WALKER COUNTY WATER AND SEWERAGE AUTHORITY
2023 Annual Water Quality Report

The Walker County Water & Sewerage Authority is pleased to report that your community's drinking water met or exceeded all safety and quality standards set by the State of Georgia and EPA during the previous year. This 2023 Water Quality Report provides our customers with detailed accounts of all the monitoring and testing results gathered from water quality testing during the previous year. Our employees are committed to providing you with safe, dependable tap water on a year- round basis and are proud to provide the enclosed information.

Community Participation

You are invited to participate in our public board meetings and voice your concerns about your drinking water. We meet on the second Tuesday of every month at the Walker County Water & Sewerage Authority, 4665 Happy Valley Road, Flintstone GA 30725.

Contact Information

For more information about this report, or for any questions relating to your drinking water, please call Brandon Whitley, General Manager, at (706) 820-1455 or Randall Haney, Water Production Superintendent, at (706) 375-6603.

Source Water Assessment

A source water assessment is a study, unique to each water system, which provides basic information about drinking water. Source water assessments identify the area of land that impacts the raw water used for drinking water and identifies the major potential sources of contamination. This information is used to determine how susceptible it is to potential contaminant sources. Copies of our Source Water Assessment are available upon request. To receive a copy, please contact Randall Haney at (706)-375-6603 between 9:30am and 4:30pm Monday thru Friday.

Where Does My Water Come From?

The Walker County Water Treatment Plant, located in The City of Chickamauga.
Permitted to treat up to 4.5 million gallons a day.
An average of 1.108 million gallons a day are treated and pumped to the distribution.
Coke Oven Wells, located in The City of Chickamauga.
Permitted to treat 2.8 million gallons a day.
An average of 1.64 million gallons a day are pumped to the distribution.
The Kensington Wells, located in Kensington GA.
Permitted to treat 1.0 million gallons a day.
An average of 585 thousand gallons a day are pumped to distribution.

Treatment Process

Water from the Walker County Water Treatment Plant goes through a series of steps.
Step 1: Withdrawal Process
Raw water is drawn from our water sources (ground water) located at the plant.
Step 2: Microfiltration
Water then goes through 160 Microfiltration Modules. Microfiltration (commonly abbreviated to MF) is a type of physical filtration process where contaminated water is passed through a special pore-sized membrane to separate microorganisms and suspended particles from the water.
Step 3: Disinfection Process
Chlorine is added as a precaution against any bacteria that may still be present. We carefully monitor the amount of chlorine, adding the smallest amount necessary to protect the safety of your water without compromising taste.
Step 4: Additives and Storage
Finally, fluoride (used to promote strong bones and prevent tooth decay) and a corrosion inhibitor (used to protect distribution pipes from scale build up) are added before the water is pumped to a sanitized water storage tank. Water from the Coke Oven Wells and the Kensington Wells do not require the filtration process.

Important Health Information

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 EPA's Safe Drinking Water Hotline (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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 the following:
Microbial contaminants, such as viruses and bacteria that 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 storm 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.
Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Definitions:

AL (Action level): *The concentration of a contaminate which, if exceeded, triggers Treatment or other requirement which a water system must follow.*

Maximum Contaminant Level (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 (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 microbiological 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*

NA: *Not Applicable*

ND*: Non-Detect*

NTU Nephelometric Turbidity Units: *Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person*

ppb (parts per billion): *One part substance per billion parts water.*

ppm (parts per million): *One part substance per million parts water.*

TT (Treatment Technique*): A required process intended to reduce, the level of a contaminant in drinking water*

Regulated Substances

Substance (UNIT OF MEASUREMENT)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Disinfectants & Disinfectant By-Products							
Chlorine (ppm)	2023	[4]	[4]	1.6	1.6-.30	NO	Water additive used to control microbes.
Haloacetic Acids [HAA]-IDSE Results (ppb)	2023	60	NA	10.55	0-10.75	NO	By-product of drinking water disinfection.
TTHMs [Total Trihalomethanes]	2023	80	NA	16.1	0-16.10	NO	By-product of drinking water disinfection.
Total Organic Carbon (% Removal)		TT	NA	15%	.58-ND	NO	Naturally present in the environment.
Inorganic Contaminants							
Fluoride (ppm)	2023	4	4	1.04	1.04-.60	NO	Water additive that promotes strong teeth.
Nitrate	2023	1	1	1.1	1.1-.83	NO	Runoff from fertilizer use.
Barium	2023	2	2	0.08	ND-0.08	NO	Discharge of drilling waste, Discharge from metal refiners, Erosion from natural deposits.
Microbiological Contaminants							
Turbidity (NTU)	2023		NA	.07	.01 -.07	NO	Soil runoff.
Turbidity (Lowest monthly percent of samples meeting limit)	2023		NA	100%	NA	NO	Soil runoff.
100 % of the samples were below the TT value of 1. A value less than 95% constitutes a TT violation. The highest single measurement was 0.06. Any measurement in excess of 5.0 is a violation unless otherwise approved by the State.							
Inorganic Contaminants							
Tap water samples were collected for Lead and Copper analyses from sample sites throughout the community.							
Substance (UNIT OF MEASUREMENT)	**Year Sampled**	**AL**	**MCLG**	**Amount Detected (90th % Tile)**	**Sites above AL/total sites**	**Violation**	**Typical Source**
Copper (ppm)	2022	1.3	1.3	.19	0	NO	Corrosion of household plumbing systems.
Lead (ppb)	2022	15	0	1.1	0	NO	Corrosion of household plumbing systems.

Walker County Water & Sewerage Authority monitors for unregulated parameters in order to assist EPA in determining where certain contaminants occur and whether additional regulations may be necessary						
UNREGULATED CONTAMINANT						
Parameter	**Year Sampled**	**MCL**	**MCLG**	**AMOUNT DETECTED**	**RANGE OF DETECTION**	**VIOLATION**
PFBS (ppt)	2022		Not Regulated	43	ND - 43	MCL Currently Pending
PFOS (ppt)	2022		Not Regulated	8.3	ND - 8.3	MCL Currently Pending
PFOA (ppt)	2022		Not Regulated	11	ND - 11	MCL Currently Pending

PFOS and PFOA are part of a larger group of chemicals called per- and polyfluoroalkyl substances (PFASs). PFASs, which are highly fluorinated aliphatic molecules, have been released to the environment through industrial manufacturing and through use and disposal of PFAS-containing products (Liu and Mejia Avendano 2013). PFOS and PFOA are the most widely studied of the PFAS chemicals. PFOS and PFOA are persistent in the environment and resistant to typical environmental degradation processes. As a result, they are widely distributed across all trophic levels and are found in soil, air and groundwater at sites across the United States. The toxicity, mobility and bioaccumulation potential of PFOS and PFOA result in potential adverse effects on the environment and human health.
https://19january2021snapshot.epa.gov/sites/static/files/2017-12/documents/ffrrofactsheet_contaminants_pfos_pfoa_11-20-17_508_0.pdf

For more information on the 2023 testing results, please contact Randall Haney or Ricky Reynolds at (706) 375-6603 or (706) 375-8963, 9:30 AM - 4:30 PM, Mon. – Fri.