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## 2017 Drinking Water Report

Brainerd Public Utilities is pleased to provide you with the results of monitoring done on its drinking water for the period from January 1 to December 31, 2017. The purpose of this report is to advance our customers understanding of drinking water and heighten awareness of the need to protect precious water resources. Our constant goal is to provide you with a safe and dependable supply of drinking water.

### Making Safe Drinking Water

Your drinking water comes from a groundwater source: six wells ranging from 123 to 187’ deep, that draw water from the Quaternary Water Table aquifer.



Brainerd Public Utilities 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, Superintendent at 829-8726 if you have questions about Brainerd’s drinking water. 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.

### Monitoring Results

We work with the MN Dept 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 MN Dept of Health’s webpage [Basics of Monitoring and Testing of Drinking Water in Minnesota \(http://www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html\)](http://www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html).

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 EPA 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 MN Dep’t of Health at 1-800-818-9318.

**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.

**NA (Not applicable):** Does not apply.

**pCi/l (picocuries per liter):** A measure of radioactivity.

**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 (µg/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).



Contaminant (units)	MCLG	AL	90% Level	# Sites over AL	Typical Source of Contaminant
Lead (ppb)	0	15	3.2	0 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	0	1.3	2.63*	23 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

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.

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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.

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2017)	Average /Result*	
Fluoride (ppm)	4.0	4.0	.59-.84	.75	State of Minnesota requires all municipal water systems to add fluoride to the drinking water to promote strong teeth. Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen )(ppm)	10.	10.4	N/A	.45	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
TTHM (Total trihalomethanes) (ppb)	N/A	80	N/A	1.6	By-Product of drinking water disinfection.
Haloacetic Acids	N/A	60	N/A	1.3	By-Product of drinking water disinfection.

### COMPLIANCE WITH NATIONAL PRIMARY DRINKING WATER REGULATIONS

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 ([www.health.state.mn.us/divs/eh/water/swp/swa/](http://www.health.state.mn.us/divs/eh/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 provides high quality drinking water, but it cannot control the plumbing materials used in private buildings. Test your water. 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 MN Department of Health accredited laboratory to get a sample container and instructions on how to submit a sample:

\* Environmental Laboratory Accreditation Program (<https://apps.health.state.mn.us/eldo/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.**

<p><b>Business &amp; Repair Office Hours</b> 7:00 a.m.—3:30 p.m.</p> <p><b>Business Number:</b> 829-8726</p>	<p><b>Repair Number:</b> 829-2193</p> <p><b>Emergency 24 hour service 365 days a year:</b> 829-2193</p>	<p>EMAIL@BPU.ORG</p> <p><a href="http://WWW.BPU.ORG">WWW.BPU.ORG</a></p> <p><b>Facebook:</b>  Brainerd Public Utilities</p>	<p><b>Call Gopher State One at 1-800-252-1166</b> for water &amp; electric locations before digging.</p> <p>All requests for locations must be made by calling the above toll free number at least 48 hours before digging begins.</p>
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