ANNUAL WATER QUALITY REPORT

Reporting Year 2024

Presented By

TriRiver WATER

Sanford Location

PWS ID#: NC03-53-010

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Our Commitment

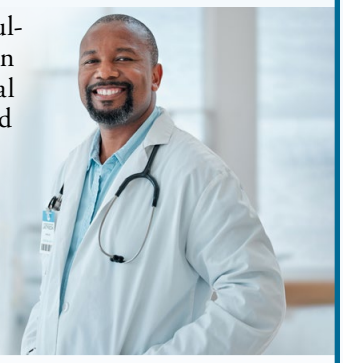
We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. This report is developed to keep you informed about your water quality, what it contains, and how it compares to standards set by regulatory agencies. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, community outreach, and education while continuing to serve the needs of all our water customers. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from the Cape Fear River and stored in a 60-million-gallon reservoir. The water is gravity-fed into a mixing tank where a coagulant chemical, aluminum sulfate, is added. The addition of the coagulant causes particles called floc to adhere to one another, making them heavy enough to settle into a basin from which the sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through multimedia filters composed of anthracite coal and silicate sand. As smaller suspended particles are removed, the turbidity disappears and clear water emerges.

Chorine is added again as a safeguard against any bacteria that may be present as the water travels into a two-million gallon storage tank. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, caustic soda (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), a corrosion inhibitor (to protect distribution system pipes), and chlorine with ammonia (to form chloramines for final disinfection) are added before the water is pumped to sanitized elevated storage tanks and into your home or business.

Important Health Information



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 (U.S. EPA)/Centers for Disease Control and Prevention (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 at (800-426-4791) or epa.gov/safewater.

Where Does My Water Come From?

Our customers are fortunate because they enjoy an abundant water supply from a single water source, the Cape Fear River. The Deep, Haw, and Rocky Rivers form the headwaters of the Cape Fear River basin.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Sanford City Council meets the first and third Tuesday of each month at 5:00 p.m. in the Council Chambers in the Municipal Building at 225 East Weatherspoon Street. Meetings are open to the public. Public comment is open during the first meeting of each month. Those who want to make a general public comment must sign up at least 15 minutes prior to the meeting.

Testing for *Cryptosporidium*

TriRiver Waters - Sanford Location monitored for *Cryptosporidium* in both the Cape Fear River and the facilities reservoir in 2018. Monitoring detected a level of 0.091 oocyst per liter in the Cape Fear River during February.

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Scott Christiansen, Director of Water Filtration, at (919) 777-1803.

Think Before You Flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit https://bit.ly/3IeRyXy.

Substances That Could Be in Water

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 occur naturally in the soil or groundwater or may result from urban stormwater 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 chemicals, 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 occur naturally or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations which 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.

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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (800-426-4791) or visiting epa.gov/safewater.

Source Water Assessment

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 (PCS). 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. 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 PCS in the assessment area.

The relative susceptibility rating of each source for TriRiver Water - Sanford was determined by combining the contaminant rating (number and location of PCS 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 following table:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES (PCS)		
SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE
Cape Fear River	Higher	September 2020

The complete SWAP Assessment Report for TriRiver Water - Sanford may be viewed at https://www.ncwater.org/SWAP_Reports/NC0353010_SWAP_Report-20200909.pdf. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this website may differ from the results that were available at the time this Consumer Confidence Report was prepared. If you are unable to access your SWAP report online, 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 swap@deq.nc.gov. Please indicate your system name and 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 at (919) 707-9098.

Lead in Home Plumbing

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. TriRiver Water is responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. If you are concerned about lead and wish to have your water tested, contact Scott Christiansen, Director of Water Filtration, at (919) 777-1803. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The lead service inventory may be https://gis.tririverwater.com/portal/apps/sites/#/lead-service-line-inventory. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Test Results

We routinely monitor for multiple water quality contaminants in your drinking water according to federal and state laws. The following 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 from January 1 through December 31, 2024.

The U.S. 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.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Atrazine (ppb)	2024	3	3	0.2	ND–0.2	No	Runoff from herbicide used on row crops
Chloramines (ppm)	2024	[4]	[4]	3.38	2.8–3.75	No	Water additive used to control microbes
Chlorine (ppm)	2024	[4]	[4]	3.04	2.91–3.19	No	Water additive used to control microbes
Fluoride (ppm)	2024	4	4	0.7	0.04–0.81	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60[1]	NA	44.98	2.8–89.4	No	By-product of drinking water disinfection
Simazine (ppb)	2024	4	4	0.12	ND–0.12	No	Herbicide runoff
Total Organic Carbon [TOC] (removal ratio)	2024	TT[2]	NA	1.25	1.06–1.54	No	Naturally present in the environment
TTHMs [total trihalomethanes] (ppb)	2024	80[3]	NA	66.3	32.5–119	No	By-product of drinking water disinfection
Turbidity[4] (NTU)	2024	TT = 1 NTU	NA	0.13	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community[5]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.118	<0.05–0.161	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2022	15	0	<0.003	NA	0/30	No	Corrosion of household plumbing systems; erosion of natural deposits

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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 (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (ng/L) (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

Removal Ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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

Emerging Contaminants

Emerging contaminants, or contaminants of emerging concern, are unregulated synthetic or naturally occurring chemicals that are not commonly monitored by water utilities. The health significance of these trace contaminants is under review and the subject of further study and research.

Beginning March 2020, we started monitoring for per and polyfluoroalkyl substances, and 1,4 dioxane monthly. The data presented in the tables is testing done from January 1 through December 31, 2024.

Per and polyfluoroalkyl substances (PFAS) are a class of man-made chemicals used for consumer products such as waterproof and stainproof products, nonstick cookware, food packaging and fire suppression foams.

1,4 dioxane is a clear, flammable liquid used as a solvent or stabilizer in the manufacturing of chemicals, cosmetics, detergents, and shampoos.

UNREGULATED SUBSTANCES [6]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
1,4-Dioxane (ppb)	2024	0.5	ND–6	NA
Perfluorobutanesulfonic Acid [PFBS] (ppt)	2024	1.75	ND–3.6	NA
Perfluoroheptanoic Acid [PFHpA] (ppt)	2024	2.7	ND–5	NA
Perfluorohexanesulfonic Acid [PFHxS] (ppt)	2024	1.78	ND–3.6	NA
Perfluorononanoic Acid [PFNA] (ppt)	2024	0.11	ND–1.3	NA
Perfluorooctanesulfonate Acid [PFOS] (ppt)	2024	10.75	10–14	NA
Perfluorooctanoic Acid [PFOA] (ppt)	2024	4.79	ND–101	NA
Perfluorodecanoic Acid [PFDA] (ppt)	2024	0.07	ND–0.92	NA
Perfluorohexanoic Acid [PFHxA] (ppt)	2024	2.54	ND–8.4	NA

[1] Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
[2] Depending on the TOC in our source water, the system must have a certain percentage removal of TOC or achieve alternative compliance criteria. If we do not achieve that percentage removal, there is an alternative percentage removal. If we fail to meet the alternative percentage removal, we are in violation of a treatment technique.
[3] 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 system and may have an increased risk of getting cancer.
[4] 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.
[5] This table summarizes our most recent lead and copper tap sampling data. If you would like to review the complete lead tap sampling data, please contact Scott Christiansen, Director of Water Filtration, at (919) 777-1803.
[6] Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.