

# Town of Lake Waccamaw

## 2016 Annual Drinking Water Quality Report

PWSID #04-24-045

May, 2017

We are pleased to present to you this year's Annual Water Quality Report. This report is a snapshot of last year's water quality. Included are details about from where your water comes, 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. If you have any questions about this report or concerning your water, please contact the Lake Waccamaw Town Hall at 910-646-3700. We want our valued customers to be informed about their water quality. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at the Town Hall on the second Tuesday of each month at 6:00 PM.

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. Immunocompromised 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 (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 Lake Waccamaw 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 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

**Susceptibility of Sources to Potential Contaminant Sources (PCSs)**

Source Name	Susceptibility Rating	SWAP Report Date
Well #1	Moderate	August 2015
Well #2	Moderate	August 2015

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.

The complete SWAP Assessment report for Lake Waccamaw may be viewed on the Web at <http://www.ncwater.org/pws/swap>. Note that because SWAP results and reports are periodically updated by the PWS Section, the results available on the 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, 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.

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 provide the same protection for public health.

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.

Our water source is two deep wells drawing ground water from the Black Creek and Cape Fear Aquifers.

I’m pleased to report that our drinking water is safe and meets Federal and State requirements.

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.

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The relative susceptibility rating of each source for Lake Waccamaw 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.

We routinely monitor for over 150 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 concentration 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

*Non- 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 2 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)* – Pico curies per liter is a measure of the radioactivity in water.

*Action Level (AL)* – The concentration of a contaminant which, if exceeded, triggers treatment

or other requirements which a water system must follow.

*Maximum Contaminant Level (MCL)* – The “Maximum Allowed” is the highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLGs as feasible using the best available treatment of contaminants.

*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. MCLG’s 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 By Products Rule.

EXTRA NOTE: 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.

As mentioned earlier, the table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. Many additional contaminants were tested for but were not detected. A list of these contaminants is available at Town Hall.

**Microbiological Contaminants in the Distribution System (2016)**

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria) (presence or absence)	N	Absent	0	1 Positive Sample/Month*	Naturally present in the environment
Fecal Coliform or E. coli (Presence or absence)	N	Absent	0	Note: If either an original routine sample and/or its repeat samples are Fecal Coliform or E. coli Positive, a Tier 1 violation exists.	Human and animal fecal waste

\*If a System Collecting fewer than 40 samples per month has two or more positive samples in one month, the System has a MCL violation.

### Lead and Copper Contaminants (2015)

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	08/18/15	0.135	0	1.3	AL=1.3	Corrosion of household plumbing Systems; erosion of natural deposits; Leaching from wood preservatives
Lead (ppm) (90 <sup>th</sup> percentile)	08/18/15	ND	0	0	AL=15	Corrosion of household plumbing Systems, erosion of natural deposits.

### Radiological Contaminants (2012)

Contaminant (units)	Sample Date	MCL Violations Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/l)	02/08/01	N	2	0	15	Erosion of natural deposits

### Disinfection Byproduct Analysis

#### TTHM Analysis (2016)

Contam Code	Contaminant	Method Code	Not Detected above R.R.L	Quantified Results Bella Coola	Allowable Limits
2950	Total Trihalomethanes	217		0.0434 mg/l	0.080 mg/l

#### HAA5 Analysis (2016)

Contam Code	Contaminant	Method Code	Not Detected above R.R.L	Quantified Results Bella Coola	Allowable Limits
2456	Total Haloacetic Acids	253		0.0116 mg/l	0.060 mg/l

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.

### Inorganic Contaminants (2015)

Contaminant (Units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Fluoride (ppm)	1/20/15	N	0.14	ND	0.14	4	4	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
Sodium (ppm)	1/20/15	N	51.460	25.850	51.460			
pH	1/20/15	N	7.8	7.6	7.8			

We at the Town of Lake Waccamaw work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our water resources (groundwater, lakes, streams, and rivers), that are the heart of our community, our way of life and our children's future. Water conservation and awareness and elimination of possible cross-connections and potential backflows

are means that all citizens can use to protect our drinking water.

If you have any questions concerning your water or about this report, please contact Harry Foley, Town Manager, at the Lake Waccamaw Town Hall (910-646-3700).