



City of
Maple Grove

Water Quality Report

763.494.6370

The City of Maple Grove is issuing the results of monitoring done on its drinking water for the period from **January 1 to December 31, 2018**. The purpose of this report is to advance consumers' understanding of drinking water and heighten awareness of the need to protect precious water resources.

This report contains very important information. Translate or ask someone who understands it. Información importante. Si no la entiende, haga que alguien se la traduzca ahora. Nov yog ntaub ntawv tseem ceeb. Yog koy tsi to taub, nrhiav neeg pab txhais rau koh kom sai sai.

We are proud to present to you our **2018 City of Maple Grove Water Quality Report**. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

IMPORTANT CONTACT INFORMATION

The **Maple Grove Utility Division** is located at 9030 Forestview Lane North and can provide information or assistance for the following services:

- Leak at water meter or meter horn
- Water leak outside or at curb stop
- Hydrant maintenance or repairs
- Frozen meters or water lines
- Water quality/hardness
- Water treatment plant tours
- Watermain flushing
- Low water pressure
- Turn off at outside curb stop
- Sewer gas odor
- Sewer backup
- Water conservation kit

Office hours are Monday – Friday from 7:30 a.m. – 4:00 p.m. Please contact this office at **763.494.6370** during business hours or for **after hour water and sewer emergencies**.

The **Maple Grove Utility Billing Department** is located in the Finance Department at the Maple Grove Government Center at 12800 Arbor Lakes Parkway and can provide information or assistance for the following services:

- Utility rates and billing questions
- Change in owner/renter
- Mailing address changes
- Information on reading your water meter
- Winterizing your water system
- Auto payment options

Please contact this office at **763.494.6330** during business hours Monday – Friday from 8:00 a.m. – 4:30 p.m.

WATER SOURCE

The City of Maple Grove provides drinking water to its residents from groundwater sources; primarily from 10 wells, 157 to 295 feet deep, developed in the surficial Glacial Drift aquifer. The City has another 2 wells developed in the Mt. Simon-Hinckley bedrock aquifer, used for emergency supply only. Total pumping capacity is 34,000 gallons per minute.

Raw water is pumped from the wells to the Maple Grove water treatment plant where it is treated to reduce iron and manganese content. Manganese content is reduced from .6 parts per million to .03 parts per million and iron content is reduced from .02 parts per million to .001 parts per million. These elements pose no health threat, however can cause water discoloration and staining. Raw water is also treated with chlorine and fluoride as required by the Minnesota State Health Department (MDH).

The treated water is then pumped into the distribution system having two elevated water towers and ground storage reservoir with combined capacity of 10.5 MG. The storage

tanks provide for water pressure, peak day demand, and fire protection. Maple Grove Public Water Supply system provides about 2.8 BGY treated water to Maple Grove, Osseo, Corcoran, and Dayton.

Minnesota Department of Health source water assessment identifies the Drift aquifer wells as vulnerable to contamination. To obtain the MDH source water assessment, please call 651-201-4700 or 1-800-818-9318 (and press 5) during normal business hours. It can be viewed on line at: www.health.state.mn.us/divs/eh/water/swp/swa. Maple Grove Wellhead Protection Plan identifies Drift aquifer recharge management area, potential contamination sources, and management practices.

The City of Maple Grove Utility Division employees are committed to respond to the needs of the citizens of our community in a timely and professional manner. Water and Sewer Department vehicles are blue in color and utility personnel carry Maple Grove photo identification cards.



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Making Safe Drinking Water

Your drinking water comes from a groundwater source: ten wells ranging from 157 to 295 feet deep, that draw water from the Quaternary Buried Artesian and Quaternary Water Table aquifers.

Maple Grove 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 Mark Nelson, Utilities Supervisor, at 763-494-6370 or mnelson@maplegrovern.gov if you have questions about Maple Grove'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.

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.

Maple Grove Monitoring Results

This report contains our monitoring results from January 1 to December 31, 2018. 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 (shown on page 4) 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 651-201-4700 or 1-800-818-9318 between 8:00 a.m. and 4:30 p.m., Monday through Friday.

Definitions

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

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 (ug/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.

Monitoring Results – Regulated Substances

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
Copper (06/09/16)	90% of homes less than 1.3 ppm	0 ppm	0.92 ppm	1 out of 30	No	Corrosion of household plumbing.
Lead (06/09/16)	90% of homes less than 15 ppb	0 ppb	1.9 ppb	0 out of 30	No	Corrosion of household plumbing.

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
Combined Radium	5.4 pCi/l	0 pCi/l	0.2 pCi/l	N/A	No	Discharge from metal degreasing sites and other factories.

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	18.9 ppb	12.70 – 18.90 ppb	No	By-product of drinking water disinfection.
Total Haloacetic Acids (HAA)	60 ppb	N/A	4.4 ppb	2.80 – 4.40 ppb	No	By-product of drinking water disinfection.
Total Chlorine	4.0 ppm	4.0 ppm	0.3 ppm	0.18 – 0.56 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	0.73 ppm	0.71 – 0.76 ppm	No	Erosion of natural deposits; water additive to promote strong teeth.

*During routine sampling last year, we had one positive test for E. coli. When this happens, we take a follow-up sample to confirm whether there is actually E. coli present. This type of follow-up sampling is done because there can be sampling or testing errors. The Minnesota Department of Health performed the follow-up samples, which were negative, meaning we did not have a confirmed presence of E. coli.

