

## City of St. James Water Department

### 2017 Water Quality Report

The City of St. James is pleased to present to you this year's Annual Water Quality Report for the period of January 1 to December 31, 2017. This report is designed to inform you about the quality of water and services we deliver to you every day. This report is also to advance consumer's understanding of drinking water and heighten awareness of the need to protect our precious water resources.

Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your drinking water.

We are pleased to report that our drinking water is safe and meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please contact our Water Superintendent Jason Monnens at 375-1229. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the first and third Tuesday of the month at 5:30 pm at the community building located at 505-1<sup>st</sup> Ave. South.

Water conservation is a high priority for the City of St. James. Public education for the wise use of water resources should be a priority of everyone. The City of St. James has a water conservation plan in place.

The City Water Department now has the ability to now show our customers when and how much water is used at their residence with the new water meters that were installed. We also have dye strips available for each customer to use for checking your toilet for any leaks they may have or give us a call and we will come and check for you.

If you would like more information or ideas on how to conserve water feel free to contact the City at 375-3241 or 375-1229. You may also go on line at [www.mrwa.com](http://www.mrwa.com) and look under news/publications. Then click on water conservation where there are many articles to look under. They range from conservation tips on water use to a calculator that will show how much water is lost from a leaking stool or faucet.

**Informacion importante Si no la entienda, hage que alguien se la traduzca ahora**

#### Source of water

The City of St. James provides drinking water to its residents from the following groundwater sources:

**There are six wells ranging from 48 to 194 feet deep that draw water from the Quaternary Water Table and Quaternary Buried Artesian aquifer.**

**The water provided to customers may meet drinking water standards, but the Minnesota Department of Health has also made a determination as to how vulnerable the source 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/swo/swa](http://www.health.state.mn.us/divs/eh/water/swo/swa).**

**If you have any questions about the City of St. James drinking water or would like more information about opportunities for public participation in decisions that may affect the quality of the water you can call us at 375-1229.**

**The City of St. James Municipal water routinely monitors for contaminants in your drinking water according to all federal and state laws. The table below shows the results of our monitoring for the period of January 1 – December 31, 2017.**

## Saint James Monitoring Results

This report contains our monitoring results from January 1 to December 31, 2017.

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

### How to Read the Water Quality Data Tables

The tables below 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 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 ( $\mu\text{g}/\text{l}$ ).
- **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 ( $\text{mg}/\text{l}$ ).
- **PWSID:** Public water system identification.
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **Variations and Exemptions:** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Water Quality Data Tables**

**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
<b>Copper (07/12/16)</b>	90% of homes less than 1.3 ppm	0 ppm	0.3 ppm	0 out of 20	NO	Corrosion of household plumbing.
<b>Lead (07/12/16)</b>	90% of homes less than 15 ppb	0 ppb	4.9 ppb	0 out of 20	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
<b>Nitrate</b>	10.4 ppm	10 ppm	0.18 ppm	N/A	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; 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
<b>Total Trihalomethanes (TTHMs)</b>	80 ppb	N/A	24.6 ppb	N/A	NO	By-product of drinking water disinfection.
<b>Total Haloacetic Acids (HAA)</b>	60 ppb	N/A	11.9 ppb	N/A	NO	By-product of drinking water disinfection.
<b>Total Chlorine</b>	4.0 ppm	4.0 ppm	1.21 ppm	0.93 - 1.44 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
<b>Fluoride</b>	4.0 ppm	4.0 ppm	0.96 ppm	0.76 - 1.30 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.

## 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.

## 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 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 Saint James 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](http://www.health.state.mn.us/divs/eh/water/swp/swa/)

([www.health.state.mn.us/divs/eh/water/swp/swa/](http://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.

## 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. Saint James 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) (<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)  
(<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)  
(<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>).