

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018



***Presented By***  
**Village of Glen  
Carbon**

## Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education, while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

## Where Does My Water Come From?

The source of drinking water used by the Village of Glen Carbon is purchased water. Water is purchased from the City of Edwardsville. It is obtained from a well field that draws water from the American Bottoms Underground Aquifer.

## Water Conservation Tips

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So, get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you can save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban storm-water runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

### Monitoring Requirements Not Met for Village of Glen Carbon

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 1/1/2016 - 12/31/2018 we did not complete all monitoring for Lead & Copper and therefore cannot be sure of the quality of our drinking water during that time.

### What Should I Do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for Lead and Copper, how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

<b>Contaminant:</b>	Lead and Copper
<b>Required sampling frequency:</b>	Every Three Years
<b>Number of samples taken:</b>	20
<b>When all samples should have been taken:</b>	October 2018
<b>When samples were or will be taken:</b>	Missed samples will be taken during the next required sampling period.
<b>What happened:</b>	8 of our 20 samples were not returned from our sample locations.

For more information, please contact John Leezy, Utility Superintendent, at (618) 288-2661.

## Source Water Assessment

A Source Water Assessment Plan (SWAP) is available from the City of Edwardsville. The Source Water Assessment has been completed by the Illinois EPA. If you would like a copy of this information, please stop by the Edwardsville City Hall. 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 [www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl](http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl).

*“We remain vigilant in delivering the best-quality drinking water”*

## Lead in Home Plumbing

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 are responsible for providing high-quality drinking water, but 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Community Participation

The Village of Glen Carbon Board of Trustees has the decision-making responsibility regarding contractual agreements and expenditure of funds for the water system. You are invited to attend our regularly scheduled meetings, which are held at 7:00 p.m. on the second and fourth Tuesdays of each month in the Council Chambers of the Village Hall.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call John Leezy, Utility Department Superintendent, at (618) 288-2661.



## BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

**800**  
TRILLION

**1**  
CENT

The average cost for about 5 gallons of water supplied to a home in the U.S.

The amount of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

**99%**

**50**  
GALLONS

The average daily number of gallons of total home water use for each person in the U.S.

The amount of Earth's surface that's covered by water.

**71%**

**330**  
MILLION

The amount of water on Earth in cubic miles.

The amount of Earth's water that is available for all of humanity's needs.

**1%**

**75%**

The amount of the human brain that contains water.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. And, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The percentage of Total Organic Carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set by the IEPA.

REGULATED SUBSTANCES									
				Village of Glen Carbon		City of Edwardsville			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2017	10	0	1.6	0–1.6	1 <sup>1</sup>	1–1 <sup>1</sup>	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2017	2	2	0.13	0.12–0.13	0.085 <sup>2</sup>	0.085–0.085 <sup>2</sup>	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2018	[4]	[4]	1.2	1–1.4	1.2	1–1.4	No	Water additive used to control microbes
Combined Radium (pCi/L)	2017	5	0	0.791	0–0.791	1.328 <sup>3</sup>	1.328–1.328 <sup>3</sup>	No	Erosion of natural deposits
Fluoride (ppm)	2017	4	4	0.282	0–0.282	0.434 <sup>2</sup>	0.434–0.434 <sup>2</sup>	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha excluding radon and uranium (pCi/L)	2017	15	0	3.59	0–3.34	2.11 <sup>3</sup>	2.11–2.11 <sup>3</sup>	No	Erosion of natural deposits
Haloacetic Acids (HAA5) (ppb)	2018	60	NA	9	4.49–9.05	5.21	4.18–5.21	No	By-product of drinking water disinfection
Iron <sup>4</sup> (ppb)	2017	1,000	NA	0.52	0.44–0.52	NA	NA	No	Erosion from naturally occurring deposits
Nitrate (ppm)	2018	10	10	2.9	2.9–2.9	1	1.3–1.3	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Manganese <sup>4</sup> (ppb)	2017	150	NA	230	150–150	4.6 <sup>2</sup>	4.6–4.6 <sup>2</sup>	No	Erosion of naturally occurring deposits
Selenium (ppb)	2017	50	50	7.5	5.8–7.5	NA	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium <sup>4</sup> (ppm)	2017	NA	NA	15	13–15	130 <sup>1</sup>	130–130 <sup>1</sup>	No	Erosion of naturally occurring deposits; Used in water softener regeneration
Total Trihalomethanes (ppb)	2018	80	NA	37	17.5–37	25.75	19.23–25.75	No	By-product of drinking water disinfection
Zinc <sup>4</sup> (ppb)	2015	5,000	NA	NA	NA	0.018	0.018–0.018	No	Naturally occurring; Discharge from metal factories

### Tap Water Samples Collected for Copper and Lead Analyses from Sample Sites throughout the Community

				Village of Glen Carbon		City of Edwardsville			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2018	1.3	1.3	0.596	0	0.55 <sup>5</sup>	0 <sup>5</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2018	15	0	10	1	1.8 <sup>5</sup>	0 <sup>5</sup>	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup> Sampled in 2015.

<sup>2</sup> Sampled in 2018.

<sup>3</sup> Sampled in 2014.

<sup>4</sup> Iron, manganese, sodium, and zinc are not currently regulated by the U.S. EPA. However, the state has set MCLs for supplies serving a population of 1000 or more.

<sup>5</sup> Sampled in 2017.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

**AL (Action Level):** The concentration of a contaminant that triggers treatment or other required actions by the water supply.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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

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

**NA:** Not applicable.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).