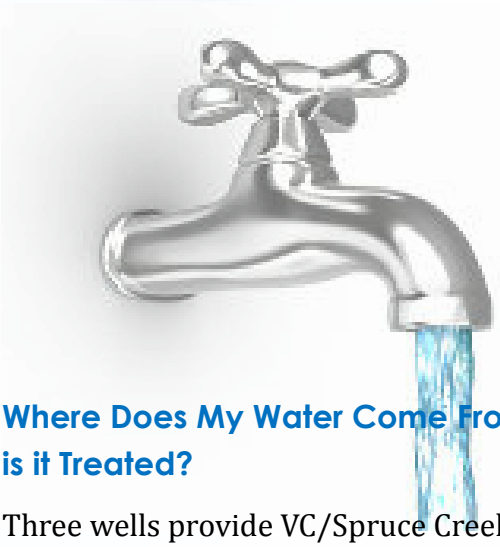
VC/Spruce Creek Fly-In Water System's 2019 Consumer Confidence Drinking Water Report



Volusia County Utilities is pleased to present to you this year's Annual Water Quality Report.

This report is designed to inform you about the quality of water and services we deliver to you every day. We want you to understand the efforts we make to provide you with a dependable and safe supply of drinking water. We are committed to ensuring the quality of your water and protecting our water resources.

Where Does My Water Come From and How is it Treated?

Three wells provide VC/Spruce Creek Fly-In with groundwater pumped from the Floridan Aquifer. Our treatment process utilizes nano filtration or membrane treatment which produces potable water of a very high quality. Further treatment includes; addition of caustic soda for pH stabilization, aeration for removal of hydrogen sulfide, addition of blended orthophosphate to inhibit corrosion and addition of chlorine to ensure the distribution system is safe from pathogenic bacteria.

Understanding Source Water Quality:

The sources of drinking water for both tap water and bottled water include rivers, lakes, streams, ponds, reservoirs, springs, and 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:

- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.
- **Microbial contaminants**, such as viruses bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which may be naturally-occurring or result from urban storm water 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, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

About Water Quality:

All 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 the 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 (800-426-4791) or by visiting the following website: epa.gov/dwstandardsregulations

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 of infections. These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available for the Safe Drinking Water Hotline (800-426-4791)

OUR WATER TREATMENT PLANTS USE PROVEN TECHNOLOGY, AND STATE-CERTIFIED OPERATORS TO ENSURE A HIGH QUALITY PRODUCT.

Lead in Drinking Water:

Volusia County Utilities routinely monitors water quality parameters at each of our groundwater supply wells and again at the point of entry into our distribution system. This allows us to ensure that proper process controls are implemented in order to ensure water characteristics such as pH, alkalinity, and calcium levels are optimal when it leaves our water treatment plant.

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. Volusia County Utilities 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 you tap for 30 seconds to two minutes before using water for drinking or cooking. 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 reduce exposure is available from the Safe Drinking Water Hotline (800-426-4791) or by visiting http://www.epa.gov/safewater/lead

Key Terms in This Report:

Volusia County Water Resources and Utilities routinely monitors for more than 80 regulated contaminants in your drinking water according to federal and state laws, rules and regulations. As you can see by the table below, laboratory analysis of our water yielded no violations of drinking water standards. All test results were well below the allowable levels. We are proud that your drinking water meets or exceeds all federal and state requirements

The primary contaminants include inorganic compounds (mostly metals that are naturally found in the environment), volatile compounds, pesticides, PCBs, and radionuclides. Secondary contaminants include compounds associated with the aesthetic quality of water. Except were indicated otherwise, this report is based on the most recent results of our monitoring for the period of January 1, 2019 to December 31, 2019. Data obtained before January 1, 2019 and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

In the water quality results tables, you may find unfamiliar terms and abbreviations. To help you better understand these terms, we have provided the following definitions:

- **Maximum Contaminant Level or MCL;** 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.
- **Maximum Contaminant Level Goal or MCLG;** 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.
- **"ND"** means not detected and indicates that the substance was not found by laboratory analysis.

