**VIOLATION SUMMARY**
The University of Illinois had one Level 1 Assessment Treatment Technique Trigger during 2022. No other monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2022.

**2022 WATER QUALITY DATA - DETECTED CONTAMINANTS**
U of I samples were collected within the parent water supply by Illinois American Water.

**2022 DATA SUMMARY**
The table below lists the contaminants that were detected in your water. The presence of contaminants does not necessarily indicate that the water poses a health risk. The data in this table represents a combination of the testing results on finished water from the distribution system and its parent supply, IAW, Champaign District. The university monitors water daily at five separate wellheads. Additionally, the university monitors water at eight points within the campus distribution system. UAW monitors the parent water supply at points prior to entering the campus distribution system.

### COLLIFORM BACTERIA

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Sampled by: Date</th>
<th>MCLG</th>
<th>MCL</th>
<th>Highest # of Positive E. Coli or Fecal Coliform</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Coli</td>
<td>U of I</td>
<td>0</td>
<td>0</td>
<td>No samples were E. Coli positive</td>
<td>0</td>
<td>Naturally present in the environment.</td>
</tr>
</tbody>
</table>

### LEAD AND COPPER

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Sampled by: Date</th>
<th>MCLG</th>
<th>MCL</th>
<th># Sites Exceeding AL</th>
<th>Violation</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppb)</td>
<td>U of I; 2020*</td>
<td>1.3</td>
<td>1.3</td>
<td>0.048</td>
<td>0</td>
<td>Natural deposits, corrosion of household plumbing systems.</td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>U of I; 2020*</td>
<td>0.15</td>
<td>1.5</td>
<td>0</td>
<td>0</td>
<td>Natural deposits, corrosion of household plumbing systems.</td>
</tr>
</tbody>
</table>

### OZONE REMOVAL OR DISINFECTION APPROACHES

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Sampled by: Date</th>
<th>MCLG</th>
<th>MCL</th>
<th>Highest Compliance Result</th>
<th>Range of Detections</th>
<th>Violation</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>U of I</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>Water additives used to control microbiological contaminants.</td>
</tr>
<tr>
<td>Haloacetic Acids (HAA) (ppb)</td>
<td>U of I</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>No</td>
<td>By-product of drinking water disinfection.</td>
<td></td>
</tr>
<tr>
<td>Total Trihalomethanes (TTHM) (ppb)</td>
<td>U of I</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>By-product of drinking water disinfection.</td>
</tr>
</tbody>
</table>

### RADIOACTIVE CONTAMINANTS

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Sampled by: Date</th>
<th>MCLG</th>
<th>MCL</th>
<th>Highest Compliance Result</th>
<th>Range of Detections</th>
<th>Violation</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americium (ppb)</td>
<td>IAW; 2021*</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>No</td>
<td>Natural deposits.</td>
</tr>
<tr>
<td>Fluoride (ppb)</td>
<td>IAW; 2021*</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0.37</td>
<td>Natural deposits.</td>
</tr>
</tbody>
</table>

### STATE REGULATED CONTAMINANTS

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Sampled by: Date</th>
<th>MCLG</th>
<th>MCL</th>
<th>Highest Compliance Result</th>
<th>Range of Detections</th>
<th>Violation</th>
<th>Typical Source of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium (ppm)</td>
<td>IAW; 2021*</td>
<td>45.1</td>
<td>45.1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Natural deposits.</td>
</tr>
</tbody>
</table>

**ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Year</th>
<th>Average</th>
<th>Range</th>
<th>Detected</th>
<th>Typical Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese (ppb)</td>
<td>2020</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
<td>Naturally-occurring elemental metal, largely used in aluminum alloy production. Essential dietary element.</td>
</tr>
</tbody>
</table>

---

* The State of Illinois requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year.

* Chlorine and Chloramines are disinfecting agents added to control microbiological contaminants that otherwise could cause waterborne diseases or other water quality concerns. Most water systems in Illinois are required to be treated with chlorine or chloramines. Levels well in excess of the MCLG could cause irritation of the eyes or nose in some people. The values reported reflect multiple locations in the service area.

* Data represents the highest monthly average of chlorine residuals measured throughout the U of I Distribution System.

* Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends a fluoride level of 0.7 mg/L (ppm).

