Cottage Grove
Water Quality Report
2018

Cottage 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.

Inside this report, you'll find results of the water quality monitoring performed from January 1 to December 31, 2017 and updates on the steps we've been taking to enhance the quality of our local drinking water.

We are pleased to share the test results which show that Cottage Grove water met or exceeded all federal and state drinking water standards throughout 2017.

Cottage Grove's Water Source

Your drinking water comes from a groundwater source. In 2017, we operated twelve wells which range from 284 to 427 feet deep. Each well draws water from the Jordan aquifer.

The Minnesota Department of Health (MDH) provides information about your drinking water sources in a source water assessment which addresses ways Cottage Grove is protecting your drinking water sources; 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 well construction.

Call 651-201-4700 or 1-800-818-9318 between 8:00am and 4:30pm (M-F) to request a copy of your source water assessment or find it online at:

www.health.state.mn.us/divs/eh/water/swp/swa/

Contact Rick Alt, Utilities Supervisor at 651-458-2842 if you have questions about Cottage Grove's drinking water. You can also ask for information about how you can take part in decisions that may affect water quality.

Regulating Drinking Water

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.

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. Get more information about contaminants and potential health effects by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Results of Monitoring

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 MDH webpage Basics of Monitoring and Testing of Drinking Water in Minnesota http://www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html

The table across the page lists the contaminants we found last year or the most recent time we sampled for that contaminant. It also displays the levels of those contaminants and the EPA'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 MDH at 651-201-4700 or 1-800-818-9318 between 8:00am and 4:30pm (M-F).

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.

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.

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.

Substance *(units) test date*	MCL	MCLG	Level Detected	Range	Major Source of Contaminant
Gross Alpha *(pCi/l) 2016*	15.4	0	6.9	N/A	Erosion of natural deposits.
Combined Radium *(pCi/l) 2016*	5.4	0	2.9	N/A	Erosion of natural deposits.
Nitrate *(ppm)*	10.4	10	1.4	nd-1.4	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Trichloroethylene *(ppb)*	5	0	0.34	nd-.34	Discharge from metal degreasing sites and other factories.
cis-1,2-Dichloroethene *(ppb)*	70	70	0.31	nd-.31	Discharge from chemical and agricultural chemical factories.
Fluoride *(ppm)*	4	4	0.68	0.44-0.83	Erosion of natural deposits; Water additive to promote strong teeth
Total Chlorine *(ppm)*	4 MRDL	4 MRDLG	0.41	0.37-0.46	Water additive used to control microbes.
Total Trihalomethanes *(ppb)*	80 MRDL	0 MRDLG	6.2	nd-6.2	By-product of drinking water disinfection.
Substance *(units) test date*	AL	MCLG	90% Level	Sites Over AL	**Major Source of Contaminant**
Copper *(ppm) 6/17/2016*	1.3	1.3	0.08	0 of 30 sites	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead *(ppb) 6/17/2016*	15	0	5.9	0 of 30 sites	Corrosion of household plumbing systems; Erosion of natural deposits.

Terms and Abbreviations in the Table

Level Detected: 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.

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.

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.

AL: Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirement which a water system must follow.

90% 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.

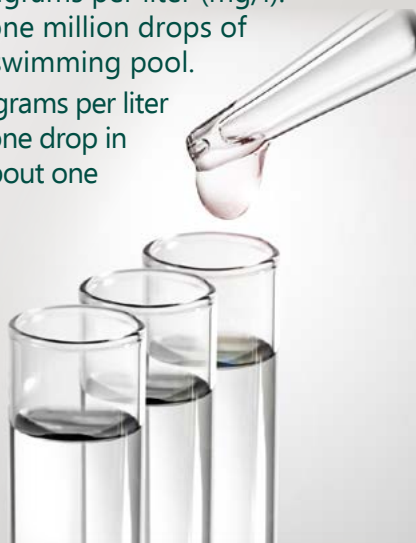
ppm: Parts per million or milligrams per liter (mg/l). One ppm is like one drop in one million drops of water, or about one cup in a swimming pool.

ppb: Parts per billion or micrograms per liter (µg/l). One ppb in water is like one drop in one billion drops of water, or about one drop in a swimming pool.

pCi/l: PicoCuries per liter (a measure of radioactivity).

nd: No detection.

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



Lead

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 present in drinking water at the source, but it can get in your drinking water as it passes through lead service lines and your household plumbing system. Cottage Grove provides high quality drinking water, but it cannot control the plumbing materials used in private buildings.

There are no lead service lines in the Cottage Grove's public water system.

To limit exposure to lead in drinking water, run your water for 30-60 seconds before using it for drinking or cooking when the water has not been used on in over six hours.

Use cold water for drinking, making food, and making baby formula as hot water releases more lead from plumbing than cold water.

In most cases, these actions should keep lead levels low in your drinking water. If you are still concerned about lead, you may arrange with a laboratory to test your tap water. A lab test is the only way to know if the lead concentration is reduced.

Testing your water is important if young children or pregnant women drink your tap water.

Contact an MDH accredited laboratory to get a sample container and instructions on how to submit a sample to the Environmental Laboratory Accreditation Program:

- **http://www.health.state.mn.us/accreditation**

The Minnesota Department of Health can help you understand your test results. If your test results show that your water has high levels of lead after you let the water run, treat your water.

Read about water treatment units:

- **www.health.state.mn.us/divs/eh/water/factsheet/com/poulead.html**

To learn more about lead in drinking water:

- **www.health.state.mn.us/divs/eh/water/contaminants/lead.html#Protect**
- **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:

- **www.health.state.mn.us/divs/eh/lead/sources.html**

Utility News

- In 2017, two GAC filter plants were installed to treat water at wells #3 and #10. These substantial improvements were made to remove PFC's from our source water. The new plants have increased the quality and safety of our drinking water.
- Our newly built well #12 came online in June of this year. The well can pump up to 1,500 gallons-per-minute. It is located in the Pine Cliff neighborhood.
- In 2017, Cottage Grove pumped a total of 938,241,005 gallons. That total is below previous years' totals due to the watering ban that was in effect until the two filter plants came online.

Water Conservation

The City of Cottage Grove observes an odd/even watering restriction all year. Outdoor watering is prohibited daily between the hours of 12pm (noon)-4pm.

Cooperation from our entire community to critical to ensure that none of our residents are shorted the clean and dependable drinking water we all need. Of all the ways we use water, lawn-watering uses the greatest volume by far. Good watering habits will reduce wasted water more than any other effort we can make. Your efforts to conserve are greatly appreciated!

Please join in the Cottage Grove Green and Blue Challenge. Our goal this year is to reduce water consumption throughout the city to less than 75 gallons per person per day. You could win a $50 credit on your water bill. For details, please visit:

www.cottagegrovemn.gov/rain-barrel-rebate

Please follow these simple practices:

- Water only during low-light periods
- Don't leave faucets running
- Check toilets for leaks
- Detect household leaks by turning off all faucets, then viewing the flow indicator on your water meter
- Repair leaks promptly