

Wilkesboro's Drinking Water Source

The water that is used by this system is surface water from the Yadkin River. The intake for the Town of Wilkesboro is located adjacent to North Collegiate Drive.

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 the source for The Town of Wilkesboro 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 watershed and its delineated assessment area).

The Town of Wilkesboro's source (**Yadkin River**) was determined to have a susceptibility rating of **Higher** according to the SWAP report released in February 2010.

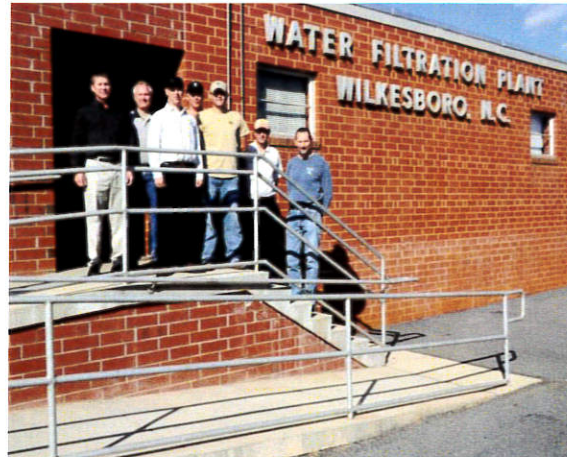
The complete SWAP Assessment report for the Town of Wilkesboro may be viewed on the web at: <http://www.deh.enr.state.nc.us/pws/swap> Please note that results available on the web site may differ from the results that were available at the time this water quality report was prepared. You may mail a request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh N.C. 27699-1634 or email requests to swap@ncmail.net. Please indicate system name (Town of Wilkesboro), PWSID(01-97-025), and provide your name, mailing address and phone number. If you have 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.

Town of Wilkesboro

2012

Water Quality Report



Town of Wilkesboro Public Water Utility meets or exceeds all Drinking Water Quality Standards

The Town of Wilkesboro Water Filtration Plant utilizes a conventional type treatment process with eight dual-media gravity filters. The plant has the capacity to treat 10 million gallons per day and gets its source water from the Yadkin River. The original plant was constructed in 1964 and has been expanded and upgraded over the years and is now a modern water treatment facility including a certified laboratory. Water quality is top priority for the town's nine state certified water treatment specialists who operate the plant around the clock.

The town's water system has never been in violation of any EPA standard, and has met all water quality parameters. Water from the plant serves not only Wilkesboro but also the surrounding community water systems of Broadway, Moravian Falls, and West Wilkes.

For 2012, as in previous years, your treatment facility has met or exceeded all state and federal standards for drinking water quality. This accomplishment reflects the quality and dedication of the employees who work year-round to provide adequate supplies of safe drinking water.

This brochure includes details about where your drinking water comes from, how it is treated, what it contains, and exactly how it compares to state and federal standards. This report is updated on a regular basis and mailed annually to our customers.

Sources of Drinking Water

The sources of drinking water (both tap 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 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 come from gas stations, urban storm runoff, and septic systems.
- **Radioactive Contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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.

Drinking water, including bottled, 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.

Treated Water Quality

The following substances were detected in the Town of Wilkesboro public water supply during the 2012 calendar year, or the results are from the most recently required testing period.

Regulated at the Treatment Plant

Substance	Highest Level Allowed (EPA's MCL)	Ideal Goals (EPA's MCLG)	Range of Detections	Average Level Detected	Source
Fluoride, ppm	4.0	4.0	0.54 – 0.79	0.67	Erosion of natural deposits; water additive; discharge from fertilizer and aluminum factories
Nitrate, ppm	10.0	10.0	n/a	ND	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon, ppm	Treatment Technique 1	n/a	0.73 – 1.02	0.92	Natural organic matter
Turbidity, NTU	Treatment Technique 2	n/a	0.06 – 0.10 **	0.10- (100%)* **	Soil erosion; natural geology
Alpha Emitters, pCi/L	15.0	0	n/a	ND	Erosion of natural deposits
Beta Emitters, pCi/L	50.0*	0	n/a	2.06	Decay of natural and man-made deposits
Combined Radium, pCi/L	5.0	0	n/a	0.3	Erosion of natural deposits
Uranium, pCi/L	20.1	0	n/a	ND	Erosion of natural deposits

