

## Annual Drinking Water Quality Report

ILLINOIS STATE UNIVERSITY-NORMAL

IL1135510

Annual Water Quality Report for the period of January 1, 2022 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. Note: a paper copy will not be mailed.

The source of drinking water used by ILLINOIS STATE UNIVERSITY-NORMAL is Purchased Ground Water.

For more information contact Toby Hoover, Water Operator Foreman, at 309-438-1845 or the Normal Water Department at 309-454-9563 or 309-454-9565

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 may 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 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 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 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 ASSESSMENT

We want our valued customers to be informed about their water quality. We purchase water from the Town of Normal and receive our water from 10 different feeds throughout campus. If you would like a copy of information or to learn more please call our water operator foreman at 309-438-1845. 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>

The Town of Normal Water Department uses ground water provided by thirteen wells supplied by the Banner (MahometSankoty Aquifer) and Glasford & Wedron Formations. An aquifer is a geological formation that contains water. Nine wells are located within the corporate limits of Normal and four wells are located west of Normal. This untreated groundwater is transmitted to our Water Treatment Plant through a network of underground pipes. At the Water Treatment Plant, the groundwater is softened, filtered, fluoridated, and disinfected. Most of the chemicals added are later removed as part of the treatment process but some, such as chlorine & fluoride, are intended to remain in the water. The treated water is then pumped to storage tanks for use by our citizens.

To determine the Town of Normal's susceptibility to contamination, the following document was reviewed: a Well Site Survey, published in 1991 by the Illinois EPA. Based on the information obtained in this document there are 51 potential sources of groundwater contamination that could pose a hazard to groundwater utilized by the Town of Normal's community water supply wells. In addition, information provided by the Leaking Underground Storage Tank and Remedial Project Management Sections of the Illinois EPA indicated additional sites with on-going remediation which may be of concern. Based upon this information, the Illinois EPA has determined that the Town of Normal community water supply's source water for wells #5, #6, #7, #8, #9, #10, #11, #13 and #14 is susceptible to contamination. The source water for wells #4, #100, #101, #102 and #103 is not susceptible to contamination. The land use within the recharge areas of the wells was analyzed as part of this susceptibility determination. This land use includes residential, commercial, and agricultural properties. Wells #4, #5, #6, #7, #8, #10, #11, #13 and #14 have all been abandoned. Further information regarding the source water assessment for Normal is available at <http://dataservices.epa.illinois.gov/swap/factsheet.aspx>

### **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 (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Contaminant Level (MCL):** 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 residual disinfectant level goal (MRDLG):** 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.

Maximum residual disinfectant level (MRDL): 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.

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

avg: regulatory compliance with some MCL's are based on running annual average of monthly samples

na: not applicable.

pCi/L: picocuries per liter

### Regulated Contaminants & Lead and Copper 2022 Illinois State University IL1135510

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	12/20/22	3.4	3.0 - 3.4	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes
Haloacetic Acids (HAAs)	08/23/22	4.3	4.3 – 4.3	No goal for total	60	ppb	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	08/23/22	2.0	2.0 – 2.0	No goal for total	80	ppb	No	By-product of drinking water disinfection

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	09/20/22	0	15	0	1	ppb	No	Corrosion of household plumbing systems, erosion of natural deposits
Copper	09/20/22	1.3	1.3	0.244	0	ppm	No	Erosion of natural deposits, leaching from wood preservatives, corrosion of household plumbing systems

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

### Regulated Contaminants Detected 2022 Town of Normal IL1130900

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2022	1.2	1.2 – 1.2	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	2022	0.013	0.013 - 0.013	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2022	0.632	0.632 - 0.632	4	4	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	2022	0.04	0.04 – 0.04	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	2022	76	76 - 76			ppm	No	Erosion from naturally occurring deposits; Used in water softener regeneration
<b>Disinfection By-Products</b>								
Chlorite	2022	0.57	0.15 - 0.57	0.8	1	ppm	No	By-product of drinking water disinfection

Violations Table

<div><div>Lead and Copper Rule</div><div>The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.</div></div>				
Violation Type	Violation Begin	Violation End	Violation Explanation	Corrective Actions
LEAD CONSUMER NOTICE (LCR)	12/30/2022	2022	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.	Results of lead tap water monitoring was provided to the consumers at the location water was tested.