Potential Health Effects and Corrective Actions (If Applicable)

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.

E. coli: E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for

infants, young children, the elderly, and people with severely-compromised immune systems.

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.

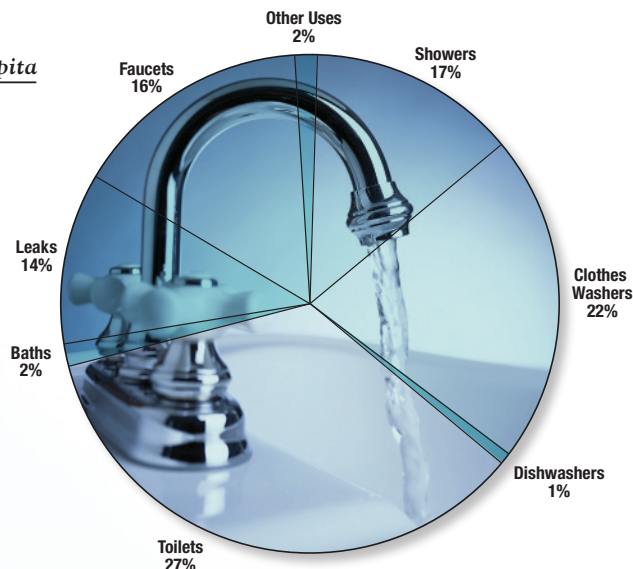
Home Water Use – Know The Facts

When we scan our quarterly water bill and see the number of gallons we have used in the past ninety days, do we consider where in our household the water use occurred? A little insight into typical home water use can shed light on how we use water and how we can take steps to use it more efficiently. According to the *Handbook of Water Use and Conservation* by Amy Vickers, daily indoor per capita water use in the typical single family home is 69.3 gallons.

Water Use Breakdown

Use	Gallons Per Capita
Showers.....	11.6
Clothes Washers.....	15.0
Dishwashers.....	1.0
Toilets	18.5
Baths	1.2
Leaks	9.5
Faucets	10.9
Other Domestic Uses.....	1.6

Reprinted from American Water Works Association



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

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. Maple Grove 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: <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://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.
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](https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html) (<https://www.health.state.mn.us/communities/environment/water/factsheet/poulead.html>)

Learn More

- Visit [Lead in Drinking Water](https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html) (<https://www.health.state.mn.us/communities/environment/water/contaminants/lead.html>)
- Visit [Basic Information about Lead in Drinking Water](http://www.epa.gov/safewater/lead) (<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](https://www.health.state.mn.us/communities/environment/lead/sources.html) (<https://www.health.state.mn.us/communities/environment/lead/sources.html>).

Questions Often Asked About Your Water

What is the hardness of the water?

The level is 25-28 grains or 428-479 parts per million hardness.

Does the water treatment plant soften the water?

No, only iron and manganese are removed.

Do we need to install a water softener in our home?

The hardness level of 25-28 grains is relatively high, therefore, the majority of homes and businesses in the community find it desirable to soften water through privately owned softeners or a softening service.

What chemicals are added to the water?

Chlorine is added to the water for purposes of disinfection. Maple Grove maintains a .05 parts per million chlorine concentration.

Fluoride (for healthy teeth) is added to municipal water systems as required by the Minnesota Department of Health. Daily tests are conducted to insure maintenance of a .5 - .9 parts per million concentration. Test results are then submitted to the State of Minnesota.

Polyphosphate (a food product) is added to the system at a ratio of 5 parts per million. Polyphosphates coat the inside diameter of water pipes, lowering the potential lead and copper concentrations.

Is the water safe to drink?

Yes, the water meets or exceeds the State requirement of the Safe Drinking Water Act. Seventy (70) sample tests are taken from various locations each month to insure safety. In addition, the Minnesota Health Department performs a complete system test every eighteen months. Per the requirement of the United States Environmental Agency particular to the city, random samplings are conducted of lead and copper levels in residential water supplies. To date, all test results comply with the recommended guidelines set by this agency.

What is causing the low pressure in my home?

Normally, low pressure is caused by a malfunctioning water softener. This can be confirmed by checking the pressure at an unsoftened inside or outside tap, or by putting the water softener on by pass (see your owners manual). If the pressure returns to normal, your softener may need repair. The average pressure in the city distribution system is approximately 75 pounds per square inch.

Why is there sand in the water?

The sudden onset of particles which resemble sand are most often the result of a water softener malfunction. These particles collect in faucet screens, washer intake hose screens, and toilet tanks. Please check your owners manual or maintenance company for assistance.

A Career in the Water Industry is Waiting for YOU!

St. Cloud Technical College's Water Environment Technologies program provides you with the skills you need to land a great job in this rapidly growing industry.

There are many benefits to this program:

- Hands-on Learning
- 12-month Program
- Metro and St. Cloud Locations
- 95% Placement Rates

For more information on this career program, call St. Cloud Technical and Community College 320-308-5952 or email instructor Bill Spain at: bspain@stccc.edu.



A member of Minnesota State

Sump Pump Connections

Each year, millions of gallons of storm water flow into the sanitary sewer system, increasing sewage treatment costs dramatically. These costs are passed on to consumers through increased quarterly sewage rates. Improper connections occur when a sump pump is allowed to drain via a hose leading to the laundry tub or floor drain. If your home is improperly connected, please contact the Maple Grove Utility Division at 763-494-6370 for information and assistance in correcting the connection.

PROPER CONNECTION

