# Cottage Grove Water Quality Report 2019

Cottage Grove works hard to provide you with safe and reliable drinking water that meets all Federal and State water quality requirements. This report provides you with information on your drinking water and ways to protect our precious water resources.

We work with the Minnesota Department of Health (MDH) to test drinking water for more than 100 potential contaminants each year. It is not unusual to detect contaminants in small amounts as no water is ever completely free of contaminants. Drinking water standards protect Minnesotans from substances that may be harmful to their health.

This report shares the results of monitoring done on Cottage Grove drinking water for the period from January 1 to December 31, 2018.

Learn more by visiting the MDH webpage "Basics of Monitoring and Testing of Drinking Water in Minnesota."

**www.health.state.mn.us/communities/environment/water/factsheet/sampling.html**

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 ways you can take part in decisions that may affect water quality.


## Cottage Grove's Water Source

The City of Cottage Grove provides drinking water to its residents from a groundwater source. In 2018, we operated twelve wells which range from 284 to 475 feet deep. Each well draws water from the Jordan aquifer.

The MDH also provides information about your drinking water source by means of a Source Water Assessment addressing ways Cottage Grove is protecting your drinking water source.This includes identifying nearby threats to your drinking water source and how easily water and pollution can move from the surface of the land into drinking water sources. These findings are based on natural geology and well construction.

Cottage Grove
Where Pride and Prosperity Meet

*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/communities/environment/water/swp/swa**

## 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 and all of the water distributed by Cottage Grove. 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 (EPA) sets safe drinking water standards. These standards limit the amounts of specific contaminants allowed in drinking water. This ensures 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.

## Monitoring Water Quality

Learn more by visiting the MDH webpage Basics of Monitoring and Testing of Drinking Water in Minnesota
www.health.state.mn.us/divs/eh/water/factsheet/com/sampling.html

The table on the following 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 table with the detection date.

In addition to testing drinking water for contaminants regulated under the Safe Drinking Water Act, we also monitor for contaminants that are not regulated. Unregulated contaminants do not have legal limits for drinking water.

Detection alone of a regulated or unregulated contaminant should not cause concern. The meaning of a detection should be determined considering current health effect information. We are still learning about health effects, so this information can change over time.

The unregulated contaminants that were detected last year are reported in the table across the page, along with human-health guidance values for comparison, where available.

The comparison values are based only on potential health impacts and do not consider our ability to measure contaminants at very low concentrations or the cost and technology of prevention and/or treatment. They may be set at levels that are costly, challenging, or impossible for water systems to meet. For example, large-scale treatment technology may not exist for a given contaminant.

A person drinking water with a contaminant at or below the comparison value would be at little or no risk for harmful health effects. If the level of the contaminant is above the comparison value, people of a certain age or with special health conditions (such as fetuses, infants, children, elderly, and people with impaired immunity) may need to take extra precautions. Because these contaminants are unregulated, the EPA and MDH require no particular action based on detection of an unregulated contaminant. We are notifying you of the unregulated contaminants we've detected as a public education opportunity. More information is available on MDH's *A-Z List of Contaminants in Water*
www.health.state.mn.us/communities/environment/water/contaminants/index.html
and *Fourth Unregulated Contaminant Monitoring Rule (UCMR4)*
www.health.state.mn.us/communities/environment/water/com/ucmr4.html

There may have been 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).

### 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. Impacted individuals 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.**

tested in drinking water

| Substance (units) test date | MCL | MCLG | Level Detected | Range | Typical Source of Contaminant |
|---|---|---|---|---|---|
| **Arsenic** (ppb) | 10.4 | 0 | 1.02 | N/A | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| **cis-1,2-Dichloroethene** (ppb) | 70 | 70 | 0.26 | nd-0.2 | Discharge from chemical and agricultural chemical factories. |
| **Combined Radium** (pCi/l) | 5.4 | 0 | 3.2 | 1.2-3.2 | Erosion of natural deposits. |
| **Fluoride** (ppm) | 4 | 4 | 0.72 | 0.58-0.78 | Erosion of natural deposits; Water additive to promote strong teeth |
| **Gross Alpha** (pCi/l) | 15.4 | 0 | 11 | 3.2-11 | Erosion of natural deposits. |
| **Nitrate** (ppm) | 10.4 | 10 | 0.47 | nd-0.47 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| **Sodium*** (ppm) | N/A | Comparison Value= 20 | 7.08 | 2.88-7.08 | Erosion of natural deposits. |
| **Sulfate** (ppm) | N/A | Comparison Value= 500 | 36.3 | 24.1-36.3 | Erosion of natural deposits. |
| **Total Chlorine** (ppm) | 4 MRDL | 4 MRDLG | 0.44 | 0.42-0.48 | Water additive used to control microbes. |
| **Total Haloacetic Acids** (ppb) | 60 MRDL | N/A | 2.8 | 2.4-2.8 | By-product of drinking water disinfection. |
| **Total Trihalomethanes** (ppb) | 80 MRDL | N/A | 4.6 | nd-4.6 | By-product of drinking water disinfection. |
| **Trichloroethylene** (ppb) | 5 | 0 | 0.32 | nd-.29 | Discharge from metal degreasing sites and other factories. |

tested at customer taps

| Substance (units) test date | AL | MCLG | 90% Level | Sites Over AL | Typical Source of Contaminant |
|---|---|---|---|---|---|
| **Copper** (ppm) 6/17/2016 | 90% <1.3 | 0 | 0.08 | 0 of 30 sites | Corrosion of household plumbing systems; Erosion of natural deposits. |
| **Lead** (ppb) 6/17/2016 | 90% <15 | 0 | 5.9 | 0 of 30 sites | Corrosion of household plumbing systems; Erosion of natural deposits. |

*home water softening can increase the level of sodium in your water

## 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 of age, and pregnant women are at the highest risk.

Lead is rarely present in drinking water at the source, but it can enter 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 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 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 make arrangements 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 obtain a sample container and instructions on how to submit a sample to the Environmental Laboratory Accreditation Program:

**www.health.state.mn.us/accreditation**

The Minnesota Department of Health can help you understand your test results. If your test results show 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/communities/environment/water/factsheet/hometreatment.html**

To learn more about lead in drinking water:

**www.health.state.mn.us/communities/environment/water/contaminants/lead.html**

**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/communities/environment/lead/sources.html**

## Utility News

Since 2017, the City's two granular activated carbon (GAC) filter plants continue to provide the safe, high-quality water our customers depend on.

In 2018, the City pumped 1,097,166,614 gallons of water. The peak pumping day occurred on August 15 with 7,501,728 gallons.

Currently the City of Cottage Grove is participating in the 3M PFC settlement process, which is guiding the use of $720 million in settlement money to address issues related to PFAS contamination in the East Metro. This process is being led by the Co-Trustees of the settlement, the Minnesota Pollution Control Agency (MPCA) and the Minnesota Department of Natural Resources (DNR). This process involves monthly meetings of the Government & 3M Working Group, Citizen & Business Working Group and Technical Subgroup for Drinking Water Supply to develop a Conceptual Drinking Water Supply Plan (CDWSP) for the East Metro. The CDWSP will be a guiding document to providing safe drinking water in sufficient supply for the East Metro now and into the future. The CDWSP is scheduled to be complete in December of 2019. For more information on the 3M PFC settlement visit the website at **https://3msettlement.state.mn.us/**

## 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.

## Water Conservation

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

Cooperation from our entire community is critical to ensure that none of our residents are denied 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!

The City is offering a smart irrigation controller program for homeowners and small business owners.

**www.cottagegrovemn.gov/residents/smart_irrigation_controller_program.php**