

City of Niceville 2023 Annual Water Quality Report

**We are pleased to report that our drinking water meets
all federal and state requirements.**

The City of Niceville is pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is, and always has been, to provide to you a safe and dependable supply of drinking water.

If you have any questions about this report or concerning your water utility, please contact Lonnie Donaldson (Water & Wastewater Superintendent) at 850-279-6436. We want our valued customers to be informed about their water utility.

In 2023 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are eight potential sources of contamination identified for this system with low to moderate concern levels. The assessment results are available on the FDEP SWAPP website at <https://prodapps.dep.state.fl.us/swapp/> or they can be obtained from The City of Niceville at 850-279-6436.

The water we withdraw from the Floridan Aquifer is recharged by rainfall in northern parts of Okaloosa and Walton Counties and in southern Alabama and Georgia, where the formation is at or near the surface. The Floridan Aquifer underlies south Okaloosa County (Niceville) at a depth of 350 to 500 feet below the surface. For more information on the Floridan Aquifer, visit the web site of Northwest Florida Water Management District. <https://nwfwater.com/>

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water source is ground water, which is drawn from the Floridan Aquifer by 9 wells and is chlorinated for disinfection purposes and then fluoridated for dental health purposes. 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.



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.

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 1-800-426-4791.

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/Center for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The City of Niceville routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2023. Data obtained before January 1, 2023, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

CONTAMINANTS AND DEFINITIONS

In the following table you will find terms and abbreviations you might not be familiar with. To help you better understand these terms and abbreviations we've provided the following definitions and a list of contaminants that may be present in source water. The table will also show the most likely source of these contaminants.

Contaminants that may be present in source water include:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) **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.
- (C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) **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 stormwater runoff, and septic systems.
- (E) **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

Terms and Abbreviations you may find in our table:

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.

Not Detected (ND): Indicates that the substance was not found by laboratory analysis.

Parts per billion (ppb) or Micrograms per liter ($\mu\text{g/l}$): one part by weight of analyte to 1 billion parts by weight of the water sample.

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.

Picocurie per liter (pCi/L): measure of the radioactivity in water.

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

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 disinfectants to control microbial contaminants.

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. The City of Niceville 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 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>.

2023 CONTAMINANTS TABLE

Microbiological Contaminants*

Contaminant	Dates of sampling (mo/yr)	MCL Violation Y/N	Total Number of Positive Samples for the Year	MCLG	MCL	Likely source of contamination
<i>E. coli</i>	Aug-23	N	1	0	Routine and repeat samples are total coliform positive and either is <i>E. coli</i> positive or system fails to take repeat samples following <i>E. coli</i> positive routine sample or system fails to analyze total coliform positive repeat sample for <i>E. coli</i>	Human and animal fecal waste

*On Aug. 15, 2023, we sampled for the fecal indicator, *E. coli*. We were notified on Aug. 16, 2023 that a distribution location tested positive for *E. coli*. On Aug. 16, 2023, we took three additional samples and were notified on Aug. 18, 2023 that zero of the three samples were positive for *E. coli*. Because all check samples taken after the positive *E. coli* sample were absent of Total Coliform and *E. coli*, the system did not receive an MCL violation.

Radioactive Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	Sep-17	N	1.8	ND-1.8	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	Aug-23	N	1.9	ND-1.9	0	5	Erosion of natural deposits

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	Aug-23	N	0.01	0.0066-0.01	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beryllium (ppb)	Aug-23	N	0.1	ND-0.1	4	4	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	Aug-23	N	0.1	ND-0.1	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	Aug-23	N	3.6	ND-3.6	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	Aug-23	N	0.88	0.55-0.88	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Lead (point of entry) (ppb)	Aug-23	N	1.5	ND-1.5	0	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder

Radioactive Contaminants							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Mercury (inorganic) (ppb)	Aug-23	N	0.4	ND-0.4	2	2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
Sodium (ppm)	Aug-23	N	9.8	7.1-9.8	N/A	160	Salt water intrusion, leaching from soil

Stage 2 Disinfectants and Disinfection By-Products							
Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination
Chlorine (ppm)	Jan-Dec 23	N	0.62 (avg)	0.46-0.74	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	Aug-23	N	2.1	ND-2.1	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Aug-23	N	21	15-21	N/A	80	By-product of drinking water disinfection

Lead and Copper (Tap Water)							
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	Jun-Sep 23	N	0.082	0 of 30	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	Jun-Sep 23	N	4.6	0 of 30	0	15	Corrosion of household plumbing systems; erosion of natural deposits