2021 Water Quality Report for City of St. Johns

Water Supply Serial Number: 6300

This report covers the drinking water quality for City of St. Johns for the 2021 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2021. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (USEPA) and state standards.

Your water comes from five groundwater wells, each over 488 feet deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is: Well # 2 Moderate, Well # 3 Moderately High, Well # 4 Moderately High, Well # 7 Moderately Low, Well # 8 Moderately Low.

There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by participating in the Well Head protection program and continuously monitoring our water supply through testing and sampling recommended by the DEQ.

If you would like to know more about the report, please contact: Justin Smith

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Contaminants and their presence in 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 USEPA's Safe Drinking Water Hotline (800-426-4791).

Vulnerability of sub-populations: 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 systems 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. USEPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Sources of drinking water: The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

- Level 2 Assessment: 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.

1Monitoring Data for Regulated Contaminants

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Arsenic (ppb)	10	0	N/A	N/A	2018	NO	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.13	N/A	2018	NO	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	N/D	N/A	2021	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	0.47	N/A	2021	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium[1] (ppm)	N/A	N/A	42	N/A	2021	NO	Erosion of natural deposits
TTHM Total Trihalomethanes (ppb)	80	N/A	.0269	N/A	2021	NO	Byproduct of drinking water disinfection
HAA5 Haloacetic Acids (ppb)	60	N/A	N/D	N/A	2021	NO	Byproduct of drinking water disinfection
Chlorine[2] (ppm)	4	4	.48	.03 - 1.13	2021	NO	Water additive used to control microbes
Alpha emitters (pCi/L)	15	0	N/A	N/A	N/A	NO	Erosion of natural deposits
Combined radium (pCi/L)	5	0	4.9	NA	2019	NO	Erosion of natural deposits
Total Coliform (total number or % of positive samples/month)	TT	N/A	0	N/A	2021	NO	Naturally present in the environment
E. coli in the distribution system (positive samples)	See *E. coli* note[3]	0	0	N/A	2021	NO	Human and animal fecal waste
Fecal Indicator – *E. coli* at the source (positive samples)	TT	N/A	0	N/A	2021	NO	Human and animal fecal waste

[1] Sodium is not a regulated contaminant.

[2] The chlorine "Level Detected" was calculated using a running annual average.

Per- and polyfluoroalkyl substances (PFAS)							
Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	370	N/A	N/D	N/A	2021	NO	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	420	N/A	N/D	N/A	2021	NO	Discharge and waste from industrial facilities; Stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	51	N/A	N/D	N/A	2021	NO	Firefighting foam; Discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	N/D	N/A	2021	NO	Firefighting foam; Discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	6	N/A	N/D	N/A	2021	NO	Discharge and waste from industrial facilities; Breakdown of precursor compounds
Perfluorooctane sulfonic acid (PFOS) (ppt)	16	N/A	N/D	N/A	2021	NO	Firefighting foam; Discharge from electroplating facilities; Discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	8	N/A	N/D	N/A	2021	NO	Discharge and waste from industrial facilities; Stain-resistant treatments
Inorganic Contaminant Subject to ALs	AL	MCLG	Your Water[4]	Range of Results	Year Sampled	Number of Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	0	0-.002	2021	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.4	0-.78	2021	0	Corrosion of household plumbing systems; Erosion of natural deposits

[3] *E. coli* MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is *E. coli*-positive, or (2) the supply fails to take all required repeat samples following *E. coli*-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for *E. coli*.

[4] Ninety (90) percent of the samples collected were at or below the level reported for our water.

Additional Monitoring

Unregulated contaminants are those for which the USEPA has not established drinking water standards. Monitoring helps the USEPA determine where certain contaminants occur and whether regulation of those contaminants is needed.

Unregulated Contaminant Name	Average Level Detected	Range	Year Sampled	Comments
[Name of Unregulated Contaminant] (unit)	N/A	N/A	N/A	Results of monitoring are available upon request
[Name of Unregulated Contaminant] (unit)	N/A	N/A	N/A	Results of monitoring are available upon request

Information about lead: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of St. johns is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you have a lead service line, it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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.

Our water supply has 0 lead service lines and 136 service lines of unknown material out of a total of 2855 service lines.

Monitoring and Reporting to the Michigan Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the USEPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2021.

We met all the monitoring and reporting requirements for 2021. We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at City of St Johns Offices 100 E State St, St Johns, Michigan. This report will not be sent to you. We invite public participation in decisions that affect drinking water quality. City Commission meetings are held the 2nd and 4th Monday of every month at the city offices. For more information about your water, or the contents of this report, contact Justin Smith Water Division Supervisor at 989-224-8944 ext 235. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.