



CITRUS COUNTY DEPARTMENT OF WATER RESOURCES

Charles A. Black Water System

PWS ID # 6094948

2022 ANNUAL WATER QUALITY REPORT

INTRODUCTION:

Citrus County Department of Water Resources is proud to present our Annual Water Quality Report. The Charles A. Black Water System continuously monitors water quality and complies with all State and Federal laws. This report is based on the results for the period of January 1 to December 31, 2022. Data obtained before January 1, 2022, and presented in this report, are from the most recent testing done in accordance with laws, rules, and regulations.

Citrus County's Department of Water Resources' goal is, and always has been, to provide you with a safe, aesthetically pleasing, and dependable supply of drinking water. If you have any questions concerning Utility operations or water quality, please contact the **Citrus County Department of Water Resources at (352) 527-7650**.

WATER SOURCE:

The jointly owned Citrus County and the Withlacoochee Regional Water Supply Authority's **Charles A. Black Central Citrus County Wellfields and Water Treatment Facility's** source of water consists of eight groundwater wells drawing from the Northern West-Central Groundwater Basin of the Floridan Aquifer. Before delivery to you, the water is chlorinated for disinfection purposes and distributed from three interconnected water treatment facilities. The largest of these facilities is the Charles A. Black I Treatment Plant located in the Citrus Hills area.

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 process 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 Environmental Protection Agency (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 be reasonably 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/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 at 1-800-426-4791.

The Florida Department of Environmental Protection (FDEP) completed a Source Water Assessment for Charles A. Black system in 2022. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are seven potential sources of contamination identified for this system with low susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at <https://fldep.dep.state.fl.us/swapp/lookup.asp>. Use the PWS ID provided at the top of this report to search.

CONSERVATION:

Ensuring adequate water supplies for people and nature is critical to our Department. More importantly, water conservation saves time and money. For your free copies of water conservation brochures and tools or to request demonstrations in your community, call (352)527-7650.

MONITORING RESULTS:

The Citrus County Department of Water Resources routinely monitors water quality in order to determine the presence of any biological, inorganic, volatile organic, synthetic organic and radioactive contaminants in our drinking water according to State and Federal laws. **The table below reflects only those contaminants, which were detectable, required to be reported or were thought to be of special interest to our customers.**

DEFINITIONS:

- Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (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 (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 (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.
- Non-Applicable (N/A) .
- Non-Detectable (ND) - Laboratory analysis indicates the contaminant is not detected.
- Parts per Billion (PPB) - or micrograms per liter - one drop of ink in one of the largest tanker trucks used to haul gasoline would be an ink concentration of 1 ppb.
- Parts per Million (PPM) or Milligrams Per Liter (MG/L) - one drop of ink into a fuel tank of a compact car.
- Picocuries Per Liter (pCi/L) - measure of the radioactivity of water.
- Million Fibers per Liter (MFL) - longer than 10 micrometers.
- Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

Stage1 and 2 Disinfectants and Disinfection By-Products

Disinfectant or 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
Chlorine (ppm)	01-12/22	N	1.12	0.21 – 4.00	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
TTHM [Total trihalomethanes] (ppb)	07/22	N	5.2	2.4-5.2	N/A	MCL = 80	By-product of drinking water disinfection

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
Arsenic (ppb)	05/20	N	0.67	0.53 – 0.67	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	05/20	N	0.013	ND – 0.013	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	05/20	N	1.1	ND – 1.1	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	05/20	N	0.073	0.056 – 0.073	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)	05/20	N	0.37	ND – 0.37	N/A	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nitrate (as Nitrogen) (ppm)	04/22	N	1.6	0.13-1.6	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	05/20	N	7.4	6.0 – 7.4	N/A	160	Salt water intrusion, leaching from soil

Volatile Organic 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
Xylenes (ppm)	07/22	N	0.71	N/A	10	10	Discharge from petroleum factories; discharge from chemical factories

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
Radium-228 (pCi/L)	09/21	N	1.14	ND-1.14	0	5	Erosion of natural deposits
Combined Uranium (µg/L)	09/21	N	0.382	0.274-0.283	0	30	Erosion of natural deposits

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)	08/20	N	0.35	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	08/20	N	1.1	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. Citrus County Department of Water Resources 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>.

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Unregulated Contaminants

Beginning in July 2018, the Charles A. Black Potable Water System was monitored for Unregulated Contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. **At present, no health standards (for example, maximum contaminant levels) have been established for UCs.** If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule (UCMR), please call the Safe Drinking Water Hotline at (800)426-4791.

Unregulated Contaminants				
Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	Maximum Level Detected	Range of Detection (of multiple samples)	Use or Environmental Source
Bromide (ppb)	07/2018 01/2019	28.5	ND - 28.5	Indicator compound used for determination of HAAs.
HAA5 [Haloacetic Acids (five)] (ppb)	07/2018 01/2019	1.91	1.08 - 1.91	By-product of drinking water disinfection
HAA6Br [Haloacetic Acids (six)] (ppb)	07/2018 01/2019	1.64	1.25 – 1.64	By-product of drinking water disinfection
HAA9 [Haloacetic Acids (nine)] (ppb)	07/2018 01/2019	3.14	2.03 – 3.14	By-product of drinking water disinfection
Manganese (ppb)	07/2019 01/2020	2.2	ND – 2.2	Naturally-occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical; essential nutrient
1-butanol	07/2019 01/2020	2.9	ND – 2.9	Used as a solvent, food additive and in production of other chemicals

SYSTEM IMPROVEMENTS:

In our continuing efforts to maintain reliable water quality, water supply and to operate the utility system more efficiently the Citrus County Department of Water Resources is committed to ongoing well restoration and water plant improvements. We at the Citrus County Department of Water Resources work around the clock to provide the highest quality water to every customer's tap. We ask all customers and those on other water systems to help us protect our water sources, which are at the heart of our community, our way of life, and our children's future. If you have any questions please call the Department of Water Resources at (352) 527-7650.

FOR MORE INFORMATION CONCERNING:

This Report or Utility Operations - call Citrus County Department of Water Resources at (352) 527-5427. A copy of the complete list of all water testing parameters and the water analysis results can be obtained by contacting the Citrus County Department of Water Resources.

Water Quality - call the U.S. Environmental Protection Agency's Office Safe Drinking Water Hotline at (800) 426-4791 or call the Potable Water Section of the Department of Environmental Protection Tampa District Office at (813) 632-7600.

Local Drinking Water Quality and Testing - call the Citrus County Environmental Health Department at (352) 527-5295.

Utility Emergencies – during normal business hours call (352) 527-7650. After hours call (727) 497-5319.

Utility Billing Questions – during normal business hours call (352) 527-7650.