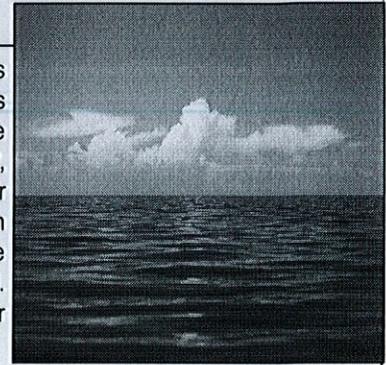


# STANLY COUNTY UTILITIES

## 2011 DRINKING WATER QUALITY REPORT

### *Consider The Source: Where your water comes from . . .*

Stanly County purchases treated drinking water from the City of Albemarle and the Town of Norwood for its customers. Water from the Albemarle system is distributed throughout the County to residents in the towns of Locust, Red Cross, Stanfield and Badin. It also serves many unincorporated areas including the Aquadale, Cottonville, Palestine, Palmerville, Millingport, Ridgecrest, Badin Road, Dennis Road, Highway 52, Indian Mound Road, and Lake Tillery communities. Albemarle's water comes from the Narrows Reservoir (Badin Lake) and Tuckertown Reservoir. Albemarle treats water at its water plants on Hwy 52 North of town and on Hwy 49. The water from the two plants is mixed and distributed in the same distribution system. The water purchased from Norwood supplies the Piney Point and the Forks communities south of Norwood. Norwood's water comes from Tillery reservoir and is treated at its Allenton Street water plant. All three water reservoirs are a part of the Yadkin River Basin.



### *What EPA Wants You to Know . . .*

Drinking water, including bottled water, may reasonably be expected to contain 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### *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.

Source Name	Susceptibility Rating
Narrows Reservoir/Badin Lake	Higher
Tuckertown Reservoir	Higher
Lake Tillery	Higher

The relative susceptibility rating of each source for Stanly County consumers 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)**

Stanly County purchases water from the City of Albemarle and the Town of Norwood. The complete SWAP Assessment report for those providers for Stanly County may be viewed on the Web at: <http://www.deh.enr.state.nc.us/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](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.

### *More Important Information...*

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.

### Testing Results for 2011

Contaminant (Units) = TTHM (ppb) Total Trihalomethanes		MCLG = N/A	MCL = 80	Likely Source of Contamination = By-product of drinking water chlorination.	
System Name & ID Number	MCL Violation Y/N	Your water (average)		Range: Low / High	
West Stanly PWSID# 01-84-035	N	73.0		44 / 107	
Palestine/Badin PWSID# 01-84-141	N	72.0		63 / 78	
Badin Road PWSID# 01-84-142	N	49.0		27 / 64	
Aquadale PWSID# 01-84-143	N	75.9		35 / 100	
Piney Point PWSID# 01-84-144	N	52.3		38 / 61	
Millingport PWSID# 20-84-005	N	38.3		< 0.0010 / 59	
East Stanly PWSID# 20-84-010	Y	81.5		62 / 89	

Contaminant (Units) = HAA5 (ppb) Total Haloacetic Acids		MCLG = N/A	MCL = 60	Likely Source of Contamination = By-product of drinking water chlorination.	
System Name & ID Number	MCL Violation Y/N	Your water (average)		Range: Low / High	
West Stanly PWSID# 01-84-035	N	34.8		19 / 63	
Palestine/Badin PWSID# 01-84-141	N	14.2		2 / 24.8	
Badin Road PWSID# 01-84-142	N	34.0		19 / 44	
Aquadale PWSID# 01-84-143	N	26.3		2 / 45	
Piney Point PWSID# 01-84-144	N	35.0		29 / 40	
Millingport PWSID# 20-84-005	N	24.3		4 / 39	
East Stanly PWSID# 20-84-010	N	18.8		4 / 23	

Contaminant (Units) = Copper (ppm) 90th percentile		MCLG = 1.3	MCL AL= 1.3000	Likely Source of Contamination = Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
System Name & ID Number	Sample Date	MCL Violation Y/N	90th Percentile	# Sites above AL	
West Stanly PWSID# 01-84-035	9/2010	N	< 0.050	0	
Palestine/Badin PWSID# 01-84-141	5/24/11 & 9/27/11	N	0.076 & 0.065	0	
Badin Road PWSID# 01-84-142	5/24/11 & 9/27/11	N	0.079 & 0.154	0	
Aquadale PWSID# 01-84-143	9/2010	N	< 0.050	0	
Piney Point PWSID# 01-84-144	9/27/11	N	0.0778	0	
Millingport PWSID# 20-84-005	9/2009	N	< 0.050	0	
East Stanly PWSID# 20-84-010	9/27/11	N	0.1228	0	

Contaminant (Units) = Lead (ppb) 90th percentile		MCLG = 0	MCL AL= 15	Likely Source of Contamination = Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
System Name & ID Number	Sample Date	MCL Violation Y/N	90th Percentile	# Sites above AL	
West Stanly PWSID# 01-84-035	9/2010	N	<0.003	0	
Palestine/Badin PWSID# 01-84-141	5/24/11 & 9/27/11	N	<0.003 & <0.003	0	
Badin Road PWSID# 01-84-142	5/24/11 & 9/27/11	N	0.003 & 0.0037	0	
Aquadale PWSID# 01-84-143	9/2010	N	<0.003	0	
Piney Point PWSID# 01-84-144	9/27/11	N	<0.003	0	
Millingport PWSID# 20-84-005	9/2009	N	<0.003	0	
East Stanly PWSID# 20-84-010	9/27/11	N	0.0048	0	

## Water Quality Data of Detected Contaminants

Stanly County Utilities routinely monitors contaminants in your drinking water according to Federal and State laws. The table on page 2 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, 2011.** 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. Since Stanly County purchases water from the City of Albemarle and the Town of Norwood some testing was performed by all three organizations. The results of other water agencies have been posted on our website or are available upon request



### IMPORTANT DEFINITIONS from the table



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.

*Action Level (AL)* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*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 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.

***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.***

### Challenges and Special Information - System Violations for 2011

SCU is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2011 Stanly County Utilities (SCU) was issued system violations for high levels of Total Trihalomethanes (TTHMs) and public notice non-compliance in the East Stanly District. The running annual average in this district exceeded the maximum contaminant levels of 80 parts per billion concentration. Though violations occurred consumers in these areas do not need to use an alternative (e.g., bottled) water supply. There is no immediate health risk. If there had been, SCU would have been required to notify customers immediately. However, some people who drink the water containing TTHMs in excess of the maximum contaminant level over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. In an effort to resolve the problem, SCU monitors the water quality and flushes water lines when water has remained in the lines for longer than usual. Also, in addition Stanly County has installed mixers in their storage tanks and we are exploring the best technology available today to ensure our water quality meets compliance. Stanly County continues to work with our providers the City of Albemarle and the Town of Norwood to improve the quality of water delivered to its customers. 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). Finally, (SCU) has incorporated the water lines from the Dennis Road District (NC 2084009) to the Aquadale District (NC0184143) thus making Dennis Road and Highway 52 north part of Aquadale District now.

### *Do You Have More Questions?*

If you have any questions about this report or concerning your water, please contact Donna Davis by mail, phone or email at Stanly County Utilities 1000 North 1st Street, Suite 12, Albemarle, NC 28001, (704) 986-3686, ddavis@co.stanly.nc.us. If you want to learn more, please attend the Stanly County Board of Commissioners meetings at 7:00 pm each first and third Monday of the month in the Commons Meeting Room, Stanly County Commons, 1000 N 1st St, Albemarle, NC.