

**“2009” Annual Drinking Water Quality Report**  
**Town of Youngsville**  
PWS ID# 02-35-020  
June 17, 2010

We are pleased to present to you this year's Annual Drinking 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 Town of Youngsville at (919)556-5073.**

**What EPA Wants You to Know**

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).

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 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.

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.

**When You Turn on Your Tap, Consider the Source**

The water that is used by this system is purchased by Franklin County. At the present, Franklin County Department of Water and Sewer has three sources. Franklin County purchases water from Henderson, Louisburg, and Franklinton. Henderson supplies us water from Kerr Lake, which is surface supply. Raw waste from Louisburg comes from the Tar River. Franklinton has two reservoirs, Taylor Creek and Cedar Creek. All test are ran by Henderson, Louisburg, and Franklinton except TTHM, HAA5 and Lead and Copper which are run by Franklin County and the Town of Youngsville.

**Source Water Assessment Program (SWAP) Results**

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 Town of Youngsville 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
Taylor Creek	Lower	March 2007
Cedar Creek	Moderate	March 2007
Tar River	Higher	March 16, 2005
Kerr Lake	Moderate	May 17,2007

The complete SWAP Assessment report for Town of Youngsville may be viewed on the Web at: <http://www.deh.enr.state.nc.us/pws/swap> 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 request to [swap@ncmail.net](mailto: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

**Violations that Your Water System Received for the Report Year**

During 2009, or during any compliance period that ended in 2009, we received an allowable limit violation for TTHM. The sample was pulled at the Town Hall. The result was 0.1 mg/l and the allowable limit is 0.080 mg/l. A notice was posted at the Town Hall. The Town is monitoring TTHM’s on a quarterly basis and is flushing the system quarterly.

**Water Quality Data Table of Detected Contaminants**

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, 2009.** 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.

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

*Maximum Residual Disinfection 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 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.

*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.

Extra Note: MCLs 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.

**Microbiological Contaminants**

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	ND	0	one positive monthly sample	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	ND	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive)	Human and animal fecal waste

**Lead and Copper Contaminants**

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90 <sup>th</sup> percentile)	7/09	.060	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90 <sup>th</sup> percentile)	7/09	ND	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

**Disinfectants and Disinfection Byproducts Contaminants**

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	Y	.076	.043 .1	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	.041	.0254 .042	N/A	60	By-product of drinking water disinfection

This CCR is for contaminants tested from the Town of Youngsville. The CCR for Franklin County can be reviewed on their website at <http://www.co.franklin.nc.us/WASA/adwqr.pdf> Franklin County's report also includes result from testing from Henderson, Franklinton and Louisburg.

June 1, 2010

**2009 ANNUAL DRINKING WATER QUALITY REPORT  
FRANKLIN COUNTY PUBLIC UTILITIES  
PWDS ID # 02-35-030**

We are pleased to provide you with 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 Bryce Mendenhall at 919-556-6177. 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. The meetings are held in the Commissioners Room on the second floor of the Franklin County Administrative Office, 113 Market Street, Louisburg N.C., on the first and third Monday of each month.

**What EPA Wants You to Know**

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 (1-800-426-4791).

"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. Franklin County Public Utilities 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>."

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with 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 (1-800-426-4791).

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, 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 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.

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.

**When you Turn on Your Tap, Consider the Source**

At the present, Franklin County Public Utilities has three water sources. We purchase potable water from Louisburg, Franklinton, and Henderson. Raw water from Louisburg comes from Tar River. Franklinton has two reservoirs, Taylor Creek and Cedar Creek. Henderson supplies us with water from Kerr Lake, which is a surface supply. All tests are run by Louisburg, Franklinton and Henderson except TTHm, a by-product of drinking water chlorination, Copper, Lead and monthly Bacteria which are run by Franklin County. We are pleased to report that our drinking water is safe and meets all federal and state requirements.

Louisburg, Franklinton, Henderson and Franklin County routinely monitor for contaminants in your drinking water according to Federal and State Laws. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

**Source Water Assessment Program (SWAP) Results**

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 Franklin County Public Utilities was determined by combining the contaminant rating (number and location 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 below.