Regulated in the Distribution System

Total Trihalomethanes, ppb	80 RAA	n/a	28 - 59	42	By-product of drinking water disinfection
Total Haloacetic Acids, ppb	60 RAA	n/a	18 – 28	22	By-product of drinking water disinfection
Chlorine, ppm	4.0	4.0	0.7 – 2.0	1.6	Water additive used to control microbes
Total Coliforms	One positive monthly sample	0	0 – 0	0	Naturally present in the environment
Fecal Coliforms or E. Coli	0	0	0 – 0	0	Naturally present in the environment

Unregulated Substances

Sodium, ppm	n/a	n/a	n/a	11.1	
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*Note: The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

** Note: Range of Detections is the range of monthly maximum turbidities recorded.

***Note: Maximum recorded turbidity for 2012 was 0.10NTU's. Turbidity rule mandates that 95% of samples be below 0.3NTU's, Wilkesboro had 100% below limit.

Regulated at the Consumers' Tap

Substance	Highest Level Allowed (EPA's MCL)	Ideal Goals (EPA's MCLG)	Number of Sites Sampled	Number of Sites Above the Action Level	90 th Percentile Concentration, ppb	Source (both lead and copper)
Copper, ppm	1.3	1.3	20	0	< 0.05	Corrosion of household plumbing Systems, erosion of natural deposits
Lead, ppb	15	0	20	0	< 3	

Definitions:

ND – Not Detected

EPA – Environmental Protection Agency

(MCL) Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water.

(MCLG) Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected risk to health.

ppb – One part per billion. (For example, one penny in \$10,000,000.)

ppm – One part per million. (For example, one penny in \$10,000.)

Treatment Technique 1 – The Town of Wilkesboro used Alternative Compliance Criteria 2 to comply with its treatment technique of ensuring that its treated water Total Organic Carbon content remained less than 2.0 ppm.

Treatment Technique 2 – No more than 5% of measurements in a given month may exceed 0.3 NTU's.

NTU, Nephelometric Turbidity Unit – A measure of the clarity of the water. Turbidity above 5 NTU's is just noticeable to the average person.

RAA, Running Annual Average – last four quarterly samples collected from the system.

pCi/L, Picocuries per liter – A measure of the radioactivity in water.

Action Level – The concentration of a contaminant that triggers treatment or other requirements that a water system must follow.

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.

Cryptosporidium

Cryptosporidium is a microscopic organism that, when ingested, can cause diarrhea, fever and other gastrointestinal symptoms. The organism occurs naturally in surface waters (lakes & streams) and comes from animal waste. Cryptosporidium is eliminated by an effective treatment combination of coagulation, sedimentation, filtration, and disinfection. The Yadkin River was tested and did contain Cryptosporidium in 3 of 24 samples taken from April 2008 through March 2010.



Special Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. People whose immune systems have been compromised: such as people 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 for infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants. Further information is available from the Safe Drinking Water Hotline at (800)-426-4791.

Lead Exposure from Water

Elevated levels of lead in drinking water can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing.

The Town of Wilkesboro 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 and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800)-426-4791 or go online at www.epa.gov/safewater/lead.

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 Town Board Meetings. They are held on the first Monday of each month, 7:00 P.M., at the Wilkesboro Town Hall. Town Hall is located at 203 West Main Street. If you have any questions concerning this Water Quality Report you can contact the staff of the Water Filtration Plant at 838-4631.



Town of Wilkesboro

Mayor: Mike Inscore

Mayor Pro Tem: Jimmy Hayes

Town Council: Nellie Archibald, Gary Johnson, Mike Testerman

Town Manager: Ken Noland

Utility Director: Sam Call