

We are pleased to present to you the 2012 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. 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.

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

Your water comes from numerous wells located in Transylvania County which draw water from a fractured bedrock aquifer. An aquifer is a geological formation that contains water.

## **Water Conservation**

Please be reminded that all our water systems in North Carolina are always in some stage of either voluntary or mandatory water conservation restriction. These restrictions may vary weekly due to drought conditions and are dictated by a system established by the North Carolina Utilities Commission in an order dated May 23, 2008. The customers are encouraged to keep informed of current restrictions by checking the Commission's web page at <a href="https://www.ncuc.commerce.state.nc.us/">www.ncuc.commerce.state.nc.us/</a> and clicking on the "Drought! Non-essential water usage restrictions" in the right hand margin or if you do not have access to a computer by calling the customer service number shown on this report.













## The Process of Delivering Your Water

Your water is disinfected through a chlorination process to ensure the water is microbiologically safe (free from bacteria, viruses, and protozoan parasites). It is important to note that all drinking water contains some naturally occurring contaminants that are not harmful to our health. In fact, some minerals provide low levels of nutritional value and actually improve the taste of drinking water. After the drinking water has been thoroughly treated at the water treatment facility, we deliver it to homes and businesses through an underground network of pipes.

Individual homes use service lines to tap into larger, underground water main lines. The water is then passed through a water meter—either inside or outside the home—so that the amount of water the household uses can be accurately calculated and flow throughout your home.

## Message From Lisa Sparrow, President and CEO

Dear Transylvania Utilities, Inc. Customers,

We have made some exciting changes in the format of the Annual Water Report this year. The report will provide you with useful conservation tips, some 'good to know' facts about your water service, complete definitions of the key measures used to assess water quality as well as the critical data itself.

I am proud to share this report which is based on water quality testing through December 2012. We continually strive to supply water that meets or exceeds all federal and state water quality regulations.

Because it has always been of utmost importance to us, we remain committed to providing safe, reliable and cost effective service to our customers. And, we will continue to do this with the underlying commitment to act with integrity, protect the environment and enhance the communities we serve.

The result of that commitment is a team of water quality experts who make it their job to see that our customers are our top priority and to provide you with the highest quality drinking water and service now and in the years to come.

Best regards,

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The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

#### **EPA Wants You To Know:**

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 may pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (i) Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (ii) Inorganic contaminants, such as salts and metals, that may be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (iii) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (iv) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.
- (v) Radioactive contaminants, which may be naturally-occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 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 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. Transylvania Utilities, Inc. 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 Environmental Protection Agency requires monitoring of over 80 drinking water contaminants. Those contaminants listed in the tables below are the only contaminants detected in your drinking water.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alquien que lo entienda bien.



We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

# Samething you should know!

In response to heightened security concerns around the nation's water supply, we have implemented additional security measures to ensure the safety of its systems and treatment centers. In addition to our secure facilities, we also use less hazardous raw chemicals during the treatment process.

#### FIX THAT LEAKY FAUCET OR TOILET!!!

Leaks can account for, on average, 10,000 gallons of water wasted in the home every year, which is enough to fill a backyard swimming pool!



## With summer approaching...

To maintain a healthy lawn, water no more than every 3 to 5 days in the summer and 10 to 14 days in the winter.

To prevent water loss from evaporation, water your lawn in the early morning, late afternoon, or evening. Avoid watering when it is windy.

Use a broom, rather than a hose, to clean sidewalks and driveways.

If you have a swimming pool, cover it when it's not in use. You'll cut the loss of water through evaporation by 90 percent.

#### **Understanding This Report:**

In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

- Action level (AL) action level is 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 contaminant level is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum contaminant level goal (MCLG) The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Goal (MRDLG): The Level 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 contamination.
- Non-Detects (ND) laboratory analysis indicates that the constituent is not present.
- Not-Applicable (N/A) Information not applicable/not required for that particular water system or for that particular Rule.
- 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 (ug/l) 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.
- Treatment Technique (TT) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- Avg Regulatory compliance with some MCLs is based on running annual average of monthly samples.

