



City of Dublin Water Quality Report 2023



P.O. BOX 681 - DUBLIN, GEORGIA 31001 - 478-277-1000

May 22, 2024

Dear Customers:

I am very pleased to present your 2023 Water Quality Report. There are few things as important to our public health than the availability of clean drinking water, and at the Dublin Water System we take our responsibility to distribute that water to your tap very seriously.

Tap water is subject to more stringent regulations than most products you can use at home - including bottled water. In the pages that follow, you'll learn how the Dublin Surface and Ground Water Treatment Plants work to make sure the water we deliver meets those regulations and beyond. This includes the results of the thousands of water quality tests we perform every year.

Sincerely,

Tony Braziel
Director of Utilities



Questions?

For more information about this report or for any questions relating to your drinking water, please contact the City of Dublin Water Treatment Plant at



478-277-5050



<http://www.cityofdubin.org>.



<http://www.facebook.com/cityofdublinga>

City of Dublin

2023 Water Quality Report

System ID 1750002

This report is designed to inform you about the excellent quality of water the City of Dublin Water Treatment Plant delivers to you every day. We produce over 3,000,000 gallons of water per day to serve the City of Dublin. Our number one goal is to provide you and your family a safe and dependable supply of drinking water. Our employees strive to deliver a quality product and protect the city's precious water resources.

To ensure the safety of your water, the City of Dublin's water treatment plant operators continuously monitor for contaminants in your drinking water according to federal and state laws, rules and regulations. Except where indicated, this water quality report is based on the results of monitoring for the period of January 1, 2023 to December 31, 2023. We hope that you will take a few minutes to review this important information.

If you have any questions about this report or the City of Dublin's Water Treatment System, please do not hesitate to call us at 478-277-5050; a licensed water plant operator will be happy to assist you. You are also invited to attend any of our regularly scheduled city council meetings. The meetings are held on the first and third Thursday of each month at 5:30 pm at City Hall.

SOURCE WATER ASSESSMENT

THE CITY OF DUBLIN AND THE UNIVERSITY OF GEORGIA WATERSHED GROUP COMPLETED A SOURCE WATER ASSESSMENT PLAN (SWAP) IN 2003. THE GOAL OF THE SOURCE WATER ASSESSMENT IS TO IDENTIFY POTENTIAL POLLUTANTS OF CONCERN AND PREVENT POLLUTION FROM REACHING THE SOURCE WATER. THE SWAP HAS IDENTIFIED THAT THE MAJORITY OF POTENTIAL SOURCES OF POLLUTION IN DUBLIN'S DRINKING WATER SOURCE WATERSHED ARE ROAD AND RAILROAD STREAM CROSSINGS. THE SWAP IS AVAILABLE FOR REVIEW, PLEASE CALL 277-5050 FOR MORE INFORMATION.



City of Dublin, Georgia

www.cityofdublin.org



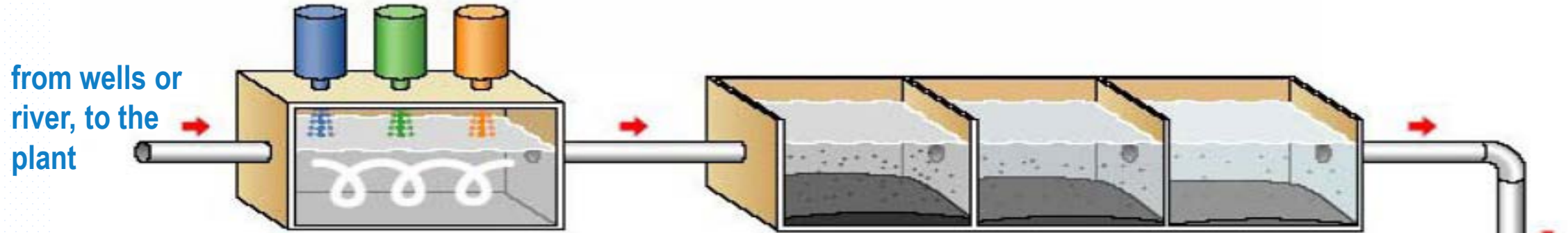
- Since 1812

OUR WATER

The City owns and operates a surface water treatment plant, a ground water treatment plant, storage and distribution system, which are operated as a combined system. Water service is provided to all areas within the corporate limits of the City and to several areas outside the city limits. The water system is comprised of a raw water intake which draws from the Oconee River, and three deep wells that pull from the Upper Dublin-Midville Aquifer and the Lower Floridian Aquifer, with a combined total daily permitted withdrawal of 7.0 MGD. The treated water is pumped from two 500,000-gallon clearwells by high service pumps, to the water distribution network and five elevated storage tanks, with a total storage capacity of 2,250,000 gallons.

