Supply's source water is susceptible to contamination. The Illinois EPA is in the process of delineating 5-year recharge area calculations for Carpentersville's wells. The land use within the areas around the wells was analyzed as part of this susceptibility determination. This land use includes open space, residential, and commercial properties.



Help put a stop to the more than **1 trillion gallons of water lost annually** due to household leaks. These easy-to-fix leaks waste the average family the amount of water used to fill a backyard swimming pool each year.

Plumbing leaks can run up your family's water bill an extra 10 percent plus, but chasing down these water- and money-wasting culprits is as easy as 1—2—3. Simply check, twist, and replace your way to fewer leaks and more water savings:

- **Check** for silent leaks in the toilet with a few drops of food coloring in the tank, and check your sprinkler system for winter damage.
- **Twist** faucet valves; tighten pipe connections; and secure your hose to the spigot. For additional savings, twist a WaterSense labeled aerator onto each bathroom faucet to save water without noticing a difference in flow. They can save a household more than 500 gallons each year—equivalent to the amount water used to shower 180 times!
- **Replace** old plumbing fixtures and irrigation controllers that are wasting water with WaterSense labeled models that are independently certified to use 20 percent less water and perform well.

Message From Steve Lubertozzi, President

Dear Utilities Services of Illinois, Inc. Customers,

I am pleased to share your Annual Water Report for 2016. As the local President of your community water utility, this communication is part of our continuing effort to emphasize to our customers that we fully understand our role in the local community. Additionally, I'm also pleased to let you know that we now have created a new, more 'user friendly' website just for our state at www.uiwater.com.

Our team is committed to providing safe, reliable and cost effective service to our customers. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2016. You will find that we supply water that meets or exceeds all federal and state water quality regulations.

These results don't happen by chance. Our dedicated local team of water quality experts is working in the community everyday ensuring that you, our customer, are our top priority and providing the highest quality drinking water and service - now and in the years to come.

Best regards,



GO GREEN



Sign up for e-billing now at www.uiwater.com

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

EPA Wants You To Know:

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 may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (i) Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (ii) Inorganic contaminants, such as salts and metals, that may be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (iii) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (iv) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- (v) Radioactive contaminants, which may be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall 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 may be obtained by calling the Environmental Protection Agency'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 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/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).

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. Utilities Services of Illinois, Inc. 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 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 or at <http://www.epa.gov/safewater/lead>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

The Environmental Protection Agency requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables below are the only contaminants detected in your drinking water.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.



We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

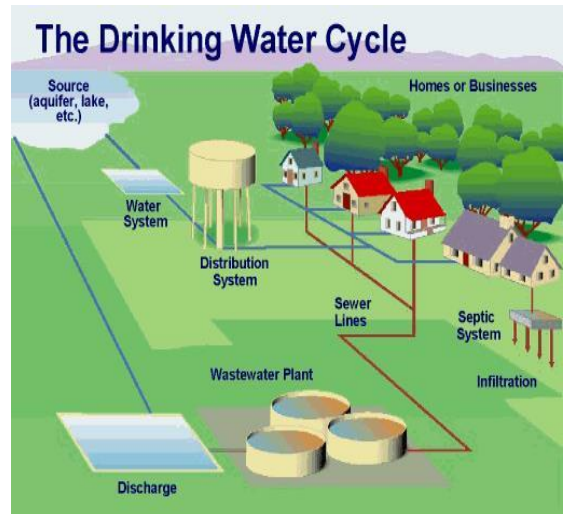
Drain Disposal Information: Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps/solids for disposal.

Prescription Medication and Hazardous Waste - Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures.

Don't flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain. They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at:

<http://www.epa.gov/epawaste/conservematerials/hhw.htm>



Understanding This Report:

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- Action level (AL) - action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum contaminant level (MCL) - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum contaminant level goal (MCLG) - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for 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 Goal (MRDLG): The 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 contamination.
- Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.
- Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular Rule.
- Parts per million (ppm) or milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.
- Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
- Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- 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
- Avg - Regulatory compliance with some MCLs is based on running annual average of monthly samples.

Utilities Services of Illinois, Inc. routinely monitors for contaminants in your drinking water according to Federal and State laws. Unless otherwise noted, the tables that follow show the results of our monitoring for the period of January 1st to December 31st, 2016. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data [e.g., for organic contaminants], though representative, are more than one year old. Data obtained before January 1, 2016, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

If You Have Questions Or Want To Get Involved?

Utilities Services of Illinois, Inc. does not hold regular public meetings. If you have any questions about this report or your water utility, please contact customer service at 1-800-831-2359. We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

**Regulated Contaminants Tables:
2016 Water Quality Data**

Lead and Copper								
Contaminant	Date Sampled	MCLG (ALG)	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.65	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2016	0	15	13.2	2	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

Infants and children who drink water containing lead in excess of the action level 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.

Disinfectants (Based on a Running Annual Average (RAA)) & Disinfection Byproducts								
Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2016	(RAA) 0.4	0.2-0.5	MRDLG =4	MRDL =4	ppm	N	Water additive used to control microbes
Haloacetic Acids [HAA5]	2016	*2	0 – 2.26	No goal for the total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes [TTHMs]	2016	*10	7.07 – 14.6	No goal for the total	80	ppb	N	By-product of drinking water chlorination

*Based on a Location Running Annual Average

In December 2014, Lake Marian began purchasing water from the City of Carpentersville. The following chart represents testing from the wells that previously supplied Lake Marion prior to the switch to the City.

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	2014	3.1	N/A	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2014	0.18	N/A	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2014	1.16	N/A	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium	2014	56	N/A	N/A	N/A	ppm	N	Erosion of naturally occurring deposits; used in water softener regeneration
Radiological Contaminants								
Combined Radium 226/228	2014	2.36	1.9 – 2.36	0	5	pCi/L	N	Erosion of natural deposits
State Regulated Contaminants								
Iron	2014	1.1	N/A	N/A	1.0	ppm	N	Erosion of natural deposits
Manganese	2014	27	N/A	150	150	ppb	N	Erosion of natural deposits

Water Quality Table Footnotes:

- **Iron:** This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more. *Excessive iron in water may cause staining of laundry and plumbing fixtures and may accumulate as deposits in the distribution system.* The utility treated the water with an iron sequestering agent to alleviate this aesthetic characteristic.
- **Manganese:** This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.
- **Sodium:** There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

Lake Marian Water Company 2016 Violation Summary Table

Violation Description – No drinking water violations were recorded during 2016.

**The following information was provided by the Carpentersville Water Department (IL0890200):
2016 Regulated Contaminants Detected**

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	4/8/2012	1.5	N/A	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2015	0.053	N/A	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2015	1.23	N/A	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	4/20/16	0.35	N/A	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	2015	190	N/A	N/A	N/A	ppm	N	Erosion of naturally occurring deposits; used in water softener regeneration
Radiological Contaminants								
Combined Radium 226/228	2015	1.17	N/A	0	5	pCi/L	N	Erosion of natural deposits
State Regulated Contaminants								
Iron	2015	0.11	N/A	N/A	1.0	ppm	N	Erosion of natural deposits
Manganese	2015	6.1	N/A	150	150	ppb	N	Erosion of natural deposits

- **Iron:** This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.
- **Manganese:** This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.
- **Sodium:** There is not a state or federal MCL for sodium. Monitoring is required to provide information to consumers and health officials that are concerned about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.