Town of Williamston

Annual Drinking Water Quality Report

PWS ID# 04-59-010

May 23, 2017

Dear TOWN of WILLIAMSTON customer,

We are pleased to present this year's Annual Drinking Water Quality Report. This report includes details about where your water comes from, what's in the water, and how it compares to standards set by regulatory agencies. It is our goal to consistently provide you with a safe and dependable supply of drinking water. To ensure that your water is safe to drink, the US EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems while the FDA regulates bottled water to provide the same protection for public health. We strive to improve our water treatment process and protect our water resources and we are committed to ensuring the quality of your water. We take pride in our system's operation and the diligence of those individuals involved in its operation and maintenance. We also realize the value and importance of informed customers.

I'm pleased to report that our drinking water meets all federal and state requirements. As we have stated in past water quality reports, several years ago the state determined that groundwater aquifers in our area were being impacted by groundwater withdrawals and that the withdrawals were resulting in the migration of salt water into the aquifers. The decision was made to require the town to obtain water from another source. The same decision also applied to Martin County's water system. The state's Central Coastal Plains Capacity Use Rules were implemented in our area and the decision was made of obtain water from the Roanoke River. The town and county then partnered to establish the Martin County Regional Water and Sewer Authority (MCRWASA). As of March 7, 2016, the Town of Williamston receives its water from the Authority through their water treatment facility. Although used as an emergency or supplemental supply only, the town also continues to operate six wells, drawing groundwater from the Black Creek and Upper Cape Fear Aquifers. These wells are located at 415 W. Church St., 303 Carolina Ave., 107 Willow Dr., 161 Factory St., 400 Henderson St., and 23319 Hwy 125 North.

If you have any questions about this report or your water, please contact Gary Barmer at the Public Works Department at (252) 792-1024. We value our customers and want you to be informed about your water utility.

Our natural resources continue to be of critical importance to us all. The water delivered to your home is one of the best values available to you. Where would we be without it? Your system provides you with about 1000 gallons of water for the price of about a gallon or two of gas from the neighborhood store. The Town of Williamston offers customers a one-time rebate for the installation of low flow water fixtures. See the Town Clerk for inquiries. ((252) 792-5142) ***USE WATER WISELY.....PLEASE CONSERVE !!!***

Sincerely,

Kerry L. Spivey
Director of Public Works
Town of Williamston

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 (800-426-4791).

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).

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 Williamston 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 http://www.epa.gov/safewater/lead.

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 Williamston 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
Church St. Well	Moderate	March 2010
Carolina Ave. Well	Moderate	March 2010
Willow Dr. Well	Moderate	March 2010
Factory St. Well	Moderate	March 2010
Henderson St. Well	Moderate	March 2010
Northside Well	Lower	March 2010

The complete SWAP Assessment report for the Town of Williamston may be viewed on the Web at: http://www.ncwater.org/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@ncmail.net. 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 919-715-2633.

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 PCS's in the assessment area

We routinely monitor for over 120 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the 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 or the State requires 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.

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.

Important Drinking Water Definitions:

Not-Applicable (N/A) – Information not applicable/not required for that particular water system or for that particular Rule.

Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

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.

Action Level (AL) -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 Residual Disinfection Level Goal – The "Level" (MRDLG) 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.

Maximum Residual Disinfection Level – The "Highest Level" (MRDL) of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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.

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.

MCL's are set at very 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 one-in-a-million chance of having the described health effect.

Inorganics Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low / High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm) Well W08 →	March, 2015 Sept 2014	N	2.4	1.6 to 2.4	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Lead and Copper Contaminants

Contaminant (units)	Sample Date 2016	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90^{th} percentile)	May Oct.	0.338 0.272	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Stage 2 Disinfection Byproduct Compliance

Contaminant (units)	Year Sampled	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb)					N/A	80	By-product of drinking water chlorination
Location B01	2016	N	34.4				
Location B02	2016	N	24.6				
HAA5 (ppb)					N/A	60	By-product of drinking water disinfection
Location B01	2016	N	18.6				
Location B02	2016	N	13.8				

Disinfectant Residuals Summary

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range Low High	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	2016	N	1.72	0.50 to 1.72	4	4.0	Water additive used to control microbes
Chloramines (ppm)	2016	N	4.10	1.70 to 4.10	4	4.0	Water additive used to Control microbes

