

LINO LAKES

Minnesota

2021- Water Quality Report -2021

Lino Lakes works hard to provide you with safe and reliable drinking water that meets federal and state water quality requirements. This report is meant to inform you about your drinking water and ways to protect our precious water resources.

Inside, you'll find results of the water quality monitoring performed from January 1 to December 31, 2021.



Lino Lakes Water Source

Lino Lakes drinking water comes from a groundwater source: six wells which range from 258 to 338 feet deep, that draw water from the Prairie Du Chien-Jordan and Jordan-St. Lawrence aquifers.

The Minnesota Department of Health (MDH) provides information about your drinking water sources in a source water assessment which addresses ways Lino Lakes is protecting your drinking water sources, nearby threats to your drinking water sources, and how easily water and pollution can move from the surface of the land into drinking water sources based on natural geology and well construction.

Call 651-201-4700 between 8:00am and 4:30pm (M-F) to request a copy of your source water assessment or find it online at:

www.health.state.mn.us/communities/environment/water/swp/swa



LinoLakes.us

Contact Justin Williams, Utilities Supervisor at 651-982-2452 if you have questions about Lino Lakes drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

Calcium-57.3 ppm

Iron-2.7 ppm

Hardness-13.7 grains

Source Water information from MDH

Minnesota's primary drinking water sources are groundwater and surface water. Groundwater is the water found in aquifers beneath the surface of the land. Groundwater supplies 75 percent of Minnesota's drinking water. Surface water is the water in lakes, rivers, and streams above the surface of the land. Surface water supplies 25 percent of Minnesota's drinking water.

Contaminants can get in drinking water sources from the natural environment and from people's daily activities. There are five main types of contaminants in drinking water sources.

Microbial contaminants, such as viruses, bacteria, and parasites. Sources include sewage treatment plants, septic systems, agricultural livestock operations, pets, and wildlife.

Inorganic contaminants include salts and metals from natural sources (e.g. rock and soil), oil and gas production, mining and farming operations, urban stormwater runoff, and wastewater discharges.

Pesticides and herbicides are chemicals used to reduce or kill unwanted plants and pests. Sources include agriculture, urban stormwater runoff, and commercial and residential properties.

Organic chemical contaminants include synthetic and volatile organic compounds. Sources include industrial processes and petroleum production, gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants such as radium, thorium, and uranium isotopes come from natural sources (e.g. radon gas from soils and rock), mining operations, and oil and gas production.

Regulating Drinking Water

The U.S. Environmental Protection Agency (EPA) sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water.

This ensures that tap water is safe to drink for most people. The U.S. Food and Drug Administration regulates the amount of certain contaminants in bottled water. Bottled water must provide the same public health protection as public tap water.

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. Get more information about contaminants and potential health effects by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.



Results of Monitoring

Lino Lakes works with MDH to test drinking water for more than 100 contaminants. It is normal to detect contaminants in trace amounts. No water supply is ever completely free of contaminants. Drinking water standards protect Minnesotans from substances that may be harmful to their health.

Learn more by visiting the MDH webpage Basics of Monitoring and Testing of Drinking Water in Minnesota

www.health.state.mn.us/communities/environment/water/factsheet/sampling

The table across the page shows all contaminants detected last year or the most recent time sampling found that contaminant. It also displays levels of those contaminants and the EPA's limits. Substances that were tested for, but not found, are not included in the table.

Some contaminants are sampled less than once a year because their levels in water are not expected to change from year to year. If any of these contaminants were detected the last time sampling was conducted, they are included in the table with the detection date.

Additional monitoring may have been conducted for contaminants that are not included in the Safe Drinking Water Act. To request a copy of these results, call MDH at 651-201-4700 or 1-800-818-9318 between 8:00 am and 4:30 pm (M-F).

Some contaminants are monitored regularly throughout the year, and rolling (or moving) annual averages are used to manage compliance. Because of this averaging, there are times where the Range of Detected Test Results for the calendar year is lower than the Highest Average or Highest Single Test Result, because it occurred in the previous calendar year.

Lead

You may come in contact with lead through paint, water, dust, soil, food, hobbies, or your job. This can cause serious health problems for everyone. There is no safe level of lead. Babies, children under six years, and pregnant women are at the highest risk.

Lead is rarely present in drinking water at the source, but it can get in your drinking water as it passes through lead service lines and your household plumbing system. Lino Lakes provides high quality drinking water and there are no lead service lines in its public water distribution system, but it cannot control the plumbing materials used in private buildings.

To limit exposure to lead in drinking water, run your water for 30-60 seconds before using it for drinking or cooking when the water has not been used for over six hours.

Use cold water for drinking, making food, and making baby formula as hot water releases more lead from plumbing than cold water.

