

Brainerd 2020 Drinking Water Report

Making Safe Drinking Water

Your drinking water comes from a groundwater source: six wells ranging from 123 to 187 feet deep, that draw water from the Quaternary Water Table aquifer. Brainerd works hard to provide you with safe and reliable drinking water that meets federal and state water quality requirements. The purpose of this report is to provide you with information on your drinking water and how to protect our precious water resources.

Contact Scott Magnuson, Superintendent, at 218-829-8726 or smagnuson@bpu.org if you have questions about Brainerd's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

The U.S. Environmental Protection Agency 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Brainerd Monitoring Results

This report contains our monitoring results from January 1 to December 31, 2020.

We work with the Minnesota Department of Health to test drinking water for more than 100 contaminants. It is not unusual to detect contaminants in small 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 Minnesota Department of Health's webpage [Basics of Monitoring and testing of Drinking Water in Minnesota \(https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html\)](https://www.health.state.mn.us/communities/environment/water/factsheet/sampling.html).

How to Read the Water Quality Data Tables

The tables below show the contaminants we found last year or the most recent time we sampled for that contaminant. They also show the levels of those contaminants and the Environmental Protection Agency's limits. Substances that we tested for but did not find are not included in the tables. We sample for some contaminants less than once a year because their levels in water are not expected to change from year to year. If we found any of these contaminants the last time, we sampled for them, we included them in the tables below with the detection date.

We may have done additional monitoring for contaminants that are not included in the Safe Drinking Water Act. To request a copy of these results, call the Minnesota Department of Health at 1-800-818-9318.

Definitions

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

- **EPA:** Environmental Protection Agency
- **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.
- **N/A (Not applicable):** Does not apply.
- **ppb (parts per billion):** One part per billion in water is like one drop in one billion drops of water, or about one drop in a swimming pool. ppb is the same as micrograms per liter ($\mu\text{g/l}$).
- **ppm (parts per million):** One part per million is like one drop in one million drops of water, or about one cup in a swimming pool. ppm is the same as milligrams per liter (mg/l).
- **PWSID:** Public water system identification.

Monitoring Results – Regulated Substances

LEAD AND COPPER – Tested at customer taps.						
Contaminant (units)	EPA's Ideal Goal (MCLG)	EPA's Action Level	90% of Results Were Less Than	Number of Homes with High Levels	Violation	Typical Sources
Lead ppb	0	90% of homes less than 15 ppb	3.2 ppb	1 out of 30	NO	Corrosion of household plumbing.
Copper ppm	0	90% of homes less than 1.3 ppm	2.54 ppm	25 out of 30	YES	Corrosion of household plumbing.

Potential Health Effects and Corrective Actions (If Applicable)

Copper: We are in exceedance of the action level for copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor. In response to this issue, we performed a corrosion control study and/or have taken actions to make the water less likely to absorb materials such as copper from your plumbing.

INORGANIC & ORGANIC CONTAMINANTS & OTHER SUBSTANCES – Tested in drinking water.						
Contaminant (units)	EPA's Ideal Goal (MCLG)	EPA's Limit (MCL)	Highest Average or Highest Single Test Result	Range of Detected Test Results	Violation	Typical Sources
Total Coliform Bacteria	N/A	TT	N/A	1	YES	Naturally present in the environment
Nitrate	10 ppm	10.4 ppm	0.5 ppm	N/A	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride	4.0 ppm	4.0 ppm	0.69 ppm	.68-.70 ppm	NO	Erosion of natural deposits; Water additive to promote strong teeth

Potential Health Effects and Corrective Actions (If Applicable)

Total Coliform Bacteria: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. Total Coliform Bacteria: During the past year one Level 2 assessments were required to be completed

for our water system. One Level 2 assessments were completed. In addition, we were required to take zero corrective actions, but the issue was fixed.

Fluoride: Fluoride is nature's cavity fighter, with small amounts present naturally in many drinking water sources. There is an overwhelming weight of credible, peer-reviewed, scientific evidence that fluoridation reduces tooth decay and cavities in children and adults, even when there is availability of fluoride from other sources, such as fluoride toothpaste and mouth rinses. Since studies show that optimal fluoride levels in drinking water benefit public health, municipal community water systems adjust the level of fluoride in the water to a concentration between 0.5 to 0.9 parts per million (ppm), with an optimal fluoridation goal between 0.7 and 1.2 ppm to protect your teeth. Fluoride levels below 2.0 ppm are not expected to increase the risk of a cosmetic condition known as enamel fluorosis.

CONTAMINANTS RELATED TO DISINFECTION – Tested in drinking water.

Substance	EPA's Ideal Goal (MCLG or MRDLG)	EPA's Limit (MCLG or MRDLG)	Highest Average Result or Highest Single Test Result	Range of Detected
Total Trihalomethanes (TTHMs)	N/A	80 ppb	52.5 ppb	0.00 - 10.59
Total Haloacetic Acids (HAA)	N/A	60 ppb	52 ppb	0.00 - 66.99

Some People Are More Vulnerable to Contaminants in Drinking Water

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. The developing fetus and therefore pregnant women may also be more vulnerable to contaminants in drinking water. These people or their caregivers should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (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 1-800-426-4791.

[Learn More about Your Drinking Water](#)

Drinking Water Sources

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.

The Minnesota Department of Health provides information about your drinking water source(s) in a source water assessment, including:

- How Brainerd is protecting your drinking water source(s);
- Nearby threats to your drinking water sources;
- How easily water and pollution can move from the surface of the land into drinking water sources, based on natural geology and the way wells are constructed.



Find your source water assessment at [Source Water Assessments](https://www.health.state.mn.us/communities/environment/water/swp/swa) (<https://www.health.state.mn.us/communities/environment/water/swp/swa>) or call 1-800-818-9318.

Lead in Drinking Water

You may be in contact with lead through paint, water, dust, soil, food, hobbies, or your job. Coming in contact with lead 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 in a drinking water source, but it can get in your drinking water as it passes through lead service lines and your household plumbing system. Brainerd is responsible for providing high quality drinking water, but it cannot control the plumbing materials used in private buildings.

In most cases, letting the water run and using cold water for drinking and cooking should keep lead levels low in your drinking water. If you are still concerned about lead, arrange with a laboratory to test your tap water. Testing your water is important if young children or pregnant women drink your tap water.

- Contact a Minnesota Department of Health accredited laboratory to get a sample container and instructions on how to submit a sample:

[Environmental Laboratory Accreditation Program](https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam)

<https://eldo.web.health.state.mn.us/public/accreditedlabs/labsearch.seam>

The Minnesota Department of Health can help you understand your test results.



Brainerd Public Utilities works around the clock to provide quality water to every consumer in Brainerd.

We ask that all of our customers help protect our water sources, which is the heart of our community, our way of life and our children's future. See our website for well head protection information. WWW. BPU.ORG

Business & Repair Office Hours 7:00 a.m. — 3:30 p.m.	Repair Number: 829-2193 Emergency 24 hour service 365 days a year: 829-2193	EMAIL@BPU.ORG WWW.BPU.ORG Facebook: Brainerd Public Utilities	Call Gopher State One at 1-800-252-1166 for water & electric locations before digging. All requests for locations must be made by calling the above toll-free number at least 48 hours before digging begins.	
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