

Town of Forest City Water System

2016 DRINKING WATER QUALITY REPORT PUBLIC WATER SYSTEM ID # 01-81-010

DEVELOPED **March 7, 2017**

This annual report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide 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. Our water source is the Second Broad River which begins in Marion, NC and flows southeast through Rutherford County.

We invite our customers to learn more about the water treatment process. Tours of our facility are scheduled and questions regarding water quality can be answered by calling the Forest City Treatment Plant staff at 248 - 5215. Questions regarding water bills should be directed to the City's Utility Customer Services staff at 245 - 0148.

Interested in how decisions are made regarding the operation of City facilities? Citizens are welcome to attend regular City Council meetings on the first and third Monday of each month at 7:00 PM. Meetings will be held in the Council Chambers on the second floor of City Hall - 128 North Powell Street.

City Administrative Offices - City Hall - 128 North Powell Street

City Manager – John Condrey

828 - 245 - 4747

City Clerk – Emily Sain

828 - 248 - 5202

Public Works Coordinator – Stewart Briscoe

828 - 248 - 5248

Water Treatment Plant - 581 Vance Street

Superintendent – Jason P. Webb

Office 828 - 248 - 5215

Fax 828 - 248 - 5227

Distribution System - 141 North Broadway Street

Superintendent – Avery Hamrick

828 - 245 - 0149

Want to contact us by way of the Internet? Use our e-mail address:

fcwtp@townofforestcity.com

Este Informe contiene information muy importante.
Traduscalo o hable con un amigo quien Lo entienda bien.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. 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 storm water 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 storm water 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 storm water runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

All 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 the 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 1-800-426-4791.

Physical & Mineral Characteristics for Calendar Year 2016

Constituent	Annual Avg.	MCL
pH, Standard Units	7.54	TT
Alkalinity, mg/l	23.0	N/A
Chlorine, mg/l	1.38	4.0
Hardness-EDTA, mg/l	21.69	N/A
Iron, mg/l	ND	.30
Manganese, mg/l	ND	.05
Sodium, mg/l	10.0	N/A
Sulfate, mg/l	ND	250
Temperature, degrees C	17.8	N/A

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Treatment Technique (TT) - a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - the "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - the "Goal"(MCLG) is 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.

Locational Running Annual Average (LRAA) – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

Facts and Figures

The City's Water Treatment Facility is required to test for over 100 contaminants to make sure that the water you drink is safe. We are pleased to report for the calendar year 2016 the water delivered to your homes and businesses complied with all State and Federal requirements. The following regulated contaminants were detected in our finished drinking water as analyzed between January 1st and December 31st, 2016, unless otherwise noted. The EPA has determined your water is SAFE at these levels. There were numerous contaminants tested for but not detected. Finished water is the water that leaves our treatment plant and is distributed throughout the system.

<i>Contaminant & Unit</i>	<i>Violation Y/N</i>	<i>Avg or Level Detected</i>	<i>RANGE LOW HIGH</i>	<i>M C L G</i>	<i>M C L</i>	<i>Likely Source of Contamination</i>
<i>Regulated at the Treatment Plant</i>						
Barium, mg / l	No	<0.40		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride, mg / l	No	.60		4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Turbidity, NTU *	No	.045		N/A		Soil runoff: 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 below 0.3 NTU.
Beta/photon emitters, pCi / L **	No	N/D		0	50	Decay of natural and man-made deposits
Alpha emitters, pCi / L **	No	N/D		0	15	Erosion of natural deposits
<i>Regulated at the Customer's Tap</i>						
Copper, mg / l	No	ND ***		1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. No sampling sites exceeded the Action Level
Lead, mg / l	No	.004 ***		0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits. No sampling sites exceeded the Action Level
<i>Disinfectant By-products Precursors Removal</i>						
~ TTHM [Total Trihalomethanes], ppb	No	38 ****	15.3 68.5	0	80	By-product of drinking water chlorination. Values from 18 to 85 ppb in the distribution system
~ ~ HAA5 [Total Haloacetic Acids], ppb	No	21 ****	13.6 35.0	0	60	By-product of drinking water chlorination. Values from 10 to 105 ppb in the distribution system.
TOC's [Total Organic Carbon], ppm	No	0.0 (LRAA)	N/D N/D	2.0	TT	Naturally present in the environment.
<i>Regulated in the Distribution System</i>						
Total Coliform Bacteria	No	0		0	1 positive sample /month	Human and animal fecal waste; indigenous sources such as vegetation; bacterial regrowth

~ For TTHM: 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 systems, and may have an increased risk of getting cancer.

~ ~ For HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Summarized results for calendar year 2016

* The highest finished water turbidity reading for the year was .10 NTU.

** Samples were analyzed 02/14/12. Next required sampling is in March 2021.

*** Lead and Copper are determined to the 90th percentile. Lead and copper samples were analyzed during 2013. Next required sampling is 2016.

**** These compounds are components of the total trihalomethanes, therefore no individual MCL has been established.

MCL (Maximum Contaminant Level).....

is an enforceable level of a contaminant as close to the goal as is practical to achieve in light of available treatment technology and cost/benefit considerations. MCL's are set at stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a once-in-a-million chance of having the described health effect.

Special Concerns

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 Forest City 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 your 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 <http://www.epa.gov/safewater/lead>.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

The North Carolina Department of Environment and Natural Resources (DENR), 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 Town of Forest City 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 Sources to Potential Contaminant Sources (PCSs)

Source Name	Susceptibility Rating	Swap Report Date
Second Broad River	Moderate	July 14, 2015

The complete SWAP Assessment report for the Town of Forest City may be viewed on the Web at: <http://www.deh.enr.state.nc.us/pws/swap>. To obtain 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 request to swap@ncdenr.gov. Please indicate your system name, PWSID, 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 systems’ potential to become contaminated by PCS’s in the assessment area.

Protection of drinking water is everyone’s responsibility. You can help protect your community’s drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center, volunteer in your community to participate in group efforts to protect your source, etc.).