

# 2007 Annual Drinking Water Quality Report

## City of Mebane

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Public Water System ID # 02-01-018  
Report Date: June 16, 2008

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. 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. Our water source is the Graham – Mebane Reservoir. This is a surface water supply that goes through a series of treatment processes at the Graham – Mebane Water Treatment Plant before being pumped into the distribution system for use in homes, commercial establishments and industries.

The Graham – Mebane Water Treatment Plant is staffed by trained, certified water treatment facility operators. Four people on staff hold the highest certification obtainable for water treatment facility operation in North Carolina. The staff works around the clock in order to provide a safe and dependable supply of water for our citizens. Please let us know if you have any questions or concerns regarding the City of Mebane water supply.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. 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. The source water goes through a series of purification processes at our Water Treatment plant. All drinking water (including bottled water) may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

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 Graham – Mebane Reservoir 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 Graham – Mebane Reservoir relative susceptibility rating was determined to be moderate. It is important to understand that a susceptibility rating is only a measure of the systems' *potential* to become contaminated by PCS's in the assessment area, and not an actual measure of water quality.

The complete SWAP Assessment report for Graham – Mebane Reservoir may be viewed on the Web at: [http://204.211.89.20/swap\\_app/pdfreports/0201015\\_3\\_18\\_2005\\_85\\_11.PDF](http://204.211.89.20/swap_app/pdfreports/0201015_3_18_2005_85_11.PDF).

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.

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.

City of Mebane  
106 East Washington Street  
Mebane, NC 27302

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I'm pleased to report that our drinking water complies with all Federal and State regulations for safe drinking water. The constituents listed below that were detected are below the established maximum contaminant levels for the specific parameter. The EPA has determined that your water IS SAFE at these levels.

If you have any questions about this report or concerning your water utility, please contact:

Jimmy Jobe, Director of Public Works

City Of Mebane  
106 E. Washington Street, Mebane, NC 27302

Telephone #: 919-563-5901  
Fax #: 919-563-1007

This report shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2007. The City of Mebane's test results have also been inserted for your reference. As guidance, the U.S. Environmental Protection Agency (USEPA) recommends that we only report those parameters that have a recognized limit for drinking water, and have been detected in the water tested.

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).

In order to maintain a safe and dependable water supply, we sometimes need to make improvements that will benefit all of our customers. Federal and State regulations are becoming more stringent and, therefore, it is necessary to continually upgrade treatment facilities. The costs of these improvements are sometimes reflected in rate structure adjustments. Thank you for understanding that your water bill may be higher in the future due to our responsibility to provide an adequate supply of drinking water that complies with all State and Federal regulations.

The City Council of the City of Mebane is the authority that determines infrastructure funding and the council members, under advisement of the City's management staff, make other decisions that affect the water supply and the quality of your drinking water. The City of Mebane City Council meets on the first Monday of every month at 6:00 PM in the City of Mebane Municipal Building, 106 East Washington Street, Mebane, NC.

In the table on the following page, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*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* - 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.

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

*Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*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.

MCL's are set at very stringent levels. For example: a person would have to drink 2 liters of water every day for seventy years at the MCL level in order to have a one-in-a-million chance of having the potential health effect associated with a particular contaminant. Many of the regulated contaminants MCL's are set at this level.

CITY OF MEBANE DISTRIBUTION SYSTEM: TEST RESULTS						
Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Likely Source of Contamination
<b>Microbiological Contaminants 2007</b>						
Total Coliform Tested Monthly in 2006	NO	(ND)	Colonies per ml	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Fecal Coliform and <i>E.coli</i> Tested Monthly in 2006	NO	(ND)	Colonies per ml	0	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform and <i>E. coli</i> positive.	Human and animal fecal waste
<b>Inorganic Contaminants 2007</b>						
Asbestos Tested every 9 years Last Tested – 11/2002	NO	(ND)	Million Fibers per Liter (MFL)	7 MFL	7 MFL	Decay of asbestos cement water mains; Erosion of natural deposits
Copper Tested every 3 years between June 1 and September 30 Last Tested–6/28/2005	NO	0.15*	ppm	1.3	AL=**1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead Tested every 3 years between June 1 and September 30 Last Tested–6/28/2005	NO	5*	ppb	0	AL=**15	Corrosion of household plumbing systems, erosion of natural deposits
<b>Disinfection Byproducts 2007</b>						
TTHM Total Trihalomethanes Tested Quarterly in 2005	NO	Range: 49-103 Ave. = 67	ppb	0	80 (annual average)	By-product of drinking water chlorination
THAA5 Total Haloacetic Acids Tested Quarterly in 2005	NO	Range: 24-53 Ave. =35	ppb	0	60 (annual average)	By-product of drinking water chlorination
<b>GRAHAM-MEBANE WATER TREATMENT PLANT: TEST RESULTS</b>						
<b>Inorganic Contaminants: July, 2007</b>						
Fluoride	N	1.00	ppm	4.0	4.0	Erosion of natural deposits; water additive which promotes strong teeth.
<b>Unregulated Contaminants: February, 2005</b>						
Chloroform	N	19.2	ppb	NA	NA	
Bromodichloromethane	N	4.38	ppb	NA	NA	

Note: \* 90<sup>th</sup> percentile level.