



Electricity—Water—Wastewater—Electricity—Water—Wastewater—Electricity—Water—Wastewater—Electricity—Water—Wastewater—Electricity—

**Business & Repair Office Hours**  
7:00 a.m.—3:30 p.m.

**Business Number:**  
829-8726

**Repair Number:**  
829-2193

**Emergency 24 hour service 365 days a year:**  
218-829-2193

EMAIL@BPU.ORG  
[WWW.BPU.ORG](http://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.

**All Electrical Work** performed in the City of Brainerd requires a “Request for Electrical Inspection” form to be filed with the **State of Minnesota.**

## 2016 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, 2016. 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.

### SOURCE OF WATER

Brainerd Public Utilities provides drinking water to its customers from a groundwater source: six wells ranging from 120 to 187 feet deep, which draw water from the quaternary water table aquifer.

The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source of water may be to future contamination incidents. If you wish to obtain the entire source water assessment regarding your drinking water, please call (651) 201-4700 or 1(800) 818-9318 (and press 5) during normal business hours. Also, you can view it on line at [www.health.state.mn.us/divs/eh/water/swp/swa](http://www.health.state.mn.us/divs/eh/water/swp/swa).

Call (218) 829-2193 if you have any questions about the City of Brainerd’s drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.

### RESULT OF MONITORING

The results contained in the following table indicate an exceedance of a federal standard. Some other contaminants were detected in trace amounts that were below legal limits. The table that follows shows the contaminants that were detected in trace amounts last year.

- **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.
- **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.
- **AL**—Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **90th Percentile 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.) Note: In situations in which only 5 samples are taken, the average of the two with the highest levels is taken to determine the 90th percentile level.
- **ppb**—Parts per billion, which can also be expressed as micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **ppm**—Parts per million, which can also be expressed as milligrams per liter (mg/l) - one part per million corresponds to one minute in two years, or a single penny in \$10,000.
- **N/A**— Not Applicable. (does not apply)

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2016)	Average /Result*	
Fluoride (ppm)	4.0	4.0	.67-.77	.88	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)	10.4	10.4	N/A	.46	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

\*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.

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)	1.3	1.3	2.52*	20 out of 30	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

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. Brainerd Public Utilities is responsible for providing high quality drinking water, but 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 2 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 or at <http://www.gov/safewater/lead>.

\* We are in exceedance of the action level for copper at the consumer's water tap. The copper level from the City's ground water source is less than 0.050 ppm. Therefore the main source of copper at the consumer's water tap is from consumer's copper piping. 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 installed treatment to make the water less likely to absorb materials such as copper from your plumbing.

Monitoring may have been done for additional contaminants that do not have MCLs established for them and are not required to be monitored under the Safe Drinking Water Act. Results may be available by calling 651-201-4700 or 1-800-818-9318 during normal business hours.

## COMPLIANCE WITH NATIONAL PRIMARY DRINKING WATER REGULATIONS

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 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 be naturally-occurring or 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 be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (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 indicate that water poses a health risk. More information about contaminants and the potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

**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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline at 1-800-426-4791.**

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.

