2023 Annual Drinking Water Quality Report Town of Fort White – Columbia County Utilities PWS # 2124399 P.O. Box 969, Lake City, FL 32056

We're very pleased to provide you with this year's Annual Drinking 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.

Our water sources are two groundwater wells that draw from the Floridan aquifer at depths of 147 and 150 feet. Prior to its distribution, our water is chlorinated for disinfection purposes, treated with permanganate and filtered through green sand for iron and manganese removal, filtered through granular activated carbon for organic matter removal in addition to color, taste, and odor control, and treated with orthophosphate for further iron and manganese control.

In 2023, the Florida Department of Environmental Protection (DEP) 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 is one potential source of contamination identified for this system with a moderate susceptibility level. The assessment results are available on the DEP Source Water Assessment and Protection Program (SWAPP) website at https://prodapps.dep.state.fl.us/swapp/.

This report shows our water quality results and what they mean.

If you have any questions about this report or concerning your water utility, please contact **Columbia County Utilities** at (386) 758-1005, Customer Service Hours: Monday-Friday, 8:00am-4:30pm. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Council Meetings. They are held every third Monday of each month, at 6pm, at the Town Hall, 18 SW Wilson Springs Rd, Fort White, FL 32038 (attendance is welcomed until maximum occupancy for Town Hall -33 persons- is reached).

Town of Fort White and Columbia County Utilities routinely monitor 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 are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

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

Initial Distribution System Evaluation (IDSE): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

Locational Running Annual Average (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

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.

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 to not reflect the benefits of the use of disinfectants to control microbial contaminants.

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 (\mu g/L): one part by weight of analyte to 1 billion parts by weight of the water sample.

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

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)	08/2021	Ν	3.2	N/A	0	15	Erosion of natural deposits		

Inorganic (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)	08/2021	Ν	0.0044	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Chromium (ppb)	08/2021	Ν	1.80	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits				
Cyanide (ppb)	08/2021	Ν	7.27	N/A	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories				
Nitrate (as Nitrogen) (ppm)	05/2023	Ν	0.11	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Sodium (ppm)	08/2021	N	8.45	N/A	N/A	160	Saltwater intrusion; leaching from soil				

Stage 1 Disinfectants									
Disinfectant and Unit of	Dates of	MRDL Violation	Level	Level Range of		MDDI	Likely Source of Contemination		
Measurement	(mo/yr)	Y/N	Detected	Results	MRDLG	MINDL	Likely Source of Containination		
Chlorine (ppm)	Monthly 2023	Ν	0.81	0.2-1.21	4.0	4.0	Water additive used to control microbes		
For Chlorine, "Level Detected" is the highest running annual average (RAA) that occurred in 2023, computed quarterly, using monthly averages of all									
samples collected.	"Range of R	esults" is the 1	ange of mor	thly average	s of all indiv	idual sampl	es collected in 2023.		

Stage 2 Disinfection By-Products										
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			
Haloacetic Acids (HAA5s) (ppb)	Quarterly 2023	Y	121.46 (highest LRAA-Site 2)	8.57-168.17	N/A	60	By-product of drinking water disinfection			
Total Trihalomethanes (TTHMs) (ppb)	Quarterly 2023	Y	134.08 (highest LRAA-Site 1)	54.61- 181.18	N/A	80	By-product of drinking water disinfection			

For HAA5s and TTHMs, "Level Detected" is the highest locational running annual average (LRAA) that occurred in 2023, computed quarterly. "Range of Results" is the range of all individual samples collected from all sampling locations in 2023.

HAA5 Monitoring Results (ppb)	1 st Quarter 2023	2 nd Quarter 2023	3 rd Quarter 2023	4 th Quarter 2023						
Site 1 Quarterly Results	107.05	8.57	123.32	119.26						
Site 1 LRAA	86.47	67.00	72.67	89.55						
Site 2 Quarterly Results	93.85	93.48	168.17	130.33						
Site 2 LRAA 80.73 83.92 100.49 121.46										
Reported LRAA for Quarte	Reported LRAA for Quarters 1-3 are based on quarterly HAA5 results from 2022 not reported in this table.									
Site 1 – End of Water Line	Wilson Springs Rd									

Site 2 - CR 18 & Greenwood Terrace Hydrant

Sites selected by Initial Distribution System Evaluation (IDSE)

TTHM Monitoring Results (ppb)	1 st Quarter 2023	2 nd Quarter 2023	3 rd Quarter 2023	4 th Quarter 2023
Site 1 Quarterly Results	56.81	178.03	174.55	126.94
Site 1 LRAA	103.12	123.16	132.32	134.08
Site 2 Quarterly Results	54.61	181.18	137.47	125.50
Site 2 LRAA	99.32	121.22	121.81	124.69
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Reported LRAA for Quarters 1-3 are based on quarterly TTHM results from 2022 not reported in this table.