Substance (units) test date	MCL	MCLG	Level Detected	Range	Major Source of Contaminant	Meets Standard
Barium (ppm) 12/17/2020	2	2	0.14	N/A	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	✓
Fluoride (ppm)	4	4	0.57*	0.47-0.53**	Erosion of natural deposits; Water additive to promote strong teeth.	✓
Total Chlorine (ppm)	4	4	0.55	0.26-0.77	Water additive to control microbes.	✓
Total Trihalomethanes (ppb)	80 (MRDL)	N/A	0.6	0-0.6	By-product of drinking water disinfection.	✓
Substance (units) test date	AL	MCLG	90% Level	Sites Over AL	Major Source of Contaminant	Meets Standard
Copper (ppm) 9/1/2020	1.3	0	0.33	0 of 30 sites	Corrosion of household plumbing.	✓
Lead (ppb) 9/1/2020	15	0	0.75	0 of 30 sites	Corrosion of household plumbing.	✓



*Highest quarterly average **Lowest-highest monthly average

Terms in the Table

In most cases, these actions should keep lead levels low in your drinking water. If you are still concerned about lead, you may arrange with a laboratory to test your tap water. A lab test is the only way to know if the lead concentration is reduced.

Testing your water is important if young children or pregnant women drink your tap water. Contact an MDH accredited laboratory to get a sample container and instructions on how to submit a sample to the Environmental Laboratory Accreditation Program:

www.health.state.mn.us/accreditation

The Minnesota Department of Health can help you understand your test results. If your test results show that your water has high levels of lead after you let the water run, treat your water.

Read about water treatment units:

health.state.mn.us/communities/environment/water/factsheet/hometreatment.html

To learn more about lead in drinking water:

www.health.state.mn.us/communities/environment/water/contaminants/lead.html

www.epa.gov/safewater/lead

Call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

To learn about how to reduce your contact with lead from sources other than your drinking water:

www.health.state.mn.us/communities/environment/lead/fs/common.html

- **Level Detected:** This is the value used to determine compliance with federal standards. It sometimes is the highest value detected and sometimes is an average of all the detected values. If it is an average, it may contain sampling results from the previous year.
- **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.
- **AL:** Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **90% Level:** This is the value obtained after disregarding 10 percent of the samples taken that had the highest levels. For example, in a situation in which 10 samples were taken, the 90th percentile level is determined by disregarding the highest result, which represents 10 percent of the samples.
- **ppm:** Parts per million or milligrams per liter (mg/l). One ppm is like one drop in one million drops of water, or about one cup in a swimming pool.
- **ppb:** Parts per billion or micrograms per liter (µg/l). One ppb in water is like one drop in one billion drops of water, or about one drop in a swimming pool.
- **N/A:** Not Applicable (does not apply).

Fluoride

If your drinking water fluoride levels are below the optimal concentration range of 0.5 to 0.9 ppm, please talk with your dentist about how you can protect your teeth and your family's teeth from tooth decay and cavities.

For more information, visit:

health.state.mn.us/communities/environment/water/com/fluoride

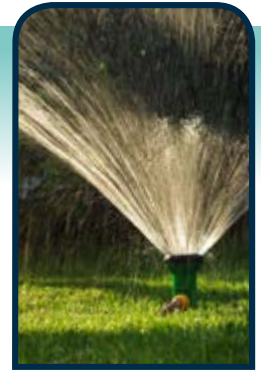


Lino Lakes is continuing to evaluate construction of a water treatment plant as a means to remove manganese from the drinking water supply. To manage manganese levels, the City presently draws water first from wells that have the lowest manganese levels. This approach is a challenge to maintain when water demands peak during lawn watering season. When our best wells cannot meet the full demand, we must rely on wells with higher levels of manganese.

Please help manage this issue by implementing responsible conservation efforts.

Best Watering Practices

- Only irrigate during weeks of less than 1 inch of rain
- Irrigate only before 6:00 in the morning
- Soak 6-8 inches of soil (requires ~1 inch of water)
- Aim nozzles so all water lands on lawn, not streets, sidewalks or driveways



Lino Lakes Watering Restrictions

- Lawn watering is prohibited from 6:00 am - 6:00 pm all year
- An odd/even watering rule is in effect from May 15 - Sept 15. Even-numbered addresses may water only on even dates and odd-numbered addresses may water only on odd dates
- Exemptions to the odd/even restriction can be obtained for new sod or seed by calling 651-982-2440
- Restrictions do not apply to hand watering or for properties using a private well for sprinkling

Save money and water more efficiently by applying to join our Smart Irrigation Controller Program. Find details and your application at linolakes.us Search the keyword "Irrigation."

Manganese

Manganese is a naturally occurring mineral found in rock and soil. It occurs naturally in Lino Lakes source water. In small concentrations, it is considered a healthy nutrient and it's not federally-regulated as part of the Clean Water Act. However, MDH health-based guidelines indicate that a concentration of at least 100 parts per billion (ppb) in drinking water poses a public health risk for infants and at a concentration of at least 300 ppb poses a health risk for adults.

MDH conducted testing in 2019 as part of a study of unregulated contaminants. This testing found that some of our wells have manganese levels above MDH's recommended health guidelines.

You can learn more about this issue by visiting:

linolakes.us/272/Public-Water-Advisory

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 EPA's Safe Drinking Water Hotline at 1-800-426-4791.