- **"N/A"** means not applicable.
- **Maximum Residual Disinfectant Level or MRDL;** 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.
- **Maximum Residual Disinfectant Level Goal or MRDLG;** 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 disinfectant to control microbial contaminants.
- **Action Level (AL);** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Parts per million (ppm) or Milligrams per liter (mg/L);** One part by weight of analyte to 1 million parts by weight of the water sample.
- **Parts per billion (ppb) or Micrograms per liter (ug/l);** One part by weight of analyte to 1 billion parts by weight of the water sample.
- **90th Percentile;** Value for which ninety percent of the sites sampled were either equal to or below.

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Disinfectants and Disinfection By-Products

Contaminant and Unit of Measure	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	01/19 - 12/19	No	2.1	1.1 - 3.4	4	MRDL = 4	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	7/19	No	30.2	27.3 - 30.2	N/A	MCL = 60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM) (ppb)	7/19	No	54.9	50.8 - 54.9	N/A	MCL = 80	By-product of drinking water disinfection.

Inorganic Contaminants

Contaminant and Unit of Measure	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	06/17	No	0.051	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth at the optimum level of 0.7 ppm
Sodium (ppm)	06/17	No	27.7	N/A	N/A	160	Salt water intrusion, leaching from soil.
Arsenic (ppb)	06/17	No	0.77	N/A	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.

Lead & Copper (Tap Water)

Contaminant and Unit of Measure	Dates of Sampling (mo/yr)	AL Exceeded Y/N	90th Percentile	No. of Sampling Sites Exceeding AL (Action Level)	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	07/17	No	0.21	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (tap water) (ppb)	07/17	No	2.1	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits

Synthetic Organic Contaminants

Contaminant and Unit of Measure	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Dalapon (ppb)	06/17	No	1.1	N/A	200	200	Runoff from herbicide used on rights of way.

Source Water Assessments:

The FDEP's Source Water Assessment & Protection Program is meant to ensure that your drinking water is safe, not just at the tap, but at its source. Initiated as part of the federal Safe Drinking Water Act, the program identifies potential threats to drinking water supplies with the goal to protect our vital resources.

The most recent Source Water Assessment performed for VC/Spruce Creek Fly-In by the Department of Environmental Protection was in 2019. A search of the available data sources indicated one potential source of contamination, which was identified as being a low level of concern. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at: https://fldep.dep.state.fl.us/swapp/

Questions or Concerns?

If you have any questions or concerns about the information provided in this report, please feel free to contact Volusia County Utilities Operations at (386) 822-6465. You may also choose to attend a Volusia County Council meeting. These meetings are held twice a month on Tuesday's with public participation at 9:30 a.m. at the Thomas C. Kelly Administration Center, 123 W. Indiana Ave, DeLand. Please visit Volusia.org for specific meeting dates.

Water Conservation Practices

Save Money While Protecting Our Natural Eco-Systems

- Most of us turn off the water when brushing our teeth, and wait until the dishwasher is full before we run it. But there are lots of other ways to save water at home and in your business.
- Finding and fixing leaks is a good place to start. A leaky toilet or faucet can waste thousands of gallons of water each month, putting a hefty dent in your wallet.
- Your water fixtures may use more water than you think. Installing low-flow toilets and showerheads can dramatically reduce your indoor water consumption without reduced performance.
- Outdoors, lawn and landscape irrigation accounts for more than half of all residential water use. Watering wisely outside the home saves water and promotes healthier lawns and landscapes.
- Overwatering a lawn can promote weeds and insect pests, as well as weakened grass roots. Broken or misdirected sprinkler heads spray water onto sidewalks and pavement where it evaporates or trickles into storm drains.
- You can save water by irrigating lawns and landscapes only when they need it, by properly maintaining your irrigation system and by landscaping with plants and grasses that require minimal water. A well-designed and properly maintained Florida landscape will stay beautiful with minimal care.
- Ready to start saving water? Explore tips and other information for saving water both inside and outside your home by visiting the Saint Johns River Water Management District's Website at: http://www.sjrwmd.com/waterconservation/savingwater