



2016 Drinking Water Report
City of Baxter

Also available on-line at www.baxtermn.gov

The Safety of Your Water

The City of Baxter is issuing 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 consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources. The City of Baxter must distribute this report annually to its customers as required by the Minnesota Department of Health.

Baxter's Water Supply: Source of Water

The City of Baxter provides drinking water to its residents from the following groundwater sources:

- Four wells ranging from 121 to 136 feet deep, that draw water from the Quaternary Water Table aquifer.
- In the event of an emergency, the City of Baxter purchases treated water from the City of Brainerd, which obtains its water from the Quaternary Water Table aquifer.

The Minnesota Department of Health has made a determination as to how vulnerable our systems' source(s) 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.

Please call (218) 454-5115 if you have questions about the City of Baxter drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water.



How Can I Be Sure My Drinking Water Is Safe?

In order to insure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations that 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 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 potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.



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. 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 Safe Drinking Water Hotline at 1-800-426-4791.

The Minnesota Department of Health monitors and enforces the Federal standards for Baxter's drinking water. On an ongoing basis, the Department of Health test samples of Baxter's water checking for the presence of more than 130 different substances, including lead, copper, and chlorinated by-products.

One more assurance of water quality occurs at the local level. Each day, in addition to ongoing computerized monitoring, the staff at Baxter's Water Treatment Plant performs several laboratory tests to ensure the continued quality and safety of our drinking water. On a monthly basis, three water quality reports are submitted to the Minnesota Department of Health.

Important Information for you to better understand this report:

Definitions:

Key to abbreviations:

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.

MRDL - Maximum Residual Disinfectant Level.

MRDLG - Maximum Residual Disinfectant Level Goal.

AL - Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirement 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.

ppm - Parts per million, which can also be expressed as milligrams per liter (mg/l).

ppb - Parts per billion, which can also be expressed as micrograms per liter (µg/l).

N/A - Not Applicable (does not apply).

Compliance with National Primary Drinking Water Regulations:

During the year, we had a treatment technique violation for failure to take water parameter samples as required.

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 from human activity.

Contaminants that may be present in source water include:

Microbial Contaminant:

Such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminant:

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 Herbicide:

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.

Water Quality Roundup: Results of Monitoring

No contaminants were detected at levels that violated federal drinking water standards. However, some 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. (Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for in 2016. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred.)

Results of 2016 Water Quality Analyses:

Contaminant (units)	MCLG	MCL	Level Found		Typical Source of Contaminant
			Range (2015)	Average /Result*	
Barium (ppm) (06/17/2014)	2	2	N/A	.09	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	4	4	.4-1.1	1.02	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.
Haloacetic Acids (HAA5) (ppb)	0	60	18.4 - 25.7	25.7	By-product of drinking water disinfection.
TTHM (Total trihalomethanes) (ppb)	0	80	51.3 – 55.4	55.4	By-product of drinking water disinfection.

**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.*

Results of Lead and Copper Analyses:

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. City of Baxter 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.epa.gov/safewater/lead>.

Contaminant (units)	MCLG	AL	90% Level	# of sites over AL	Typical Source of Contaminant
Copper (ppm) (06/25/2013)	1.3	1.3	.8	0 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb) (06/25/2013)	0	15	3.1	1 out of 20	Corrosion of household plumbing systems; Erosion of natural deposits.

Results of Chlorine Analyses:

Contaminant (units)	MRDLG	MRDL	****	*****	Typical Source of Contaminant
Chlorine (ppm)	4	4	.12 – 1.25	.72	Water additive used to control microbes.

****Highest and Lowest Monthly Average.

*****Highest Quarterly Average.

Additional Analyses:

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.

Everyone is Responsible for Ensuring the Continued Safety of our Water:

We all need to work together to protect our precious water resources. This includes taking steps to prevent problem tomorrow.

Protecting Our Area's Water Resources:

- Help identify land uses and potential sources of contamination on your property (wells, tanks, septic systems, hazardous wastes, etc.)
- Make sure any potential sources of contaminations under your control meet local, state and federal regulations.
- Seal unused wells on your property, according to Minnesota Well Code. See the Minnesota Department of Health website for more information. Owners of active wells should refer to the Well Owner's Handbook for proper construction, maintenance and sampling information.
- Use hazardous products only as directed and dispose of them properly when no longer needed. Visit the Crow Wing County website for information on handling and disposal of wastes.
- Practice proper turf management techniques and avoid over-fertilization of your lawns or gardens. Visit the Minnesota Department of Agriculture website for more information.
- Report spills or illegal dumping of hazardous wastes, fuels, or chemicals to law enforcement.

Customer Questions Welcome:

An often asked question is the hardness of the City of Baxter's tap water. In 2015, the average hardness was 13 grains/gallon.

If you have any questions about Baxter's drinking water or would like information about opportunities for public participation in decisions that may affect the quality of the water; please call the Public Works Department at (218) 454-5115, or you may email questions or comments to publicwork@baxtermn.gov.

If you have questions about your monthly utility bill, please call the Utility Billing Department at (218) 454-5121, or you may email questions or comments to ub@baxtermn.us.

For more information about drinking water:

Minnesota Department of Health – www.health.state.mn.us

U.S. Environmental Protection Agency – www.epa.gov/drink