HOLLY SPRINGS
North Carolina

2022 Annual Drinking Water Quality Report

Our Drinking Water Is Regulated

The Town of Holly Springs is pleased to provide the Drinking Water Annual Report for 2022. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2022, and was developed by using the data from the most recent U.S. Environmental Protection Agency (EPA) required analysis.

We hope this information helps you become more knowledgeable about what's in your drinking water.

PWS ID #03-92-050

What can I do to conserve water?

There are many things you can do to conserve water. Running your clothes washer and dishwasher only when they are full can save up to 1,000 gallons a month. Watering your lawn and garden in the morning or evening when temperatures are cooler will help minimize evaporation. Shortening your shower by a minute or two can save up to 150 gallons per month. Turning off the water while you are brushing your teeth can save up to 25 gallons per month. Also, take time to review your water bill on a regular basis as this can help you quickly realize if there are leaks in your system.

How much water do I use during a typical shower?

Based on the age of your house and your showerheads, anywhere from 20 to 40 gallons of water can be used during a typical shower.

Tap vs. Bottled, Rethinking What You Are Drinking

When choosing the water you want to drink, it is often easy to be convinced that bottled water is healthier for you than tap water, but in truth is it? The answer, thanks to a study by the Natural Resources Defense Council (NRDC) is not always. First, approximately 25 percent of bottled water is – in reality – bottled tap water. Additionally, the Food and Drug Administration (FDA) regulates bottled water; however, their testing standards are not as rigorous as what is required by the US Environmental Protection Agency (EPA) for tap water. Moreover, FDA oversight does not apply to water that is packaged and sold within the same state. According to the NRDC's report, this leaves approximately 60 -70 percent of bottled water, including the contents of watercooler jugs, free of FDA regulation.

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Questions About This Report

If you have any questions about the information contained in this report please contact Karen Foster, Environmental Compliance Manager with the Town of Holly Springs at 919-557-2907 or email karen.foster@hollyspringsnc.gov.

Source of Drinking 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:

- **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 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 byproducts 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 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 also provide protection for public health.

Where Do We Get Our Drinking Water?

The Town of Holly Springs customers are fortunate because we enjoy an abundant water supply from the Cape Fear River. We currently obtain, on average, 3.2 million gallons daily and have a current capacity of 10 million gallons per day in the Harnett County Water Treatment Plant. Harnett County's Water Quality Report can be accessed at www.harnett.org/.

All Drinking Water May Contain Contaminants

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 at (800-426-4791).

Required Additional Health Information for 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. The Town of Holly Springs 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, more information on testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Source Water Assessment

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for drinking water sources in North Carolina. The assessments determine the susceptibility of each drinking water source 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.

> **It is important to understand that a susceptibility rating of "higher" does not imply poor water quality, only the systems' potential to become contaminated by PCSs in the assessment area.**

The relative susceptibility rating of each source for the Town of Holly Springs 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). According to the Source Water Assessment Plan assessment of September, 2020, the Town's sources had a susceptibility rating of "Moderate." The complete SWAP Assessment report may be viewed on the Web at www. ncwater.org/. Please note that because SWAP results and reports are periodically updated, the results available on this web site may differ from the results that were available at the time this CCR was prepared.

For a printed copy of this report, please mail a written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or email your request to swap@ncmail.net. Please indicate your system name and PWSID, and provide your name, mailing address, and phone number. If you have questions about the SWAP report, please contact the Source Water Assessment staff at (919) 715-2633.

2022 Test Results

We routinely monitor for constituents in your drinking water in accordance with Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2020. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2022. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

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

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

Average (Avg.): Regulatory compliance with some MCLs is based on running annual average of monthly samples.

Locational running annual average (LRAA): Is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

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. Secondary MCLs are unenforceable guidelines for aesthetic quality of water.

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 microbial 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 microbial contaminants.

MRL: Minimum reporting level defined by EPA

MREM: Millirems per year (a measure of radiation absorbed by the body).

NA: Not applicable.

N: No.

ND: Not detected.

TT: Treatment Technique.

NTU: Nephelometric Turbidity Units.

Parts per billion (ppb): Micrograms per liter (µg/L) or one ounce in 7,800,000 gallons of water.

Parts per million (ppm): Milligrams per liter (mg/L) or one ounce in 7,800 gallons of water.

SU: Standard Unit.

Microbiological Contaminants							
Substance (Unit of Measure)	Year Sampled	MCL	MCLG	Town of Holly Springs Your Water	Harnett County Your Water	Violation Yes/No	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	2022	> than 5% requires Level 1 Assessment	0	1.20%*	0%	No	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	2022	0[1]	0	0	0	No	Human and animal fecal waste

[1] Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

** Six routine total coliform positive samples in 2020. 1 sample collected in each month of January, June, August, and September 2020 tested positive. Repeat results from each original, upstream, and downstream site were negative. In 2020, the Town of Holly Springs analyzed 498 samples for total and fecal coliforms.*

Turbidity2						
Substance (Unit of Measure)	Year Sampled	Treatment Technique (TT) Violation if:	Town of Holly Springs Amount Detected	Harnett County Amount Detected	TT Violation Yes/No	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	2022	Turbidity >1 NTU	N/A	0.09 NTU	No	Soil runoff
Fecal Coliform or E. coli (presence or absence)	2022	Less than 95% of monthly turbidity measurements are <0.3 NTU	N/A	100%	No	

[2] 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.

