

ANNUAL WATER QUALITY REPORT

Reporting Year 2023

Presented By



PWS ID#: 1710004

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, 2023. 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.

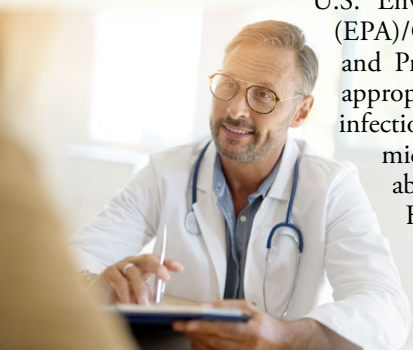
Lead in Home Plumbing

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 two 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 [epa.gov/safewater/lead](https://www.epa.gov/safewater/lead).



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. Environmental Protection Agency (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 at (800) 426-4791 or [water.epa.gov/drink/hotline](https://www.water.epa.gov/drink/hotline).



WHEN SECONDS COUNT



YOUR HYDRANT MATTERS!

- REMOVE ICE AND SNOW
- KEEP 3 FT CLEAR SURROUNDING
- CLEAR A PATH TO THE ROAD

Adopt-a-Hydrant – A City of Elk River Program

Our friends over at the City of Elk River have a new program that creates a fun way to be mindful of hydrants that may be obstructed by snow just outside of our front door. Visit elkrivermn.gov/1842/Adopt-a-Hydrant, and select a hydrant - or several - that you would like to clear snow from to ensure that firefighters have access to water in the event of a fire. A hydrant should have a three-foot radius that is clear of snow to allow first responders to safely turn water on and off. We appreciate your commitment to help your community. All our adoptive hydrant parents did an excellent job of shoveling out hydrants this last winter! Wait - did we get snow? Oh, yes, we did - in the spring!

Where Does My Water Come From?

Elk River Municipal Utilities (ERMU) wells are supplied from the Mt. Simon-Hinckley Aquifer. ERMU maintains eight wells, four water towers, over 125 miles of water main, 1,319 fire hydrants, and just under 3,000 valves. In 2023 ERMU pumped over 1,004,271,000 gallons of water. We are proud to serve over 5,500 water customers.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Elk River Municipal Utilities at (763) 441-2020 – Dave Ninow, Water Superintendent. You may review this report online at <https://www.ermummn.com/services/water/water-quality-report>

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 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 may also come from gas stations, urban stormwater 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.

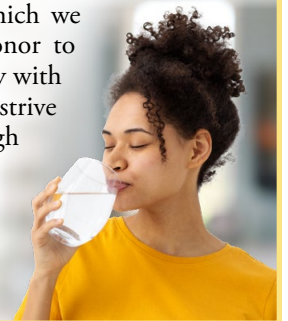


Advanced Metering Infrastructure (AMI) Project

With the assistance of Allegiant Utility Services, ERMU began installing new AMI meters in April 2024. Please visit ermumn.com/about-us/news-education/featured-news/elk-river-municipal-utilities-ami-ready for information and updates throughout the project.

Reducing Water Waste

We aim to reduce water loss, which is calculated by measuring the water pumped from the ground (at the well) and subtracting the amount of treated water accounted for by customers' meters. Loss generally occurs through quality and maintenance-based practices, such as hydrant flushing and backwashing (well filter cleaning). On occasion, a water leak may go unidentified for some time. In the event of a water main break, we can lose a large volume of water in a few seconds. There is an allowable percentage range for loss each year, beyond which we may incur fines. It is our honor to serve the Elk River community with quality, on-demand water. We strive to limit water waste through community education and best practices to maintain our water system with great financial stewardship.



Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at our office, or you may search for "Elk River" online at <https://www.health.state.mn.us/communities/environment/water/swp/swa.html>. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

About 90 percent of our drinking water supply management area is considered non-vulnerable; less than 10 percent is vulnerable. Our wellhead protection plan has many items that address limiting or stopping potential contamination.

