

ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By
City of Tega Cay



Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to providing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use four gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

“Thousands have lived without love, not one without water.”
—W.H. Auden

Where Does My Water Come From?

The City of Tega Cay has an agreement to purchase its drinking water from Fort Mill, which purchases its drinking water from the City of Rock Hill. The supply system between the City of Tega Cay and Fort Mill consists of a 12-inch-diameter transmission main installed in the Sutton Road right-of-way, which runs from the Catawba River Bridge to New Grey Rock Road. In 2020 Tega Cay purchased in excess of 383 million gallons from the Town of Fort Mill. This water was distributed through the Tega Cay system to serve residential and commercial customers.



Lake Wylie is the City of Rock Hill's raw water source. Raw water is pumped to the treatment facility. Rock Hill monitors its water treatment process on a 24-hour basis. The City of Tega Cay, as required by state law, conducts additional testing throughout its distribution system. The tables contained in this report show the results of monitoring from January 1 to December 31, 2022. The City of Tega Cay is pleased to report that its drinking water is safe and meets all federal and state requirements.

Community Participation

You are invited to attend our city council meetings and voice your concerns about your drinking water. Council meetings are usually scheduled for the third Monday of each month at 7:00 p.m. at Council Chambers, located in the lower level of the Glennon Center, 15077 Molokai Drive.

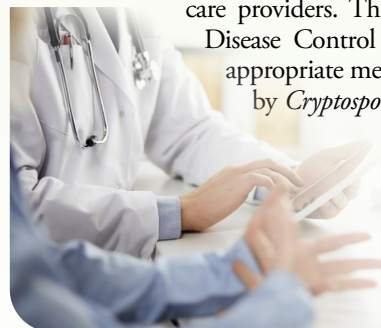
QUESTIONS? We are once again pleased to report that the water provided by the City of Tega Cay met all water quality standards in 2022. For more information about this report, or for any questions relating to your drinking water, please contact me at (803) 548-3514.

Sincerely,

Philip E. Jolley, Utilities Director

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 <http://water.epa.gov/drink/hotline>.



Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 two 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 at (800) 426-4791 or www.epa.gov/safewater/lead.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business.

For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef. According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking.

The annual American per capita water footprint is about 8,000 cubic feet; twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish. To check out your own water footprint, go to www.watercalculator.org.

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/3leRyXy>.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all the analytical results is available upon request from the City of Rock Hill). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE |
|--|--------------|------------|--------------|-----------------|----------------|-----------|---|
| Chlorine (ppm) | 2022 | [4] | [4] | 1.5 | 1.5–1.5 | No | Water additive used to control microbes |
| Haloacetic Acids [HAAs]–Stage 1 (ppb) | 2022 | 60 | NA | 17 | 10.8–20.6 | No | By-product of drinking water disinfection |
| Total Coliform Bacteria** (positive samples) | 2022 | TT | NA | 2 | NA | No | Naturally present in the environment |
| TTHMs [total trihalomethanes]–Stage 1 (ppb) | 2022 | 80 | NA | 37 | 21.3–66.9 | No | By-product of drinking water disinfection |

**During the past year one (1) Level 2 assessment was required to be completed for our water system. One Level 2 assessment was completed. In addition, we were required to take one corrective action and we completed this action.

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

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | MCLG | AMOUNT DETECTED (90TH %ILE) | SITES ABOVE AL/TOTAL SITES | VIOLATION | TYPICAL SOURCE |
|-----------------------------|--------------|-----|------|-----------------------------|----------------------------|-----------|---|
| Copper (ppm) | 2022 | 1.3 | 1.3 | 0.027 | 0/30 | No | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) | 2022 | 15 | 0 | ND | 0/30 | No | Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits |

WATER PURCHASED FROM ROCK HILL – WATER QUALITY DATA TABLE FOR 2022

Microbiological Contaminants

| CONTAMINANT | LIMIT (TREATMENT TECHNIQUE) | | LEVEL DETECTED | VIOLATION | LIKELY SOURCE OF CONTAMINATION | |
|-------------|-----------------------------|--|----------------------------|-----------|--------------------------------|--------------|
| Turbidity | 1 NTU | | Highest Single Measurement | 0.03 | No | Soil runoff. |
| | 0.3 NTU | | Lowest Monthly Percentile | 100% | No | Soil runoff. |

Total Organic Carbon: The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Inorganic Contaminants

| CONTAMINANTS | YEAR | MCLG | MCL | UNITS | HIGHEST LEVEL DETECTED | RANGE OF LEVELS DETECTED | VIOLATION | LIKELY SOURCE OF CONTAMINATION |
|--------------------------------|------|------|-----|-------|------------------------|--------------------------|-----------|---|
| Nitrate [measured as Nitrogen] | 2022 | 10 | 10 | ppm | 0.17 | 0.17-0.17 | No | Runoff from fertilizer use; Leaching from Septic tanks, sewage; Erosion of natural deposits |
| Fluoride | 2022 | 4 | 4.0 | ppm | 0.6 | 0.6-0.6 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |

Radionuclide Contaminants

| | | | | | | | | |
|----------------------|------|---|-------------|-------|---|-----|----|---|
| Beta Photon Emitters | 2022 | 0 | 4 mrem/yr** | pCi/L | 0 | N/A | No | Decay of natural and man-made deposits. |
|----------------------|------|---|-------------|-------|---|-----|----|---|

**EPA considers the 50 pCi/L to be the level of concern for Beta/photon emitters.

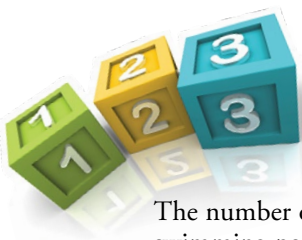
| | | | | | | | | |
|---------|------|---|------------|-------|------|----------|----|---|
| TRITIUM | 2022 | 0 | 4 mrem/yr* | pCi/L | 1130 | 296-1130 | No | Decay of natural and man-made deposits. |
|---------|------|---|------------|-------|------|----------|----|---|

*Average annual concentration assumed to produce a total body or organ dose of 4 mrem/yr for Tritium is 20,000 pCi per liter.

Unregulated Contaminants

| ANALYTE NAME | COLLECTION DATE | MCLG | MCL | UNITS | HIGHEST LEVEL DETECTED | RANGE OF LEVELS DETECTED | VIOLATION | LIKELY SOURCE OF CONTAMINATION |
|---------------------|-----------------|---------------|---------------|-------|------------------------|--------------------------|-----------|---------------------------------------|
| Sodium | 2022 | not regulated | not regulated | ppm | 6.3 | 6.3-6.3 | No | Erosion of natural deposits; Leaching |
| Hardness (optional) | 2022 | not regulated | not regulated | ppm | 32.0 | 17-32 | No | Erosion of natural deposits; Leaching |

BY THE NUMBERS



The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

800
TRILLION

1 The average cost in cents for about 5 gallons of water supplied to a home in the U.S.

The percent of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

99

50 The average daily number of gallons of total home water use for each person in the U.S.

The percent of Earth's surface that is covered by water.

71

330
MILLION

The amount of water on Earth in cubic miles.

The percent of the human brain that contains water.

75

Definitions

Unit Descriptions

ppm: parts per million, or milligrams per liter (mg/L)

ppb: parts per billion, or micrograms per liter (µg/L)

pCi/L: picocuries per liter (a measure of radioactivity)

NTU: Nephelometric Turbidity Units. 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.

NA: not applicable

ND: Not detected

NR: Monitoring no required, but recommended

Important Drinking Water Definitions

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.

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.

Action Level: the concentration which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. AGLs allow for a margin of safety.

Minimum Reporting Levels: The value and unit of measure at or above which the concentration of the contaminant must be measured using the approved analytical methods.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.