MCWRWASA WATER PRODUCTION FACILITY (Purchased Water)

Compound & Unit	Highest Level Allowed by Regulation (MCL)	Maximum Contaminant Level Goal (MGLG)	Maximum Detected by WTP	Range High	Range Low	Major Source of Compound
Microbiological Contaminants			**January through December 2016**			
Turbidity, NTU*	TT = NTU	N/A	0.23	023	0.00	Soil run off
	TT = Percentage of Samples <0.3 NTU	N/A	100%			
Disinfectants/Disinfection By-Products			**January through December 2016**			
Total Organic Carbon (TOC) – Raw Water mg/l**	TT	N/A	7.60	7.60	3.30	Naturally present in the environment
Total Organic Carbon(TOC) – Treated Water mg/l**	TT	N/A	3.20	3.20	1.20	Naturally present in the environment
Toc Removal Ratio**	TT	N/A	1.47	1.29	1.41	
Volatile Organic Chemical			**January through December 2016**			
Total Xylenes	10	10	0.0013	Mg/L		Discharge from petroleum Factories; discharged from Chemical Factories

ANNUAL AVERAGE OF PROCESS CONTROL TE

Parameter	Annual Average
Alkalinity, mg/l	28
Color, mg/l	2
Calcium, mg/l	21
Hardness, mg/l	32
Iron, mg/l	0.05
Manganese, mg/l	0.019
Phosphate, mg/l	2.00
pH, SU	8.05
Sulfate (1055)	54.80
Sodium (1052)	24.86

All sources of drinking water are subject to potential contamination by naturally occurring or man made substances. These substances can be microbes, organic or inorganic chemicals, and radioactive substances. 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. In order to ensure that tap water is safe to drink, EPA prescribes regulations limiting contaminant concentrations in water provided by public water systems. FDA 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

The Town of Williamston staff works diligently to provide the best possible quality water to every tap. As we find ourselves facing increased restrictions of our water resources, we ask that all our customers help us to conserve water and protect our water sources, which are the heart of our community, our way of life and our children's future.

Please call our office if you have questions.

Gary W. Barmer
Water System Operator

Kerry L. Spivey
Director of Public Works

WATER CONSERVATION TIPS

Kitchen

* Eliminate leaks by replacing old gaskets. A dripping faucet can waste 3,600 gallons a year.
* Install faucet aerators.
* Keep a pitcher of cold water in the fridge, instead of running water until its cold.
* Don't leave the water running while rinsing dishes.
* Don't use a garbage disposal.
* Only use the dishwasher with full loads, and use the "water-saver" setting, if available.
* Don't rinse dirty dishes before loading into dishwater; scrape clean and let the machine do the rest.
* Don't thaw frozen food under running water.

Bathroom

* Don't leave the water running while rinsing, shaving, or brushing teeth.
* If you hear running water in your toilet tank, adjust the leaky float valve or replace the faulty hardware.
* Don't use your toilet as a wastebasket.
* Install a water-filed plastic jug or a "toilet tank bag" in your toilet tank to reduce the water used per flush.
* Don't use a brick, which may crumble.
* Check for leaks by dropping a small amount of food coloring in the upper tank.
* If color appears in the bowl, you have a leak.
* Take shorter showers
* Install faucet aerators and or water-saving showerheads.

Outdoors

* Check for and repair leaky garden taps, hose connections and sprinkler valves.
* Water in the morning or evening, not in the heat of the day, to prevent evaporation.
* Avoid watering on windy days.
* Water slowly, thoroughly, and as infrequently as possible to promote deep roots and healthy plants.
* Hold your garden hose close to the roots of plants so that there's little waste and evaporative loss.
* Add compost and other organic matter to your soil to improve its water holding capacity.
* Choose plants that don't require a lot of water.
* Mulch all plant beds to reduce evaporation, weeds, and soil temperature.
* Position sprinklers so that they do not water pavement.
* Use rinse water from the house to water plants in or near the house.
* Never let water run unnecessarily
* Limit car washing. Use a bucket and a hose with spray attachment.
* Don't use the hose to clean driveways and sidewalks. A broom will provide more exercise, anyway.