2017 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, 2017. Baxter works hard to provide you with safe and reliable drinking water that meets state and federal requirements. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

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 (http://www.health.state.mn.us/divs/eh/water/factsheet/com/sampling/html.)

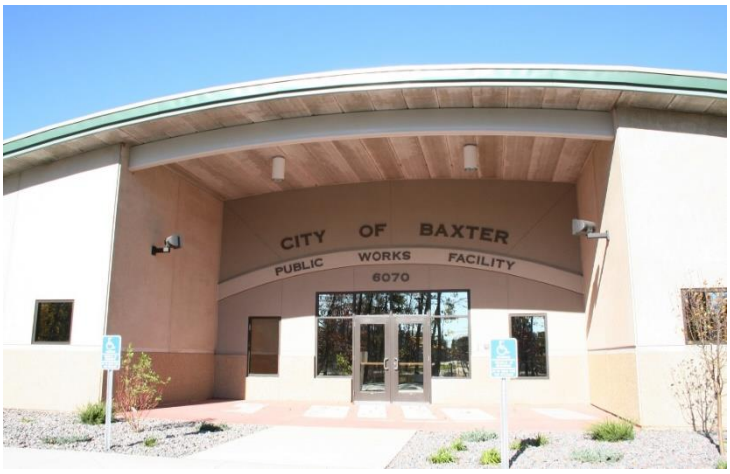
Baxter's Water Supply: Source of Water

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?

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.

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.

Water Quality Roundup: Results of Monitoring

Important Information for you to better understand this report:

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 2017. 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.)

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 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Definitions:

Key to abbreviations:

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.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

MRDLG (Maximum residual disinfectant level goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA (Not applicable): Does not apply.

NTU (Nephelometric Turbidity Units): A measure of the cloudiness of the water (turbidity).

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).

PWSID: Public water system identification.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Results of 2017 Water Quality Analyses:

**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.*

INORGANIC & ORGANIC CONTAMINANTS – Tested in drinking water.

Contaminant (Date, if sampled in previous year)	**EPA's Limit** (MCL)	**EPA's Ideal Goal** (MCLG)	**Highest Average or Highest Single Test Result**	**Range of Detected Test Results**	**Violation**	**Typical Sources**
Barium (06/17/14)	2 ppm	2 ppm	0.09 ppm	N/A	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposit.
Combined Radium	5.4 pCi/l	0 pCi/l	1.1 pCi/l	N/A	NO	Erosion of natural deposits.

CONTAMINANTS RELATED TO DISINFECTION – Tested in drinking water.

Substance (Date, if sampled in previous year)	**EPA's Limit** (MCL or MRDL)	**EPA's Ideal Goal** (MCLG or MRDLG)	**Highest Average or Highest Single Test Result**	**Range of Detected Test Results**	**Violation**	**Typical Sources**
Total Trihalomethanes (TTHMs)	80 ppb	N/A	47.4 ppb	46.80 - 47.40 ppb	NO	By-product of drinking water disinfection.
Total Haloacetic Acids (HAA)	60 ppb	N/A	38 ppb	24.10 - 38.00 ppb	NO	By-product of drinking water disinfection.
Total Chlorine	4.0 ppm	4.0 ppm	0.71 ppm	0.38 - 0.99 ppm	NO	Water additive used to control microbes.

Total HAA refers to HAA5

OTHER SUBSTANCES – Tested in drinking water.

Substance (Date, if sampled in previous year)	**EPA's Limit** (MCL)	**EPA's Ideal Goal** (MCLG)	**Highest Average or Highest Single Test Result**	**Range of Detected Test Results**	**Violation**	**Typical Sources**
Fluoride	4.0 ppm	4.0 ppm	1.1 ppm	1.00 - 1.20 ppm	NO	Erosion of natural deposits; Water additive to promote strong teeth.

Potential Health Effects and Corrective Actions (If Applicable):

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 1.5 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.

Results of Lead and Copper Analyses:

LEAD AND COPPER – Tested at customer taps.						
Contaminant (Date, if sampled in previous year)	**EPA's Action Level**	**EPA's Ideal Goal** (MCLG)	**90% of Results Were Less Than**	**Number of Homes with High Levels**	**Violation**	**Typical Sources**
Lead (07/22/16)	90% of homes less than 15 ppb	0 ppb	3.1 ppb	1 out of 20	NO	Corrosion of household plumbing.
Copper (07/22/16)	90% of homes less than 1.3 ppm	0 ppm	0.8 ppm	0 out of 20	NO	Corrosion of household plumbing.

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. Baxter provides high quality drinking water, but it cannot control the plumbing materials used in private buildings.

Read below to learn how you can protect yourself from lead in drinking water.

1. **Let the water run** for 30-60 seconds before using it for drinking or cooking if the water has not been turned on in over six hours. If you have a lead service line, you may need to let the water run longer. A service line is the underground pipe that brings water from the main water pipe under the street to your home.

    - You can find out if you have a lead service line by contacting your public water system, or you can check by following the steps at: Are your pipes made of lead? Here's a quick way to find out (https://www.mprnews.org/story/2016/06/24/npr-find-lead-pipes-in-your-home).
    - The only way to know if lead has been reduced by letting it run is to check with a test. If letting the water run does not reduce lead, consider other options to reduce your exposure.

2. **Use cold water** for drinking, making food, and making baby formula. Hot water releases more lead from pipes than cold water.

3. **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 Minnesota 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.

4. **Treat your water** if a test shows your water has high levels of lead after you let the water run.
    - Read about water treatment units:
      Point-of-Use Water Treatment Units for Lead Reduction
      (http://www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html)

Learn more:

- Visit Lead in Drinking Water (http://www.health.state.mn.us/divs/eh/water/contaminants/lead.html#Protect)
- Visit Basic Information about Lead in Drinking Water (http://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, visit Lead Poisoning Prevention: Common Sources (http://www.health.state.mn.us/divs/eh/lead/sources.html).

Compliance with National Primary Drinking Water Regulations:

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 Baxter 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 (www.health.state.mn.us/divs/eh/water/swp/swa/) or call 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

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 2017, 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