

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 the ones 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.



HOLLY
SPRINGS
North Carolina
P.O. Box 8
Holly Springs, NC 27540

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The Holly Springs Town Council meets at 7 p.m. the first and third Tuesdays of every month. Meetings, which are open to the public, are held in the Council Chambers upstairs in Holly Springs Town Hall at 128 S. Main Street.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (919) 577-1090 – para hablar con una persona bilingüe en español.



HOLLY
SPRINGS
North Carolina

PWS ID #03-92-050

2016
Annual Drinking
Water Quality
Report



Our Drinking Water Is Regulated

The Town of Holly Springs is pleased to share this report with you. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2016, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Source of Drinking Water

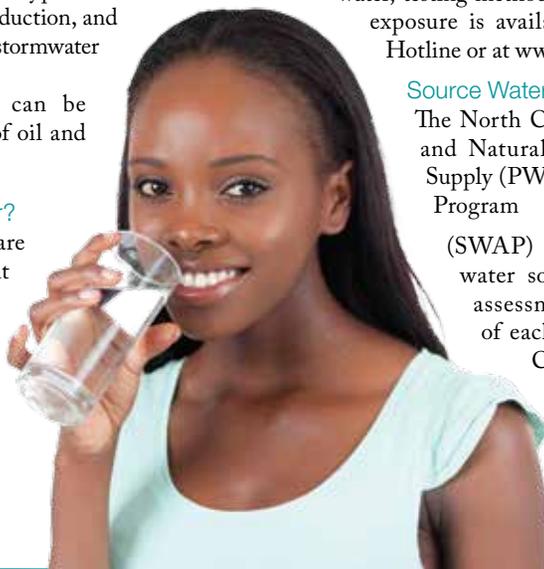
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water 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 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.

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 obtain approximately 2 million gallons daily and



have purchased up to 10 million gallons a day of capacity from the Harnett County Department of Public Utilities. 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. 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

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, 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 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 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.

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 March 2010, the Town's sources had a susceptibility rating of "Higher." The complete SWAP Assessment report may be viewed on the Web at <http://swap.deh.enr.state.nc.us/swap/>. 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.

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.

Questions About This Report

If you have any questions about the information contained in this report please contact Amy Moore, with the Town of Holly Springs Public Utilities Department, at (919) 577-2273 or email at amy.moore@hollyspringsnc.us.

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2016. 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:

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.
- **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

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).

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)	2016	Greater than 5% requires Level 1 Assessment	0	4.5%*	5.6%	No	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	2016	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.

* In September, 2016 two out of forty routine total coliform samples came back positive. Upon repeat testing, they were not found positive. In 2016, 440 samples were analyzed 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
Turbidity (NTU) – Highest single turbidity measurement	2016	Turbidity >1 NTU	N/A	0.09 NTU	No	Soil runoff
Turbidity (NTU) – Lowest monthly % of samples meeting turbidity limits	2016	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

Substance (Unit of Measure)	Year Sampled	Town of Holly Springs				Harnett County		Violation Yes/No	Likely Source of Contamination	Compliance Method
		MCL	MCLG	Your Water	Range of Monthly Removal Ratio	Your Water	Range of Monthly Removal Ratio			
Total Organic Carbon (removal ratio)	2016	TT	NA	NA	NA	1.45	1.33-1.56	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

Substance (Unit of Measure)	Date Sampled	Town of Holly Springs				Harnett County		Violation Yes/No	Likely Source of Contamination
		MCL	MCLG	Amount Detected	Range Low-High	Amount Detected	Range Low-High		
Fluoride (ppm)	1/5/16	4	4	NA	NA	0.60	NA	No	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories

Lead and Copper Contaminants

Substance (Unit of Measure)	Town of Holly Springs		Harnett County			Violation Yes/No	Likely Source of Contamination			
	AL	MCLG	Year Sampled	Your Water	# of sites found above AL			Year Sampled	Your Water	# of sites found above AL
Copper (ppm) (90th percentile)	1.3	1.3	2014	0.1185	0	2016	0.155	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90th percentile)	1.5	0	2014	ND	0	2016	ND	NA	No	Corrosion of household plumbing systems; erosion of natural deposits

Disinfectants and Disinfection Byproducts Contaminants

Substance (Unit of Measure)	Year Sampled	Town of Holly Springs		Harnett County		Violation Yes/No	Likely Source of Contamination		
		MCL [MRDL]	MCLG [MRDLG]	Highest LRAA	Range Low - High			Highest LRAA	Range Low - High
Total Trihalomethanes [TTHM] (ppb)	2016	80	NA	52	12 - 53	35	11 - 52	No	By-product of drinking water chlorination
Haloacetic Acids [HAA5] (ppb)	2016	60	NA	17	0.75 - 18	29	8.5 - 24.6	No	By-product of drinking water chlorination

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Town of Holly Springs		Harnett County		Violation Yes/No	Likely Source of Contamination
				Average	Range Low - High	Average	Range Low - High		
Chloramines (ppm)	2016	[4]	[4]	2.14	0.5 - 3.3	3.04	1.08 - 3.98	No	Water additive to control microbes
Monochloramines (ppm)	2016	[4]	[4]	2.32	1.02 - 3.4	NA	NA	No	Water additive used to control microbes
Chlorine (free) (ppm)	2016	[4]	[4]	1.34*	0.53 - 2	2.43*	0.71 - 3.80	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	2016	800	800	NA	NA	76	0 - 488	No	Water additive used to control microbes
Chlorite (ppm) (Distribution)	2016	1	0.8	NA	NA	0.240	0.140 - 0.350	No	By-product of chlorine dioxide

* Only month of March.

Unregulated Secondary Contaminants⁴

Substance (Unit of Measure)	Year Sampled	Town of Holly Springs		Harnett County		Likely Source of Contamination	
		Secondary MCL	Amount Detected	Range (Low-High)	Amount Detected		Range (Low-High)
Ammonia (free) (ppm)	2016	NA	0.12	0 - 0.30	N/A	N/A	Disinfection treatment
Manganese (ppm)	2015	0.05	N/A	N/A	0.012	N/A	Abundant naturally occurring element
pH	2016	6.5 to 8.5	7.49	6.6 - 8.4	6.9	N/A	Acidity of water
Sodium (ppm)	2016	NA	N/A	N/A	25.09	N/A	Leaching from natural deposits
Sulfate (ppm)	2016	250	N/A	N/A	46.6	N/A	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

Analyte ID#	Analyte	Method	MRL	Town of Holly Springs		Harnett County		Analyzed Date
				Result	Preparation Date	Preparation Date	Result	
1020	Chromium (ppb)	200.8	0.2	<0.2	2/3/14	2/5/14	NA	NA
1081	Cobalt (ppb)	200.8	1.0	<1.0	2/3/14	2/5/14	NA	NA
1084	Molybdenum (ppb)	200.8	1.0	<1.0	2/3/14	2/5/14	NA	NA
1051	Strontium (ppb)	200.8	0.3	51	2/3/14	3/24/15	46.5	3/25/15
1088	Vanadium (ppb)	200.8	0.2	<0.2	2/3/14	2/5/14	0.3	6/16/15
1080	Chromium, Hexavalent (ppb)	218.7	0.03	0.05	NA	NA	0.035	3/23/15 and 3/25/15
1007	Chlorate (ppb)	300.1	20	310	NA	NA	255	3/24/15
2049	1,4 Dioxane (ppb)	522	0.07	1.9	2/7/14	1/14/15 and 3/27/15	3.65	1/14/15 and 3/27/15
2802	Perfluoroheptanoic acid (PFHpA) (ppb)	537	0.01	<0.01	1/31/14	2/1/14	0.02	6/16/14