Site 1 – End of Water Line, Wilson Springs Rd.

Site 2 – CR 18 & Greenwood Terrace Hydrant

Sites selected by Initial Distribution System Evaluation (IDSE)

Our water system was in violation of federal and state water quality standards for Haloacetic Acids (HAA5s) during the first, second, third, and fourth quarters of 2023, or from January 1 to December 31, 2023.

The levels of HAA5s are shown in the test results tables above. Some people who drink water containing HAA5s in excess of the MCL over many years may have an increased risk of getting cancer.

Our water system was in violation of federal and state water quality standards for Total Trihalomethanes (TTHMs) during the first, second, third, and fourth quarters of 2023, or from January 1 to December 31, 2023.

The levels of TTHMs are shown in the test results tables above. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Explanation and Important Update on the Town of Fort White DBP Issues:

Columbia County Utilities, in participation with Twofold Water Engineering, Florida Rural Water Association (FRWA), and DEP have been working over the last three years to solve the Disinfection By-Products (DBPs) issues at the Town of Fort White Water Treatment Plant (WTP). Fort White WTP's source water has a high level of organic content that, when combined with the chlorine treatment, creates DBPs.

In 2021, Twofold Water, working with FRWA and DEP, tested a method of using Hydrogen Peroxide with a long enough contact time to burn off the organic content prior to it mixing with the chlorine treatment. The new treatment appeared at first to work well, and was installed at Fort White WTP in October 2021 when Columbia County Utilities began joint operation of the plant. Unfortunately, the Hydrogen Peroxide treatment has only decreased in effectiveness over time in reducing DBPs, due to an increase in water demand over the last three years where the Hydrogen Peroxide treatment can no longer keep up.

At present, Columbia County Utilities and the Town of Fort White, with consultation from Twofold Water and FRWA and permit approval from DEP, have decided to discontinue the Hydrogen Peroxide treatment and disinfection by free chlorine at the Fort White WTP, and furthermore convert to an alternate method of disinfection by combined chlorine (chloramines). Chloramines are a different, weaker method of water disinfection created by mixing chlorine and ammonia. A mixer/aerator will also be added to one of our potable water tanks for volatile DBP removal. Columbia County Utilities uses the Columbia County-Ellisville WTP as our model for this transition, as the Columbia County-Ellisville WTP has utilized chloramine treatment since 2013 and remains in compliance with all federal and state requirements.

Lastly to note, Columbia County Utilities and the Town of Fort White have initiated a joint project to establish a water main connecting Columbia County-Ellisville WTP to Town of Fort White WTP. This water main is intended to be a supplementary water source for the Town of Fort White. The project is ongoing at this time.

Secondary 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			
Color (color units)	08/2021	Y	30	N/A	N/A	15	Naturally occurring organics			
Manganese (ppm)	08/2021	Y	0.107	N/A	N/A	0.05	Natural occurrence from soil leaching			

As shown above, we exceeded the respective MCLs for Color and Manganese in 08/2021. Secondary contaminant exceedances are considered to be aesthetic violations, and are not considered by the EPA to have major health effects. We are actively treating to reduce the above secondary contaminants in our water. Please refer to our treatment processes listed on page 1, paragraph 2 of this report.

Lead and	Lead and Copper (Tap Water)											
Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90 th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination					
Copper (tap water) (ppm)	09/2021	Ν	0.105	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives					
Lead (tap water) (ppb)	09/2021	Ν	1.2	0	0	15	Corrosion of household plumbing systems; erosion of natural deposits					

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 Town of Fort White and Columbia County Utilities are 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.

The sources of drinking water (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:

- (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.

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 U.S. 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. Immunocompromised 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. U.S. Environmental Protection Agency/Center for Disease Control 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).

We at the Town of Fort White and Columbia County Utilities would like 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 water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.

PLEASE CONSERVE WATER. EVERY DROP COUNTS!