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

**Franklinton:**

Source Name	Susceptibility Rating	SWAP Report Date
Taylor Creek	Lower	March 2007
Cedar Creek	Moderate	March 2007

**Louisburg:**

Source Name	Susceptibility Rating	SWAP Report Date
Tar River	Higher	March, 2005

**Henderson:**

Source Name	Susceptibility Rating	SWAP Report Date
Kerr Lake	Moderate	

The complete SWAP Assessment report for Franklin County may be viewed on the Web at: <http://www.deh.enr.state.nc.us/pws/swap>. Please 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. 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](mailto: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.

**Violations that Your Water System Received for the Report Year**

The Franklinton water system received Maximum Contaminant Level (MCL) violations for Total Trihalomethanes (TTHMs) for the first two (2) quarters of 2009. These levels are based on a Running Annual Average (RAA). The state limit is 80 parts per billion (ppb) and our averages were 88 ppb and 92 ppb, respectively.

Some people who drink water that contains 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.

The Town of Franklinton's water plant staff has implemented process changes and established a quarterly flushing program to lower the amount of TTHMs in your drinking water. The RAA for TTHM's at the end of 2009 was 64 ppb. The System also received notice that during the second quarter of 2009 our RAA for Total Haloacetic Acids (HAAs) exceeded the MCL of 60 ppb. The average was 67 ppb. The flushing program and operational changes also resulted in the lowering of the RAA at the end of 2009 to 38 ppb.

During 2009, or during any compliance period that ended in 2009, Louisburg received a tier 2 violation that covered the time period of the first two quarters. Louisburg has worked with the state to assure this does not happen again. Louisburg exceeded the drinking standards for DBPs (thm & haa5) for the first two (2) quarters of the year. The actual test results were below the limits but the third quarter in 2008 was high and kept the running annual average above the limit. Some people who drink water containing haloacetic acids in excess of the mcl over many years may have an increased risk of getting cancer. Some people who drink water containing trihalomethanes over many years may experience problem with their liver, kidneys, or nervous system.

**What If I Have Any Questions Or Would Like to Become More Involved**

Should you have any questions about this report or concerning your water utility, please contact Bryce Mendenhall, Director of Franklin County Public Utilities. Our mailing address and Administrative Office location is 1630 US Hwy 1, Youngsville, North Carolina, 27596. Our phone number is 919-556-6177. Our fax number is 919-556-6709. Mr. Mendenhall's email address is [bmendenhall@franklincountync.us](mailto:bmendenhall@franklincountync.us).

**Water Quality Data Table of Detected Contaminants**

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, 2009 through December 31, 2009.**

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, through representative of the water quality, is more than one year old.

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In this table you will find many terms and abbreviations that you might not be familiar with. To help you better understand these terms we have provided the following 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 constituent is not present.

Parts per Million (ppm) or Milligrams per liter (mg/l) – one part 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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) – One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or one penny in \$10,000,000,000,000.

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

Millirems per year (mrem/yr) – measure of radiation absorbed by the body.

Million Fibers per Liter (MFLO – million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

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 contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) – (mandatory language) – A treatment technique is required process intended to reduce the level of contaminant in drinking water.

Maximum Contaminant Level – (mandatory language) – The "Maximum Allowed" (MCL) is the highest level of a contaminant is allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal – (mandatory language) – The 'Goal' (MCLG) is the level of a contaminant in drinking water below which there is no known expected risk to health. MCLGs allow for a margin safety.

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The Town of Louisburg routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of the Louisburg Water Plant for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009.

**Microbiological Contaminants**

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	One positive monthly sample	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N	0	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive)	Human and animal fecal waste

**Turbidity\* - Systems with population > 10,000**

- **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 less than or equal to 0.3 NTU.**

Contaminants	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Turbidity(NTU)	N	.35 / 98%	NA	TT = 1 NTU TT=percentage of samples < 0.3 NTU	Soil Runoff
<b>Inorganic Contaminants</b>					

Contaminant(units)	Sample Date	MCL Violation Y/N	Your Water	Range Low/High	MCLG	MCL	Like Source of Contamination
Barium (ppm)	8/09	N	0.020	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	8/09	N	0.19	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

**Unregulated Inorganic Contaminants**

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Sulfate (ppm)	8/09	2.79	N/A	250

#### Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) 90 <sup>th</sup> percentile	9/09	0.081	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	9/09	5	0	0	AL-15	Corrosion of household plumbing systems, erosion of natural deposits

