# Annual Drinking Water Quality Report



NORTHERN ILLINOIS UTILITIES, INC.

IL1115850

Annual Water Quality Report for the period of January 1 to December  $31,\ 2022$ 

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.

The source of drinking water used by NORTHERN ILLINOIS UTILITIES, INC. is Ground Water

For more information regarding this report contact:

Name	Village of Wonder Lake
	3
Phone	(815) 371-5699

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

## Source of Drinking Water

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 from 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 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.

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 EPAs 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 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. 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 or at http://www.epa.gov/safewater/lead.

#### Source Water Information

Source Wat	er Name	Type of Water	Report Status	Location
WELL #10 (	02140)	GW	A	_6305 MCCULLOM LAKE RD
WELL #11 (	02141)	GW	A	.6305 MCCULLOM LAKE RD
WELL #2 (	20148)	GW	E	7316 NORTHWOOD DR

#### Source Water Assessment

We want our valued customers 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 \_\_(815) 464-2691\_\_\_. 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.

Source of Water: NORTHERN ILLINOIS UTILITIES, INC.Based on information obtained in a Well Site Survey, published in 1990 by the Illinois EPA, no potential sources or possible problem sites were identified within the survey area of Northern Il. Utl. Inc. wells. The Illinois EPA has determined that the Northern Il. Utl. Inc. Community Water Supply's source water is not susceptible to 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; and the available hydrogeologic data on the wells.Furthermore, in anticipation of the U.S. EPA's proposed Ground Water Rule, the Illinois EPA has determined that the Northern Il. Utl. Inc. Community Water Supply is not vulnerable to viral contamination. This determination is based upon the evaluation of the following criteria during the Vulnerability Waiver Process: the water company's wells are properly constructed with sound integrity and proper site conditions; a hydrogeologic barrier exists which should prevent pathogen movement; all potential routes and sanitary defects have been mitigated such that the source water is adequately protected; monitoring data did not indicate a history of disease outbreak; and the sanitary survey of the water supply did not indicate a viral contamination threat. Because the water company's wells are constructed in a confined aquifer, which should prevent the movement of pathogens into the wells, well hydraulics were not considered to be a significant factor in this vulnerability determination. Hence, well hydraulics were not evaluated for this groundwater supply.

#### Lead and Copper

Definitions:

goal or MRDLG:

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

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/15/2020	1.3	1.3	0.036	0	ppm		Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

#### Water Quality Test Results

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are 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: 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.

Maximum Contaminant Level Goal or MCLG: 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.

Maximum residual disinfectant level or 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.

Maximum residual disinfectant level 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.

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.

# 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	12/31/2022	0.8	0.7 - 0.9	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	12	12.3 - 12.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	12	12 - 12	No goal for the total	80	ppb	N	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
Arsenic	2022	2	1.4 - 2.8	0	10	dqq	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	08/18/2021	0.057	0.057 - 0.057	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	08/18/2021	0.648	0.648 - 0.648	4	4.0	mqq	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2022	0.3	0.11 - 0.39		1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	08/18/2021	15	15 - 15	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Sodium	08/18/2021	23	23 - 23			ppm	N	Erosion from naturally occuring deposits. Used in water softener regeneration.
Zinc	08/18/2021	0.015	0.015 - 0.015	5	5	mqq	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal

#### Violations Table

#### Arsenic

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	10/01/2022		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

#### Iron

Excessive iron in water may cause staining of laundry & plumbing fixtures and may accumulate as deposits in the distribution system.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	10/01/2022		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

VIOLATION EXPLANATION: The Illinois EPA gave the NIU water system a waiver for TPO1 due to its service status during the 4th quarter for the monitoring of Arsenic and Iron. The well in question status changed from Active to Emergency during 2022 and thus does not require a quarterly Arsenic and Iron sample analysis. These violations are for not recording a sample during the 4th quarter and does not affect the water quality. This recording issue does not present any risk.



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# Village of Wonder Lake Water Department Notice

May 12, 2023

The Village of Wonder Lake Water recently received notice that 3 of 20 annual water samples for copper had results slightly above the Illinois EPA action limit. The homes that were affected were individually notified per IEPA regulations.

Adjustments were made to the treatment of the water to reduce the amount of copper in the water system. In accordance with IEPA regulations, all 20 sites plus an additional 20 sites were all sampled again and were all well below the IEPA action limit. Many of the 40 sites showed no detection of lead or copper at all. These sites will be resampled every 6 months until the IEPA is satisfied with all sampling results.

IEPA water quality reporting requires that a Corrosion Control Study be performed and be submitted to the IEPA. The Corrosion Control Study had not been received by the IEPA and it is being submitted to the agency for approval.

The attached notice is provided per IEPA regulations to notify you that there has been a reporting error by not receiving the Corrosion Control Study in a timely manner.

The integrity of water quality is not affected, and these reporting issues do not present any risk

If you have any questions about this notice, please contact Jim Tonias of Robinson Engineering 815-464-2690. Robinson Engineering manages the water system for the Village of Wonder Lake.

Thank you,

Dan Dycus, President Village of Wonder Lake

# **Failure to Report Corrosion Control Survey**

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Village of Wonder Lake Water Contains High Levels of Copper

Our water system recently violated a drinking water standard. Even though this is **not an emergency**, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

We routinely sample water at consumers' taps for copper. The tests show copper levels in the water above the limit, or action level, so we are required to submit a corrosion control treatment recommendation. This treatment recommendation helps determine what action should be taken to help prevent copper in the pipes from dissolving into the water. The corrosion control recommendation should have been submitted by 4/1/2023.

### What should I do?

Listed below are some steps you can take to reduce your exposure to copper:

- ➤ Run your water for 15-30 seconds or until it becomes cold before using it for drinking or cooking. This flushes any standing copper from the pipes.
- > Don't cook with or drink water from the hot water tap; copper dissolves more easily into hot water.
- **Do not boil your water to remove copper.** Excessive boiling water makes the copper more concentrated the copper remains when the water evaporates.

#### What does this mean?

Typically, copper enters public water supplies by leaching from copper or brass pipes and plumbing components. Your water is more likely to contain high copper levels if water pipes in or leading to your home are made of copper or contain copper solder.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician.

These symptoms, however, are not caused only by organisms in drinking water, but also by other factors. If you experience any of these symptoms and they persist, you may want to seek medical advice.

## What happened? What is being done?

We are working with the Illinois EPA to evaluate the water supply and research options to correct the problem. These options may include treating the water to remove copper.

We have made adjustments on how we are treating the water, increased the sample sites, and frequency of samples at which we test the water for copper.

We have since taken samples at all locations and had them tested. They show that we meet the standards.

**This is not an emergency**. If it had been, you would have been notified immediately. Corrosion control will be in place by 6/30/2023.

For more information, please contact Jim Tonias at 815-464-2690 or 26750 W. Commerce Ave. Suite 512, Volo,IL 60073

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by The Village of Wonder Lake

Water System ID#

IL1115750

Date distributed 5/18/2023