

**May 2022**

The City of Thomasville's Department of Public Services is pleased to present to you the 2021 Annual Water Quality Report. This report is to inform you of the quality water and services we deliver to you every day. The City of Thomasville Water Treatment Plant is located at 200 Old Lexington Road. The Thomasville Water System serves approximately 27,000 people through approximately 10,900 water connections. Our surface water source is Lake Thom-A-Lex, which is part of a larger area called the Yadkin/Pee Dee River Basin.

The City's Department of Public Utilities routinely monitors for contaminants in the drinking water supplied to your home, in accordance with Federal and State Regulations. The table on the inside of this report shows the results of our monitoring of Regulated Contaminants for the period of January 1st to December 31st, 2021, along with the most recent results of contaminants not due to be monitored in 2021.

The Thomasville Public Utilities are a valuable asset to our city. All citizens can help us protect the system and infrastructure by joining us in safeguarding these valuable resources. Please inform us of any suspicious activities around Lake Thom-A-Lex, our treatment plant, water storage tanks, manholes, or fire hydrants by calling 336-475-4247 during or after normal business hours. After all, our customers are our best allies.

All of the information in this report is available at the City of Thomasville's website at [www.thomasville-nc.gov](http://www.thomasville-nc.gov). We want you to understand the efforts we make to continually improve and protect the water treatment process and our water resources. Please contact Jeff Dennard, Superintendent of Water at 336-475-4247, if you have any questions about this report or concerning your water quality. You are welcome to attend any of our regularly scheduled City Council Meetings, held at the Ball Park Road Community Center at 7003 Ball Park Road on the third Monday of the month at 6:00 p.m. The Department of Public Services is committed to ensuring the quality of your water. We hope that this report answers your questions regarding the safety and dependability of our public water supply.

*Sincerely,  
Morgan Huffman,  
Public Services Director*

City of Thomasville  
P.O. Box 368  
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**City of  
Thomasville**



# 2021 Annual Water Quality Report

**PWS ID#02-29-020**

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	IN COMPLIANCE	SOURCE
<b>Chlorine (ppm)</b>	2021	4	4	2.8	2.0 – 3.3	Yes	Water additive used to control microbes
<b>Fluoride (ppm)</b>	2021	4	4	0.60	NA	Yes	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Turbidity (NTU)*</b>	2021	TT = 1 NTU	NA	0.19	0.01 – 0.19	Yes	Soil runoff
<b>Turbidity (Lowest monthly percent of samples meeting limit)</b>	2021	TT = 95% of samples < 0.3 NTU	NA	100%	NA	Yes	Soil runoff
<b>Total Organic Carbon (ppm)</b>	2021	TT	NA	0.85	ND – 1.4	Yes	Naturally present in environment
<b>HAA5 [Haloacetic Acids] (ppb)**</b>	2021	60	NA	28.94	11 – 57.1	Yes	Byproduct of drinking water disinfectant
<b>TTHM [Total Trihalomethanes] (ppb)***</b>	2021	80	NA	28.98	9 – 71.5	Yes	Byproduct of drinking water disinfectant
<b>Nitrate (ppm)+</b>	2021	10	10	ND	NA	Yes	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Atrazine (ppb)</b>	2021	3	3	0.165	0.13-0.20	Yes	Runoff from herbicide used on row crops
<b>Simazine (ppb)</b>	2021	4	4	0.26	NA	Yes	Herbicide runoff

\*Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

\*\*Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

\*\*\*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.

+Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

## Water Quality Sampling

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables list all the drinking water contaminants that we detected in the last round of sampling for each particular contaminant group. The presence of contaminants does **not** necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2021. The EPA and the State allow us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

## What EPA Wants You to Know

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 Environmental Protection Agency’s Safe Drinking Water Hotline (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 (800-426-4791).

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 Thomasville 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>.

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 **microbial contaminants**, such as viruses and bacteria, which 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 water 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; and **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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

RADIOLOGICAL CONTAMINANTS						
SUBSTANCE	SAMPLE DATE	IN COMPLIANCE	AMOUNT DETECTED	RANGE LOW-HIGH	MCL	SECONDARY MCL
<b>Alpha Emitters (pCi/L)</b>	2021	Yes	ND	NA	15	Erosion of natural deposits
<b>Uranium (pCi/L)</b>	2021	Yes	ND	NA	20.1	Erosion of natural deposits
<b>Radium 226 (pCi/L)</b>	2021	Yes	ND	NA	3	Erosion of natural deposits
<b>Radium 228 (pCi/L)</b>	2021	Yes	ND	NA	2	Erosion of natural deposits

TAP WATER SAMPLES COLLECTED FROM 33 SITES THROUGHOUT COMMUNITY						
SUBSTANCE	YEAR SAMPLED	AMOUNT DETECTED (90 <sup>TH</sup> PERCENTILE)	ACTION LEVEL	SITES ABOVE ACTION LEVEL	MCLG	IN COMPLIANCE
<b>Lead (ppb)</b>	2021	<3.0	15	0	0	Yes
<b>Copper (ppm)</b>	2021	0.419	1.3	0	1.3	Yes

## Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for the City of Thomasville was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

THOMASVILLE WATER SYSTEM SWAP RATINGS				
Source Name	Inherent Vulnerability	Contaminant	Susceptibility	SWAP Report Date
Thom-A-Lex Lake	Moderate	Higher	Higher	September 2020

The complete SWAP Assessment report may be viewed on the Web at [www.ncwater.org/?page=600](http://www.ncwater.org/?page=600). Enter “0229020” when asked to enter the Public Water Supply system ID#, and then click Search for Reports. Note that because SWAP results are periodically updated by the PWS Section, the results available on this web site may differ from the results that were available at the time this CCR was prepared. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to [swap@ncdenr.gov](mailto:swap@ncdenr.gov). Please indicate your system name, number, and provide your name, mailing address and phone number. If you have any questions about the SWAP report please contact the Source Water Assessment staff by phone at 919-707-9098.

It is important to understand that a susceptibility rating of “higher” **does not** imply poor water quality, only the system’s potential to become contaminated by the identified Potential Contaminants (PCSs) within the assessment area.

## Definitions

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

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

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

**NA:** Information not applicable/not required for that particular water system or that particular rule.

**ND:** Non-Detects – Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

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

**ppb (parts per billion) or ug/L (micrograms per liter):** One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**ppm (parts per million) or mg/L (milligrams per liter):** One part per million corresponds to one minute in 2 years, or a single penny in \$10,000.

Miscellaneous Water Characteristics Contaminants				
SUBSTANCE	SAMPLE DATE	AMOUNT DETECTED	RANGE LOW-HIGH	SECONDARY MCL
<b>Sodium (ppm)</b>	2021	16.92	NA	NA
<b>Sulfate (ppm)</b>	2021	22.3	NA	250
<b>pH</b>	2021	6.9	NA	6.50-8.50