---

**2022 WATER QUALITY REPORT**

**WATER INFORMATION SOURCES**

- Illinois American Water
  - www.illinoisamwater.com
- United States Environmental Protection Agency
  - www.epa.gov/safewater
- Safe Drinking Water Hotline
  - 800-426-4791
- Illinois Environmental Protection Agency
  - www.2.illinois.gov/epa
- Surf Your Watershed
  - Locate your watershed and a host of information.
  - www.epa.gov/surf
- Envirofacts
  - U.S. environmental data.
  - www.epa.gov/enviro
- National Radon Program Services
  - www.sosradon.org
- Prairie Rivers Network
  - 217-344-2371
- Mahomet Aquifer Consortium
  - www.mahometaquiferconsortium.org

**LOCAL GROUPS INVOLVED IN WATER AND ENVIRONMENTAL ISSUES**

- Prairie Rivers Network
  - 217-344-2371
- Mahomet Aquifer Consortium
  - www.mahometaquiferconsortium.org
- Illinois Environmental Protection Agency
  - www.2.illinois.gov/epa

**INTRODUCTION**

The 2022 Water Quality Report from the University of Illinois Urbana-Champaign provides information about the source of campus drinking water, contaminant testing, general health precautions, and regulatory data. The report is generated from sample data collected in 2022 and was designed to inform customers of the University of Illinois Urbana-Champaign. The report includes a summary of the water quality data, a section on violations, and additional water quality parameters. The University of Illinois Urbana-Champaign is committed to providing you with information that informs customers of the water quality.
WHAT IS THE SOURCE OF U OF I DRINKING WATER?
The University of Illinois purchases drinking water from Illinois American Water (IAW), Champaign District water supply, an affiliate of Illinois Rural Water Association, in cooperation with the University of Illinois. The water is delivered to campus via five metered locations, and this configuration is considered a consecutive water system. Therefore, the distribution system is considered a public water system. The campus system is supplied approximately 46 miles of water main. The university distributes this water to the vast majority of campus buildings, however some buildings are supplied directly from IAW. The following information about IAW, Champaign District water supply, is from their 2022 Annual Water Quality Report and is available by calling 217-373-3273 or visiting their website at www.illinoisamerican.com.

The source of supply for IAW is groundwater. Currently, IAW delivers water for treatment to two lime softening plants: the Mattis Avenue Plant, located in Champaign, and the Bradley Avenue Plant, located west of Champaign. The wells are primarily located in the Mahomet-Springfield aquifer and supply water to both plants. The wells range from 208 to 366 feet in depth and are protected from surface contamination by geologic barriers in the aquifers. An aquifer is a porous underground layer of water-bearing material and gravel) that is saturated with water.

SOURCE WATER ASSESSMENT
The IEPA has completed a source water assessment for the University of Illinois campus system. In this report, IEPA indicates the wells supply Champaign County community water systems.

To determine IAW, Champaign District’s susceptibility to groundwater contamination, the Illinois Rural Water Association, in cooperation with the IEPA, were reviewed. Based on the information contained in these documents, potential sources of groundwater contamination include surface water that could pose a hazard to groundwater pumped by the IAW, Champaign District’s community water supply wells.

The IEPA has determined that IAW, Champaign District’s water supply is susceptible to inorganic chemical (IOC), volatile organic chemical (VOC), and synthetic organic chemical (SOC) contaminants. This determination is based on a number of criteria, including monitoring conducted at the well and monitoring conducted at the entry point to the distribution system and noting the available hydrogeologic data for the wells. To view a summary of the completed Source Water Assessments, including Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommends Source Water Protection Efforts for additional information, you may access the IEPA website at http://dagservices.epa.illinois.gov/.

PROTECTING THE WATER YOU DRINK
To ensure tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health as public water systems.

The university is required to test the water in its distribution system for coliform, lead, copper, halogenated hydrocarbons (THM), and halocarbons. IAW is required 15 samples per month to be analyzed for coliform. In 2022, normal operations of the U of I water distribution system resulted in approximately 16 samples per month for coliform. The most recent testing results for coliform, lead, copper, halocarbons, and THM are provided in the Data Summary table at the end of this report.