#### Total Organic Carbon

Contaminant (units)	TT Violation Y/N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low-High	MCLG	MCL	Likely Source of Contamination	Compliance Method (Step 1 or ACC#)
Total Organic Carbon (removal ratio) (TOC)-TREATED	n	1.31	1.02-1.77	N/A	TT	Naturally present in the environment	Step 1

#### STEP 1 TOC REMOVAL REQUIREMENTS

Source Water TOC (mg/L)	Source Water Alkalinity mg/L as CaCO <sub>3</sub> (in percentages)		
	0-60	>60-120	>120
>2.0 -4.0	35.0	25.0	15.0
>4.0 - 8.0	45.0	35.0	25.0
>8.0	50.0	40.0	30.0

#### Disinfectants and Disinfection Byproducts Contaminants

Contaminant(units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contaminant
TTHM (ppb) (Total Trihalomethanes)	Y	54.48	32.1-87.1	N/A	80	By-product of drinking water chlorination
HAA5 (ppb)	Y	42.6	15.2-55.0	N/A	60	By-product of drinking water chlorination
Chlorine (ppm)	N	1.21	.73-1.91	MRDLG=4	MRDL=4	Water additive used to control microbes

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.

#### Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Sodium (ppm)	8/09	19.0	N/A	N/A
pH	8/09	7.65	N/A	6.5 to 8.5

#### Cryptosporidium

Louisburg system monitored for Cryptosporidium and found levels of 3ocysts.

Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of our source water and/or finished water indicated the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps.

Most health individuals are able to overcome the disease within a few weeks. However, immune-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immune-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. Cryptosporidium must be ingested for it to cause disease, and it may be spread through means other than drinking water.

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The Town of Franklinton routinely monitors for contaminants in your drinking water according to Federal and State Laws. This table shows the results of the Franklinton's Water Plant for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009.

#### Microbiological Contaminants

Contaminant (Units)	MCL Violation		MCLG	MCL	Likely Source of Contamination
	Y/N	Your Water			
Total Coli form Bacteria (presence or absence)	N	Absence	0	One positive sample	Naturally present in the environment
Fecal Coli form or E. coli (presence or absence)	N	Absence	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coli form positive, and one is also fecal coli form or E. coli positive)	Human and animal fecal waste

#### Turbidity-Systems with population <10,000

Contaminant (Units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
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Turbidity (NTU)	N	.10 100%	NA	TT= 1 NTU TT = Percentage of samples < 0.3 NTU	Soil runoff
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\*\*Turbidity is a measure of the cloudiness of the water. We monitor it because it a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU.

**Unregulated Inorganic Contaminant**

Contaminant (units)	Sample Date	Your Water	Range: Low/High	Secondary MCL
Sulfate(ppm)	2/2009	33.6	N/A	250

**Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides**

Contaminant (units)	Sample Date	MCL Viola-tion Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Di(2-ethylhexyl) adipate(ppb)	11/2009	N	.707	N/A	400	400	Discharge from chemical factories

**Asbestos Contaminant**

Contaminant (units)	Sample Date	MCL Viola-tion Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Total Asbestos (MFL)	3/2003	N	.2	N/A	7	7	Decay of asbestos cement water mains; erosion of natural deposits

**Lead and Copper Contaminants**

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper(ppm) (90 <sup>th</sup> percentile)	9/2009	.173	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead(ppb) 90 <sup>th</sup> percentile	9/2009	N/A	0	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

**Disinfection By-Product Precursor Contaminants**

Contaminants (units)	TT Violation Y/N	Your Water(RAA Removal Ratio)	Range Monthly Removal ratio Low/High	MCLG	MCL	Likely Source of Contamination	Compliance Method (Step 1 or ACC#)
Total Organic Carbon (Removal ratio) (TOC)-TREATED	N	1.30	1.13-1.55	N/A	TT	Naturally present in the environment	Step 1

STEP 1 TOC Removal Requirements			
Source Water TOC (mg/L)		Source Water Alkalinity	
		MG/L as CaCO3 ( in percentages)	
		0-60	>60-120
> 2.0 – 4.0		35.0	25.0
>4.0 – 8.0		45.0	35.0
> 8.0		50.0	40.0
			>120
			15.0
			25.0
			30.0

**Disinfectants and Disinfection By-Products Contaminants**

Contaminant (units)	MCL/MRDL Violation(Y/N)	Your Water(avg)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM(ppb) (Total Trihalomethanes)	N	64	37-185	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) (Total Haloacetic Acids)	N	38	15-172	N/A	60	By-product of drinking water disinfection
Chlorine(ppm)	N	1.3	.63-1.93	MRDLG=4	MRDL=4	Water additive used to control microbes

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.