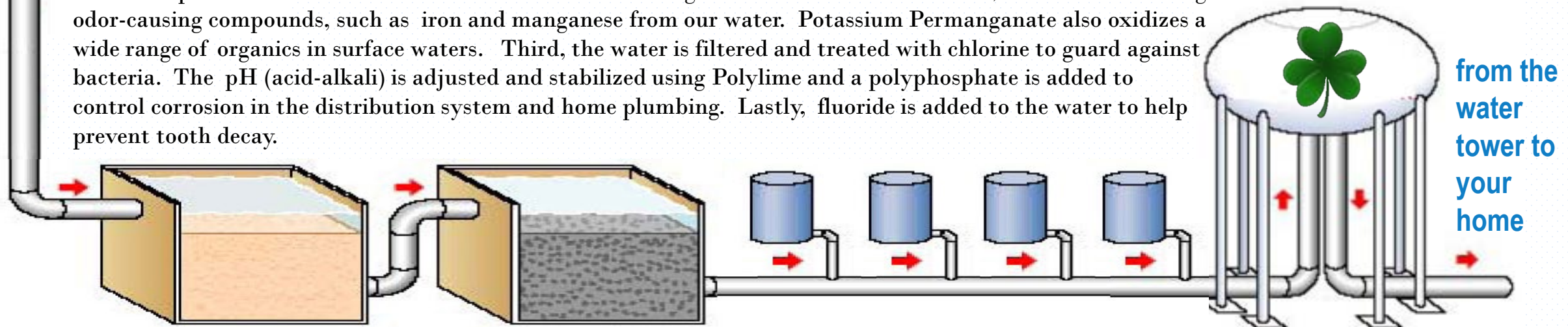
The City has been providing potable drinking water since the early 1900's. The current lime softening plant was constructed and started pumping water in 1936, at 0.5 MGD. The plant was expanded in 1955 to 1.0 MGD and since 1985 has undergone several renovations, bringing the permitted capacity to 2.0 MGD. The surface water plant was constructed and started processing drinking water, from the Oconee River, in 1972 at 3.0 MGD. In 1993 the plant was upgraded with high rate capacity filters and the permit was increased to 5.0 MGD.

The Treatment Process



OUR GROUNDWATER SUPPLY undergoes water quality enhancements that are comprised of three steps. First, untreated groundwater is filtered to remove any un-settleable particles that may be in the water. Chlorine is then added to the water to guard against bacteria. Next fluoride is added to help prevent tooth decay.

OUR SURFACE WATER SUPPLY, pumped from the Oconee River, undergoes a much different treatment process. First the water is treated to produce a “floc” that will settle out before reaching the filtration basins. Second, Potassium Permanganate is added to remove odor-causing compounds, such as iron and manganese from our water. Potassium Permanganate also oxidizes a wide range of organics in surface waters. Third, the water is filtered and treated with chlorine to guard against bacteria. The pH (acid-alkali) is adjusted and stabilized using Polylime and a polyphosphate is added to control corrosion in the distribution system and home plumbing. Lastly, fluoride is added to the water to help prevent tooth decay.