GENERAL INFORMATION ABOUT ALL DRINKING WATER
The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and underground water. Groundwater is water beneath the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants may be present in source water include:

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, agricultural systems, livestock operations, and wildlife;
- Inorganic Contaminants, such as salts naturally occurring in the ground or resulting from urban stormwater runoff, industrial or domestic wastewater discharges, gas production, mining, or farming;
- Pesticides and Herbicides, which may come from a variety of sources, such as agricultural and urban stormwater runoff, and residential use;
- Organic Chemical Contaminants, including synthetic and VOCs, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems; and
- Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Important Health Considerations
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of certain contaminants (naturally occurring and/or人为的). While the presence of these contaminants may not indicate that water poses a health risk, USEPA’s health-based standards as Public Water Supply Standards exist to adequately protect public health. This is so because the concentrations of these contaminants may be varied in different sources of water and at different times depending on a number of factors.

More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water Hotline at 1-800-426-4791.

Lead
If present, elevated levels of lead can cause serious health problems, especially for young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

The University of Illinois is responsible for providing high quality drinking water. USEPA has taken steps to monitor a variety of appropriate materials used in drinking plumbing components.

When your water has been sitting for several hours, minimize the possibility for lead exposure by flushing the 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 ordering lead testing, water treatment systems, and steps to take to minimize exposure is available by calling the USEPA Safe Drinking Water Hotline at 1-800-426-4791 or at www.epa.gov/safewater/lead.

Arsenic
While your drinking water meets the USEPA’s standard for arsenic, it does contain low levels of arsenic. The USEPA’s standards balance the current understanding of arsenic’s health effects against the costs of removing arsenic from drinking water. The seven orders of magnitude of arsenic’s health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects, such as skin damage and circulatory problems.

DEFINITIONS
Drinking water: Water used for drinking or other purposes like cooking. Safe Drinking Water Act (SDWA): A federal law that sets health-based standards for drinking water to protect public health. MRDL: Maximum Contaminant Level. The level of a contaminant in drinking water below which there is no known or expected risk to health. MRDLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water to which water systems are required to strive to achieve as an indicator that other potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which the contaminant may enter the drinking water distribution system and pose a risk to health. AL: Action Level. The concentration of contaminant that, when exceeded, triggers treatment or other required actions by the water supplier. Action Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. This is a long-term health goal. ALGs allow for a margin of safety. Action level goals may be set for contaminants for which health effects are not fully understood or fully tested, but for which there is a perceived or potential public health concern. MCL: Maximum Contaminant Level. The level of a contaminant in drinking water, including bottled water, below which there is no known or expected risk to health. If a water supplier violates the MCL, it is in violation of the Safe Drinking Water Act. MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water to which water systems are required to strive to achieve as an indicator that other potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which the contaminant may enter the drinking water distribution system and pose a risk to health. MCLGs do not represent an allowed level of the contaminant in drinking water. MCL violations can result in enforcement action. MRDL: Maximum Residual Level. The upper limit for the amount of a disinfectant or disinfection by-product allowed in drinking water. Permissible concentrations are expressed as a percentage of the MCL. MRDL: Maximum Residual Level Goal. The level of a disinfectant in drinking water to which water systems are required to strive as an indicator that other potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which the contaminant may enter the drinking water distribution system and pose a risk to health. Disinfectant Level Goal. The level of a disinfectant in drinking water to which water systems are required to strive as an indicator that other potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which the contaminant may enter the drinking water distribution system and pose a risk to health. MCL: Maximum Contaminant Level. The level of a contaminant in drinking water, including bottled water, below which there is no known or expected risk to health. If a water supplier violates the MCL, it is in violation of the Safe Drinking Water Act. MCLG: Maximum Contaminant Level Goal. The level of a contaminant in drinking water to which water systems are required to strive to achieve as an indicator that other potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which the contaminant may enter the drinking water distribution system and pose a risk to health. If a water supplier violates the MCLG, it is not in violation of the Safe Drinking Water Act. The level of a contaminant in drinking water, including bottled water, below which there is no known or expected risk to health. If a water supplier violates the MRDL, it is in violation of the Safe Drinking Water Act. Source Water: Water from which a water system draws its source of water; Susceptibility to Contamination Determination; and documentation/recommends Source Water Protection Efforts for additional information, you may access the IEPA website at http://dagservices.epa.illinois.gov/.