

## FAQ Frequently Asked Questions

### Why do I get this report each year?

Community water system operators are required by federal law to provide their customers with an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know what contaminants are in their drinking water and how these contaminants may affect their health. It also gives the system operators a chance to tell customers what it takes to deliver safe drinking water.

### Why does my water sometimes look “milky”?

The “milky” look is caused by tiny air bubbles in the water. The water in the pipes is under pressure, and gases (the air) are dissolved and trapped in the pressurized water as it flows into your glass. As the air bubbles rise in the glass, they break free at the surface, thus clearing up the water. Although the milky appearance might be disconcerting, the air bubbles won't affect the quality or taste of the water.

### How can I keep my pet's water bowl germ free?

Veterinarians generally recommend that water bowls be washed daily with warm, soapy water—normally when you change the water. Scour the corners, nooks, and crannies of the water dish using a small scrub brush. In addition, once a week put water bowls into the dishwasher to sanitize them with hot water. In most situations, disinfectants like bleach are not needed; warm, soapy water is all you need to keep your pet's water clean and safe.

### Is it okay to use hot water from the tap for cooking and drinking?

No, always use cold water. Hot water is more likely to contain rust, copper, and lead from household plumbing and water heaters. These substances can dissolve into hot water faster than they do into cold water, especially when the faucet has not been used for an extended period of time.

### How many contaminants are regulated in drinking water?

The U.S. EPA regulates over 80 contaminants in drinking water. Some states may choose to regulate additional contaminants or to set stricter standards, but all states must have standards at least as stringent as the U.S. EPA's. The complete list can be viewed at <http://water.epa.gov/drink/contaminants/index.cfm>.

### Should I be concerned about sodium in my drinking water?

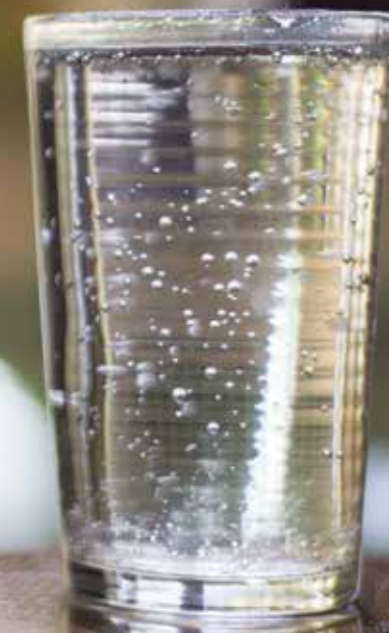
The USDA recommended daily allowance for sodium for a healthy adult is 2400 mg per day. A liter (about 4 servings) has about 22 mg which is less than 1% of the RDA. The leading sources of sodium in a typical diet are bread-like foods.



### For more information about your water

If you have any questions about this report or concerning your water, please contact Jim Connolly, P.E. at [jim.connolly@rockymountnc.gov](mailto:jim.connolly@rockymountnc.gov) or 252-972-1336. We want our valued customers to be informed about their water utility.

If you want to learn more, please attend any of our regularly scheduled meetings. Rocky Mount has regularly scheduled city council meetings on the second and fourth Mondays of the month at 7 p.m. and 4 p.m. respectively. Location is the George W. Dudley City Council Chamber on the third floor of the Frederick E. Turnage Municipal Building, 331 S. Franklin Street, Rocky Mount, NC.



PWS ID #0464010

# 2016 Annual Drinking Water Quality Report

We are pleased to present to you the 2016 Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and to providing you with this information because informed customers are our best allies.

## Our Drinking Water Is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2016. It 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.

## Where Do We Get Our Drinking Water?

The source of our water is the Tar River. We treat the water at either of two water treatment facilities before it is introduced into the water distribution system. One facility is located at the Tar River Reservoir, and the other is located on Sunset Avenue across from City Lake. In 2016, we treated and distributed 3 billion gallons of water to customers in the city of Rocky Mount and surrounding communities. To learn more about our watershed, go to U.S. EPA Surf Your Watershed Web page at [www.epa.gov/surf](http://www.epa.gov/surf).

## 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 (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 Rocky Mount 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:

## Susceptibility of Source to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	SWAP Report Date
Tar River Reservoir	Moderate	July 2015
Tar River near Sunset Ave.	Higher	

The complete SWAP Assessment report for the city of Rocky Mount may be viewed on the web at: [www.ncwater.org/pws/swap](http://www.ncwater.org/pws/swap) or [www.ncwater.org/files/swap/swap\\_reports/0464010\\_7\\_11\\_2015\\_17\\_22.pdf](http://www.ncwater.org/files/swap/swap_reports/0464010_7_11_2015_17_22.pdf). Note that because SWAP results and reports 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 (city of Rocky Mount) and number (PWS ID #0464010) 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 PCSs in the assessment area.

## Sources 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.

## 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 Ad-

ministration 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 at 1-800-426-4791.

## Lead and Drinking Water

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 Rocky Mount is responsible for providing high quality drinking water but cannot control the variety of materials used in customer plumbing components. When your water has been sitting in the home piping 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](http://www.epa.gov/safewater/lead).