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 <u>detected</u> in the last round of sampling for the particular contaminant group. The presence of contaminants does <u>not</u> 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, 2012.** 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.

#### If You Have Questions Or Want To Get Involved?

Transylvania Utilities, Inc. does not hold regular meetings. If you have any questions about this report or would like a company representative to attend an upcoming homeowners association meeting, please contact Customer Service at 1-800-525-7990.

**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 Connestee Falls 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
EP 208 - Well #1, #8*, #9	Moderate	February 26, 2010
EP 202 - Well #2	Moderate	February 26, 2010
EP 206 - Well #3, #4	Moderate	February 26, 2010
EP 205 - Well #5	Moderate	February 26, 2010
EP 207 - Well #7	Moderate	February 26, 2010
EP 210 - Well #10	Moderate	February 26, 2010
EP 211 - Well #11**	Moderate	March 2007

<sup>\*</sup> Well #8 not rated in 2010; rated "Moderate" March 2007.

The complete SWAP Assessment report for Connestee Falls may be viewed on the Web at: <a href="www.ncwater.org/pws/swap">www.ncwater.org/pws/swap</a>. 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 <a href="www.ncwater.org/pws/swap">www.ncwater.org/pws/swap</a>. 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" <u>does not</u> imply poor water quality, only the systems' potential to become contaminated by PCS's in the assessment area.

<sup>\*\*</sup> Well #11 not rated in 2010

**Inorganic Contaminants** 

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Fluoride (ppm)	2010-2012	N	2.3	ND - 2.3**	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

**Lead and Copper Contaminants** 

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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)	6/2012	0.579	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		

**Radioactive Contaminants** 

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water (Highest AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
Alpha Emitters (pCi/L)	2007/2012	N	2.42	ND - 2.42	0	15	Erosion of natural deposits
Uranium (pCi/L)	2012	N	4.98	ND - 4.98	0	20.1	Erosion of natural deposits

**Volatile Organic Chemical (VOC) Contaminants** 

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	Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
	Xylenes (Total) (ppm)	2010 - 2012	N	0.0007	ND - 0.0007	10	10	Discharge from petroleum factories; discharge from chemical factories

**Disinfectants and Disinfection Byproducts Contaminants** 

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Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination	
TTHM (ppb) [Total Trihalomethanes] Sampled 2011	N	1.8	ND - 6.0	N/A	80	By-product of drinking water chlorination	
HAA5 (ppb) [Total Haloacetic Acids] Sampled 2011	N	0.2	ND – 1.0	N/A	60	By-product of drinking water disinfection	
Chlorine (ppm) Sampled 2012	N	0.791	0.5 – 1.4	MRDLG = 4	MRDL = 4	Water additive used to control microbes	

<sup>\*\*</sup>Please see the attached notice for additional information concerning fluoride and contact your child's pediatrician and/or dentist, especially if fluoride supplements have been prescribed. The Likely Source of Contamination listed in the table for fluoride is standard language provided by the EPA. Transylvania Utilities, Inc. does not add fluoride to the drinking water of Connestee Falls. The fluoride detected is naturally-occurring.

# NOTICE TO THE PUBLIC

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Connestee Falls Has Levels of Fluoride That Exceed the

Secondary Maximum Contaminant Level (SMCL)

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system, Connestee Falls, has a fluoride concentration greater than 2.0 mg/l in two of the seven entry points. The fluoride levels at the two entry points were 2.1 mg/l and 2.3 mg/l. The results from all other entry points show no detection of naturally-occurring fluoride.

Dental fluorosis in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/l because of this cosmetic dental problem.

For more information, please call David Medling of Transylvania Utilities, Inc. at 800-525-7990. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information, please contact:

Responsible Person David Medling	System Name Connestee Falls	System Address (Main Office-Mailing Address) P.O. Box 240908
<b>Phone Number</b> 800-525-7990	<b>System PWSID #</b> NC 01-88-104	System Address (Main Office-City, State, Zip) Charlotte, NC 28224

Annual Distribution / Method of Distribution: Directly Mailed with CCR