What Your Water Bill Goes Toward

ERMU serves a population of over 26,000. Just over 5,000 customers are residential connections, and over 650 are commercial connections. It is always our goal to promote limiting water waste, because water is our fundamental lifeline. We charge in increments of 1,000 gallons; our first tier is \$2.02 per 1,000 gallons. At our local stores, it costs about \$1.50 for one gallon of water and around the same for a single-serving, 16-ounce bottle of water. That's quite a price difference for an equivalent volume, and water from ERMU comes right into your home.

Our goal is to have reliable equipment and infrastructure to provide quality water each time you turn on the faucet. The more water that's pumped, the harder the equipment runs, and the more maintenance is required to operate wells. Just like a vehicle, the more miles or hours run, the more equipment ages and fails, and the general wear and tear of pumping day in and day out adds up. Maximum-capacity pumping should only occur in peak circumstances, such as the hottest days of the year or a severe drought.

So, what part of our efforts to supply water to your home or business does your water bill cover? Customers that have new construction or are connecting into the water system are charged a water availability charge (WAC). This is a water connection and accessibility charge to establish new services, and it goes toward infrastructure build-out, including water mains, hydrants, booster pumps, wells, and towers.

Rates that are charged for water consumption keep our system operating each day. Rate-based funds are budgeted for regular maintenance and water production, including purchase of chemicals for water quality, state sampling and documentation, and valve and hydrant upkeep and labor. We meticulously budget for reliability, quality, and future growth.

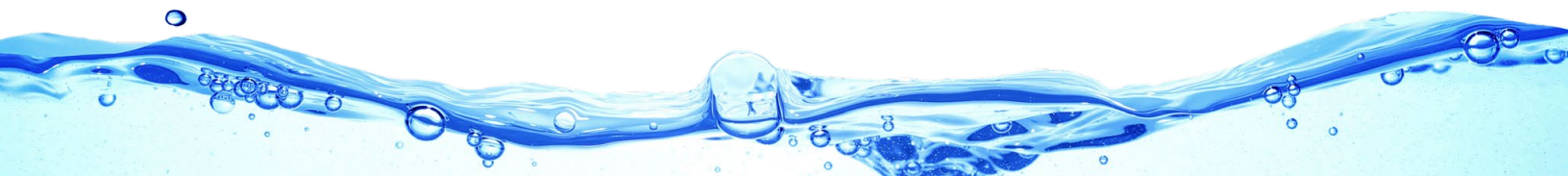
You may have wondered why we charge more for higher water use. Tiered rates are one of the few options given by the Minnesota Department of Natural Resources (DNR) for conservation efforts. ERMU must report our annual water pumping and show our peak (highest) and base (lowest) pumping month. The base pumping month indicates the actual need for water in the system for consumption and daily use, while most of the water used during the peak pumping month is for irrigation. That is our number one water use in Elk River.

In 2023 we went from 1,535,000 gallons pumped in January to 6,803,000 gallons pumped in July. That's over a 300-percent increase in water consumption. Based on our differential from base to peak, we pay the DNR for volume above the base calculation. This is called a summer surcharge.

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 four 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.
- It is important to know that the number one use of water is irrigation. Be sure to check your irrigation system and settings often to be sure that irrigation heads are not broken and that sprinkling times are limited to fit seasonal changes and actual need. Water your lawn between midnight and 4AM with a cycle-and-soak pattern for better lawn health.



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.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2023	[4]	[4]	0.72	0.64–0.81	No	Water additive used to control microbes
Fluoride (ppm)	2023	4	4	0.68	0.62–0.76	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2020	15.4	0	3.6	ND–3.6	No	Erosion of natural deposits
Haloacetic Acids [HAAs]–Stage 1 (ppb)	2023	60	NA	5.70	ND–5.70	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	1.70	ND–1.70	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [total trihalomethanes]–Stage 1 (ppb)	2023	80	NA	8.40	3.90–8.40	No	By-product of drinking water disinfection
Xylenes (ppm)	2023	10	10	ND	NA	No	Discharge from petroleum factories; discharge from chemical factories

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.23	1/30	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2022	15	0	1.37	0/30	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

UNREGULATED SUBSTANCES				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2023	4.29	2.83–4.29	Naturally occurring; In-home water softening
Sulfate (ppm)	2023	16.50	2.67–16.50	NA

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 (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