Regulated Substances											
Substance (Unit of Measure)		Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range	Violation	Typical Source			
Total Trihalomethanes (TTHM) (ppb)		2023	80	0	75.05 (highest LRAA at site #3)	46.88 – 75.05	NO	By-product of drinking water Chlorination			
Haloacetic Acids (HAA5) (ppb)		2023	60	0	51.08 (highest LRAA at site #3)	30.13 – 51.08	NO	By-product of drinking water Chlorination			
Chlorine (ppm)		2023	[4.0]	[4.0]	1.35	0.35 – 2.20	NO	By-product of drinking water Chlorination			
Fluoride (ppm)		2023	4.0	4.0	0.75	0.64 – 0.79	NO	Water additive which promotes strong teeth			
Nitrate (ppm)		2023	10	10	0.33	NA	NO	Runoff from fertilizer use; Leaching from septic tank			
Total Organic Carbon (ppm)		2023	TT	NA	2.08	1.7 – 2.6	NO	Naturally present in the environment			
Turbidity (NTU)		2023	TT = 95% of samples < 0.3 NTU		.06	0.03 – 0.32	NO	Naturally present in the environment			
Unregulated Substances											
Bromodichloromethane (ppb)		2023	NA	0	6.6	NA	NO	By-product of drinking water Chlorination			
Chloroform (ppb)		2023	NA	70	23	NA	NO	By-product of drinking water Chlorination			
Chlorodibromomethane (ppb)		2023	NA	N/A	0.98	NA	NO	By-product of drinking water Chlorination			
Tap water samples were collected for lead and copper analyses from samples throughout the community											
Substance (Unit of Measure)		Year Sampled	AL	MCLG	Amount Detected (90 th percentile)	Sites Above Action Level/ Total Sites	Violation	Typical Source			
Copper (ppm)		2022	1300	0	290	0/30	NO	Corrosion of household plumbing systems; Erosion of natural deposits			
Lead (ppm)		2022	15	0	3.5	2/30	NO	Corrosion of household plumbing systems; Erosion of natural deposits			
Additional Water Quality (Secondary or Non-Regulated) These substances are not considered harmful, but some can affect the taste and odor of drinking water.											
	Year	Suggested	Amount		Year	Suggested	Amount		Year	Suggested	Amount

Additional Monitoring

Unregulated Contaminants Monitoring Rule (UCMR4)

During 2019, the City of Dublin Water Treatment System participated in the fourth phase of the Unregulated Contaminant Monitoring Rule (UCMR4). Unregulated contaminants are those for which the EPA has not established drinking water standards. Monitoring assists the EPA in determining the occurrence of these compounds and whether or not regulation is warranted. Detections are summarized in the following table.

For general information on UCMR4, visit <https://www.epa.gov/dwucmr/fact-sheets-about-fourth-unregulated-contaminant-monitoring-rule-ucmr-4> or contact EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Name	Reported Level	Range	
		Low	High
HAA9 (ppb)	37.3	22.9	54.5
Manganese (ppb)	14.61	0.7	55.0
Tribufos (ppb)	0.037	.031	.042

Water Quality Report for the City of Dublin

Cryptosporidium

Cryptosporidium is a microbial pathogen found in most surface water in the U.S. The City of Dublin Water Treatment Plant monitored for *Cryptosporidium* in the Oconee River, January thru September, during the 2015 calendar year. ***Cryptosporidium was not detected in a single sample during 2015.***

Ingesting *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness. Dublin's Water Treatment System encourages immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Lead

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. A water service line connects the water main in the street to your household plumbing. The service line is owned by the property owner. The City of Dublin Water Treatment System 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 at least 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. If you are pregnant or have children under age six, you should use filtered tap water for drinking and cooking until all sources of lead in drinking water have been removed. This includes water used for making infant formula, beverages and ice. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the

Safe Drinking Water Hotline
(800-426-4791),

epa.gov/safewater/lead.



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).

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).”

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 stormwater runoff, and residential uses.
- ❖ Organic chemical contaminants, including synthetic and volatile organic chemical, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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.”



Life is good in Dublin, Georgia

- MICHAEL CLAY



ELM STREET TANK
250,000



FIRETOWER TANK
250,000



KELLAM TANK
500,000



SPRINGDALE TANK
750,000



WILLIE PAULK TANK
500,000

DEFINITIONS FOR TEST RESULTS TABLE

- AL** (Action Level): The concentration of a contaminant that, if exceeded triggers treatment or other requirements that a water system must follow.
- LCRAA** Locational Running Annual Average
- MCL** (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water.
- MCLG** (Maximum Contaminant Level Goal): The level of contaminant in drinking water below which there is no known or expected risk to health.
- MRDL** (Maximum Residual Disinfectant Level) The highest level of a disinfectant allowed in drinking water. there is no known or expected risk to health.
- MRDLG** (Maximum Residual Disinfectant Level Goal) The level of drinking water disinfectant below which there is no known or expected risk to health.
- N/A -** Not applicable
- TT** (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water

UNITS DEFINITIONS:

- NTU** (Nephelometric Turbidity Unit): Measurement of the clarity, or turbidity of water.
- ppb-** parts per billion, or micrograms per liter (ug/l)
- ppm-** parts per million or milligrams per liter (mg/l)