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.

**Water Characteristics Contaminants**

Contaminant	Sample MCL	Your	Secondary (units)	Date	Water
Sodium(ppm)		2/2009	23.8		N/A
pH		2/2009	7.10		6.5 to 8.5

\*\* Range Low/High: N/A

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The City of Henderson routinely monitors for contaminants in your drinking water according to Federal and State Laws. This table shows the results of the Henderson's Water Plant for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009.  
Sampling Results

Regulated Substances							
Substance (Unit of Measure)	Year Sampled	MCL (MRDL)	MCLG (MRDLG)	Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2009	(4)	(4)	.92	0.20-1.63	No	Water additive used to control microbes
Fluoride (ppm)	2009	4	4	1.02	0.51-1.30	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Halo acetic Acids (HAA)	2009	60	NA	28.1	11-41	No	By-product of drinking water disinfection
Total Organic Carbon (TOC) (removal ratio)	2009	TT	NA	1.07	1.00-1.21	No	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes) (ppb)	2009	80	NA	60.6	43-81	No	Naturally present in the environment
Turbidity (NTU)	2009	TT=1 NTU	NA	.10	0.03-0.10	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2009	TT	NA	100	N/A	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
Substance (Unit of Measure)	Year Sampled	AL	MCLG	Amount Detected (90 <sup>th</sup> tile)	Sites above AL/Total Sites	Violation	Typical Source
Copper (ppm)	2008	1.3	1.3	0.147	0/30	no	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Secondary Substances							
Substance (Unit of Measure)	Year Sampled	MCL	MCLG	Amount Detected	Range Low-High	Violation	Typical Source
Sulfate (ppm)	2009	250	NA	20.2	20.2-20.2	No	Runoff/leaching from natural deposits; Industrial wastes

**Initial Distribution System Evaluation**

Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source
Haloacetic Acids (HAA) (ppb)	2009	23.9	ND-61	By-product of drinking water disinfection
TTHMs (Total Trihalomethanes)	2009	71.3	26-165	By-product of drinking water disinfection

\* Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95 percent or more of the monthly samples must be less than or equal to 0.3 NTU.

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**Franklin County Test Results 2009**

Franklin County Public Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results for the period of January 1<sup>st</sup> to 31<sup>st</sup>, 2009.

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCG/L	MCL	Likely Source of Contamination
Copper (Tested every 3 years)	N	Last tested 2008	mg/l	1.3	Al=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Lead (Tested every 3 years)	N	Last tested 2008	mg/l	.015	Al=15	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
TTHM (Tested quarterly)	N	0.074	mg/l	.080	.080	By-product of drinking water chlorination
HAA	N	0.032	mg/l	0.60	.60	By-product of drinking water chlorination
Bacteria (Tested monthly)	N					

Children and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in your community as a result of materials used in your home's plumbing. If you are concerned about the elevated lead levels in your home's water, you may wish to have your water tested and flush for thirty seconds to two minutes before using the water. Additional information is available from the Safe Drinking Water Hotline (1-800-246-4791).

Based on the information learned through our monitoring and testing that some contaminants have been detected, however, the EPA has determined that your water IS SAFE at these levels.

Drinking water sources are subject to potential contamination by substances that are

occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive 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 described for many regulated constituents, a person would have to drink two gallons 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 a precaution, we always notify physicians and health care providers in the area if there is ever a higher than normal level of nitrates in the water supply.**

**Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified, tested, replaced or reduced.**

We thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply, we sometimes need to make

ents that will benefit all our customers. The improvements are sometimes reflected as rate structure adjustments. Thank you for your understanding. People who 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 be especially careful about drinking water from their health care providers. EPA/CDC guideline on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available for the Safe Drinking Water Hotline (1-800-426-4791). Franklin County Public Utilities employees work around the clock to provide top quality water to every tap we serve. We ask that all of our customers help us to protect our water sources, which are the heart of our community, our way of life, and our children's future. Please feel free to give us a call at 919-556-6177, if you have any questions.

Bryce Mendenhall  
Director  
Franklin County Public Utilities  
4/2008