



WATER QUALITY

2024 Annual Report



PWS ID#: 44503360



Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your source of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information, because informed customers are our best allies.

Where Does My Water Come From?

The source of Kaukauna Utilities (KU) water is five groundwater wells located throughout the city. The depth of the wells ranges from 500 to 850 feet. Our daily pumping averages around 1.2 million gallons, which calculates to 438 million gallons of treated water a year. We have the capability of pumping in excess of four million gallons a day. The distribution system consists of approximately 100 miles of water main ranging from 6 to 16 inches in diameter. We have three iron filters. We have two water towers, one on the north side and one on the south side of the city, each with a capacity of 500,000 gallons. We also have three underground reservoirs with a combined capacity of 600,000 gallons.

Source Water Assessment

The Wisconsin Department of Natural Resources (WDNR) conducted assessments for all drinking water sources across the state. The purpose of the assessments was to determine the susceptibility of each drinking water source to potential contaminant sources and establish a relative susceptibility rating of high, moderate, or low for each source. The KU system is moderately susceptible to contamination by volatile organic compounds, nitrate, beryllium, and microbes. The system has moderate susceptibility to contamination by synthetic organic compounds. The system has low susceptibility to ethylene dibromide. A copy of the source water assessment can be obtained by contacting Kaukauna Utilities at (920) 462-0238. For additional information on the WDNR's Source Water Assessment Program, call Carla Romano at (608) 910-3458.

How Is My Water Treated and Purified?

The treatment process consists of a series of steps. First, raw water is pumped from our wells and sent to the filter plant, where we add potassium permanganate and manganese sulfate to the water before it reaches the filter tank. The addition of these substances oxidizes the iron, causing small particles called floc to adhere to one another, which makes the particles big enough to be filtered out as the water passes through the layers of anthracite and manganese greensand in the filter tank. This process removes iron and also reduces radium levels. After that process, we add chlorine to the water for disinfection and a polyphosphate-orthophosphate blend for corrosion control. Finally, the water is pumped to the distribution system.

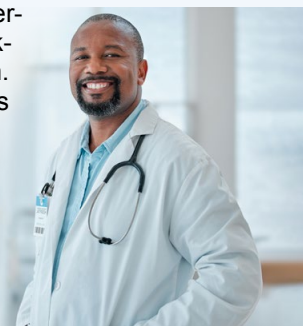
Softer Water

In 2024 customer survey results revealed that the majority of KU customers utilize a water softener but are willing to spend more for water that does not require in-home or in-business softening. Customers also expressed concern regarding the water quality impacts to appliances and overall taste of the drinking water.

Based on the 2023 water study and 2024 customer survey results, the Kaukauna Utilities Commission approved a transformational project for KU's water system. The project will involve enhancement of the drinking water filtration system to include reverse osmosis filtration and resiliency improvements that will fortify the drinking water system. The reverse osmosis filtration system will significantly reduce the hardness of your drinking water and provide customers with the opportunity to reduce or eliminate softening. Although project completion is anticipated for 2028, we are eager to continue our efforts to provide the City of Kaukauna with the highest-quality water that you can rely on. Stay up to date on the project at <https://www.kaukaunautilities.com/reverseosmosis/>

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 can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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) or epa.gov/safewater.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Andy Vanden Heuvel, Water Department Superintendent, at (920) 858-9180. Additional information can be found at <https://www.kaukaunautilities.com/about-ku/water-department/>.

Lead in Home Plumbing

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. KU is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead and wish to have your water tested, contact Andy Vanden Heuvel at (920) 858-9180. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The details regarding the lead service inventory and LSL removal can be found at <https://www.kaukaunautilities.com/about-ku/water-department/#leadservice> or by contacting Zach Moureau at (920) 462-0238. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Water Conservation Tips

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



- Automatic dishwashers use three to six 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 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.
- Check out our rebates for water saving appliances on our website at <https://www.kaukaunautilities.com/residential/rebate-programs/>

Substances That Could Be in 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 occur naturally in the soil or groundwater or may result from urban stormwater 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 stormwater 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 stormwater runoff, and septic systems.

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

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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 contaminants does not necessarily mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791) or visiting epa.gov/safewater.

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.

How to Read the Test Results

For each substance listed, compare the value in the KU Highest Level Detected column to the value in the Highest Level Allowed (MCL) (or AL) column. If the KU Highest Level Detected is smaller, your water meets the health and safety standards set for the substance. We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently; however, KU monitors for many of these substances on an annual basis, above the state requirements, to ensure levels do not change. Although most samples are collected on an annual basis, only the most recent detection levels are included, along with the year in which the sample was taken.



REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	KU HIGHEST LEVEL DETECTED	HIGHEST LEVEL ALLOWED (MCL) [MRDL]	MCLG (MRDLG)	KU RANGE OF DETECTIONS	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2024	5.7	15	0	3.0–5.7	No	Erosion of natural deposits
Barium (ppm)	2023	0.009	2	2	0.002–0.009	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Combined Radium (pCi/L)	2024	2.5	5	0	1.3–2.5	No	Erosion of natural deposits
Fluoride (ppm)	2024	1.6	4	4	1.6–1.6	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	4	60	NA	3–4	No	By-product of drinking water disinfection
Nickel (ppb)	2023	50.0	100	NA	2.6–50.0	No	Naturally occurring
Nitrate (ppm)	2024	0.20	10	10	ND–0.20	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2020	1	50	50	ND–1	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [total trihalomethanes] (ppb)	2024	11.2	80	NA	8.6–11.2	No	By-product of drinking water disinfection
Uranium (ppb)	2024	0.3	30	0	0.3–0.3	No	Erosion of natural deposits

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 which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	LEVEL DETECTED (90TH %ILE)	AL	GOAL LEVEL (MCLG)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	0.2220	1.3	1.3	0/60	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2023	2.4	15	0	0/60	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

SECONDARY SUBSTANCES ¹

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	KU HIGHEST LEVEL DETECTED	SMCL	GOAL LEVEL (MCLG)	KU RANGE OF DETECTIONS	VIOLATION	TYPICAL SOURCE
Sulfate (ppm)	2023	560.00	250	NA	420.00–560.00	No	Runoff/leaching from natural deposits; Industrial wastes

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	KU HIGHEST LEVEL DETECTED	KU RANGE OF DETECTIONS	TYPICAL SOURCE
Sodium (ppm)	2023	17.00	12.00–17.00	NA

¹ This table lists substances detected in your water that have a secondary maximum contaminant level (SMCL). There are no violations for detections of contaminants that exceed SMCLs. These are levels that do not present health concerns but may pose aesthetic problems such as objectionable taste, odor, or color.

Community Participation

You are invited to attend our Utility Commission meetings and provide feedback about your drinking water. We typically meet the third Wednesday of each month at 4:00 p.m. at Kaukauna Utilities Commission Chambers, 777 Island Street. Check for schedule changes at <https://www.kaukaunautilities.com/about-ku/utility-commission/>.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