Total Organic Carbon (TOC)3				Town of Holly Springs		Harnett County				
Substance (Unit of Measure)	Year Sampled	MCL	MCLG	Your Water	Range of Monthly Removal Ratio	Your Water	Range of Monthly Removal Ratio	Violation Yes/No	Likely Source of Contamination	Compliance Method
Total Organic Carbon (removal ratio)	2022	TT	NA	NA	NA	1.43	1.33-1.53	No	Naturally present in the environment	Step 1

[3] Total Organic Carbon (TOC) has no health effect. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. By-products of disinfection include trihalomethanes (THM) and haloacetic acids (HAA), which are reported elsewhere in this report.

Inorganic Contaminants				Town of Holly Springs		Harnett County			
Substance (Unit of Measure)	Date Sampled	MCL	MCLG	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Violation Yes/No	Likely Source of Contamination
Fluoride (ppm)	1/9/22	4	4	NA	NA	0.62	NA	No	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories

Disinfectants and Disinfection Byproducts Contaminants				Town of Holly Springs		Harnett County			
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Highest LRAA	Range Low-High	Highest LRAA	Range Low-High	Violation Yes/No	Likely Source of Contamination
Total Trihalomethanes [TTHM] (ppb)	2022	80	NA	37	22-47	40.2	18.0-63.6	No	By-product of drinking water chlorination
Haloacetic Acids [HAA5] (ppb)	2022	60	NA	14	10-16	20.9	10.2-27.2	No	By-product of drinking water chlorination
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Average	Range Low-High	Average	Range Low-High	Violation Yes/No	Likely Source of Contamination
Chloramines (ppm)	2022	[4]	[4]	NA	NA	2.81	1.0-4.2	No	Water additive to control microbes
Monochloramines (ppm)	2022	[4]	[4]	2.52	0.4-3.8	NA	NA	No	Water additive used to control microbes
Chlorine (free) (ppm)	2022	[4]	[4]	2.26	0.68-4.0	1.61*	0.20-3.4	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2022	800	800	NA	NA	22.0	0-327	No	Water additive used to control microbes
Chlorite (ppm) (Distribution)	2022	1	0.8	NA	NA	0.46	0.20-0.49	No	By-product of chlorine dioxide

Lead and Copper Contaminants			Town of Holly Springs			Harnett County				
Substance (Unit of Measure)	AL	MCLG	Year Sampled	Your Water	# of sites found above AL	Year Sampled	Your Water	# of sites found above AL	Violation Yes/No	Likely Source of Contamination
Copper (ppm) (90th percentile)	1.3	TT	2020	0.051	0	2022	0.102	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90th percentile)	15	0	2020	ND	0	2022	ND	No	No	Corrosion of household plumbing systems; erosion of natural deposits

Unregulated Secondary Contaminants[4]			Town of Holly Springs		Harnett County		
Substance (Unit of Measure)	Year Sampled	Secondary MCL	Average	Range Low-High	Amount Detected	Range Low-High	Likely Source of Contamination
Ammonia (free) (ppm)	2022	NA	0.18	0.0-0.42	NA	NA	Disinfection treatment
pH	2022	6.5-8.5	8.00	7.21-8.83	7.6	NA	Acidity of water
Sodium (ppm)	2022	NA	NA	NA	22.69	NA	Leaching from natural deposits
Sulfate (ppm)	2022	250	NA	NA	44.1	NA	Leaching from natural deposits

[4] *Secondary Contaminants, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.*

Unregulated Secondary Contaminants (UCMR4)		Town of Holly Springs		Harnett County	
Analyte	MRL	Your Water (Average)	Range (Low-High)	Your Water (Average)	Range (Low-High)
Bromochloroacetic Acid (ppb)	0.30	3.84	ND-11.9	5.82	3.83-8.8
Bromodicloroacetic Acid (ppb)	0.5	1.72	ND-4.8	4.49	3.66-5.42
Chlorodibromoacetic Acid (ppb)	0.30	1.14	ND-3.5	2.74	0.568-4.45
Dibromoacetic Acid (ppb)	0.30	1.62	ND-6.3	3.20	ND-9.55
Dichloroacetic Acid (ppb)	0.20	5.74	ND-23.3	7.74	3.15-20.9
HAA9 Group (ppb)	2.0	8.35	ND-51.6	NA	NA
Total Brominated HAAs (ppb)	NA	4.06	ND-16	NA	NA
Haloacetic Acids, Total (ppb)	NA	11.26	ND-38.9	NA	NA
Monobromoacetic Acid (ppb)	0.30	0.21	ND-0.88	0.59	ND-1.18
Monochloroacetic Acid (ppb)	2.0	0.43	ND-2.5	0.15	ND-2.53
Tribromoacetic Acid (ppb)	2.0	0.22	ND-1.4	1.17	ND-5.46
Trichloroacetic Acid (ppb)	0.50	1.65	ND-11.5	4.21	0.828-17.1
Manganese (ppb)	0.40	5.5	3.1-11	3.94	1.78-7.04
Bromide (ppb)	NA	NA	ND	120.03	48.1-222
Total Organic Carbon (ppb)	NA	NA	ND	5755	5360-6410

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. UCMR5 takes place from 2022-2026. Results from those reports will be reported in the CCR the following year after completion.

If you have any questions about the information contained in this report or general water quality concerns please contact:

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