## Cryptosporidium Testing

The city of Rocky Mount monitored for cryptosporidium in the river water 2006 - 2008 and has resumed monitoring in September 2015 as prescribed by the EPA directives. In 2006-2008 cryptosporidium was found at levels of less than 0.01 oocyst/liter. The results of the 2015-2016 testing for source water indicates presence of 0.025 oocysts/liter. Presence of cryptosporidium at 0.075/ liter or less is classified as bin #1 which is considered to be lowest level of cryptosporidium hazard for river waters.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised 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.

# 2016 Test Results

We routinely monitor for over 100 contaminants in your drinking water according to Federal and State laws. The tables below 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, 2016. 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.

## 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** – Regulatory compliance with some MCLs is based on running annual average of monthly samples.
- **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.
- **mrem** – millirems per year (a measure of radiation absorbed by the body).
- **NA** – not applicable.
- **ND** – not detected.
- **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.
- **Picocuries per liter (pCi/L)** – a measure of the radioactivity in water.
- **Range** – lowest and highest measurements
- **SU** – standard unit
- **TT** – treatment technique

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 at 1-800-426-4791

## Microbiological Contaminants

Contaminant	Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	Maximum 3.1%	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or E. Coli	N	0	0	N/A	Human and animal fecal waste

## Turbidity

	Violation Y/N	Limit (Treatment Technique)	Level Detected	Major Sources in Drinking Water
Highest single measurement	N	TT=1 NTU	0.29	Soil runoff
Lowest monthly % meeting limit	N	0.3 NTU	100%	Soil runoff

Turbidity is a measurement of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

## Inorganic Contaminants

Contaminant (Units)	Violation Y/N	Highest Detected	Range	MCLG	MCL	Major Sources in Drinking Water
Chromium <sup>1</sup> (ppm)	N	0.00033	ND-0.00033	0.1	0.1	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	N	0.807	0.47- 0.807	4	4	Erosion of natural deposits; water additive which promotes strong teeth

<sup>1</sup> Results from 2014.

## Synthetic Organic Contaminants



Contaminant	Violation Y/N	Highest Detected	Range	MCLG	MCL	Major Sources in Drinking Water
Atrazine (ppb)	N	0.2	0 - 0.2	3	3	Runoff from herbicide used on row crops.

## Unregulated Inorganic Contaminants

Contaminant (Units)	Violation Y/N	Sample Date	Your water	Range	Secondary MCL
Sulfate (mg/L)	N	2015	40	19-61	250

## Lead and Copper

Contaminant (Units)	Violation Y/N	Date Sampled	Your Water	# of sites above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) at 90th percentile	N	8/2/2014 - 8/11/2014	0.009	0	1.3	AL= 1.3ppm	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead (ppb) at 90th percentile	N	8/2/2014 - 8/11/2014	<3	0	0	AL= 15ppb	Corrosion of household plumbing systems; erosion of natural deposits

## Total Organic Carbon (TOC)

The percentage of Total Organic Carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set.

## Disinfectants and Disinfection By-products

Contaminant (Units)	Violation Y/N	Highest Level	Range	MCLG	MCL	Likely Source of Contamination
Total Trihalomethanes (TTHM) (ppb)	N	73	26-108	N/A	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	N	44	14-73	N/A	60	By-product of drinking water chlorination
Chloramines (ppm)	N	2.42	ND-3.9	4	4	Water additive used to control microbes
Chlorine	N	0.77	ND-3.7	4	4	By-product of drinking water chlorination

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

## Water Characteristic Contaminants

Contaminant (Units)	Sample Date	Average	Range	Secondary MCL	Noticeable Effects And/Or Likely Source of Contamination
Sodium (ppm)	2016	21.6	20-24	NA	Sodium refers to the salt present in the water and is generally naturally occurring.
pH	2016	N/A	7.3-8.7	N/A	Erosion of natural deposits
Hardness (ppm as Calcium Carbonate)	2015	45	16-76	N/A	Naturally occurring calcium and magnesium

Secondary Drinking Water Regulations are non-enforceable guidelines regarding contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

## Unregulated Contaminant Monitoring Rule (UCMR3)

Contaminant (Units)	Year Sampled	Highest Detected	Range
Chromium (ppm)	2014	0.00035	ND-0.00035
Strontium (ppm)	2014	0.126	0.0328-0.126
Vanadium (ppm)	2014	0.00039	ND-0.00039
Chromium, Hexavalent (ppm)	2014	0.00019	0.00005-0.00019
Chlorate (ppm)	2014	1.11	0.042-1.11

## Radiological Contaminants

Contaminant (Units)	Year Sampled	MCL Violation (Y/N)	Your Water	Range	MCLG	MCL
Alpha emitters (pCi/L)	2013	N	2	ND-3.94	0	15
Beta/photon emitters (pCi/L)	2013	N	2.5	ND-4.89	0	50*
Combined radium (pCi/L)	2013	N	1.4	ND-0.27	0	5
Uranium (pCi/L)	2013	N	ND	ND	0	20.1

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 regulation is warranted. Any unregulated contaminants detected are reported in this table. For additional information and data, visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html> or call the Safe Drinking Water Hotline at (800) 426-4791.