



NEW HANOVER COUNTY WATER SYSTEM

ANNUAL WATER QUALITY REPORT

FOR WATER TESTING
PERFORMED IN **2005**

PWS ID # NC 04-65-232

What's this about ?

New Hanover County is required by the EPA to provide this consumer confidence report on an annual basis. This report is designed to inform you about the quality of 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 are committed to insuring the quality of your water.

The New Hanover County Water System is a ground-water system which pumps water up from the Pee Dee, Castle Hayne, and other surficial aquifers utilizing twenty-one wells located throughout the northern end of the county. (See map.) Water is stored in four water towers with a combined storage capacity of 1,850,000 gallons.

Important Information

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).

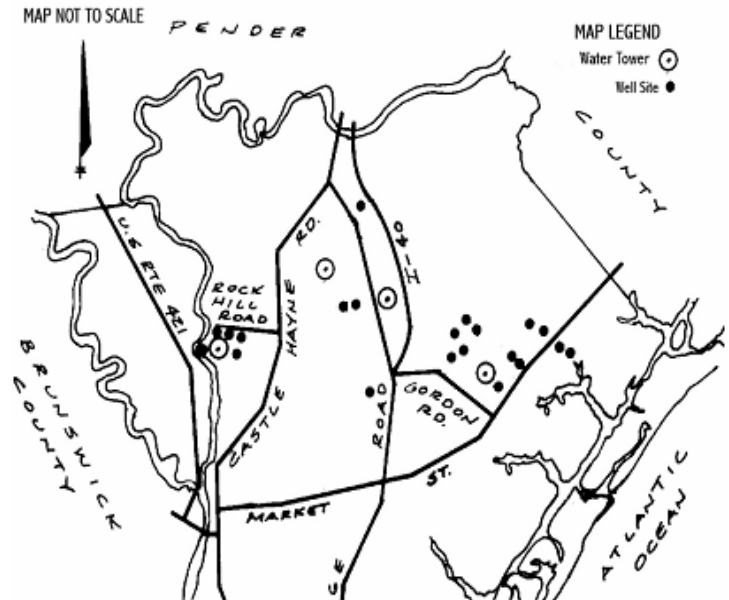
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick 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.

EN ESPANOL

Este informe contiene la información muy importante sobre su agua. Haga por favor que un amigo lo traduzca para usted.

This Report Contains Important Information About the Quality of Your Drinking Water.



SWAP (Source Water Assessment Program)

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 to susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCS's). 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 the "New Hanover County Water System", PWSID # NC 04-65-232, was determined by combining the contaminant rating (number and location of PCS's 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 for the report dated March 4, 2005 are summarized in the table on the back of this page.

The complete SWAP Assessment report for the "New Hanover County Water System" 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. 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. .

Table Definitions

N/a – Does not apply.

ND – Not detected.

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

MCL - Maximum Contaminant Level - The "Maximum Allowed" 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.

MCLG - Maximum Contaminant Level Goal - The "Goal" is the level of a contaminant in drinking water, below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MRDL – Maximum Residual Disinfection Level - 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.

MRDLG – Maximum Residual Disinfection Level Goal - 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 contaminants.

PPM - Parts per million or Milligrams per liter - one part per million corresponds to one minute in two years or a single penny in \$10,000.

PPB - Parts per billion or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Susceptibility of Sources to Potential

Contaminant Sources (PCS's)

Source Name	Susceptibility Rating
Well #1 Quail Woods Rd.	Moderate
Well #2 Old Quail Woods	Moderate
Well #3 Bay Blossom	Moderate
Well #4 White Rd.	Moderate
Well #5 Shenandoah Rd.	Moderate
Well #6 North Chase	Moderate
Well #7 North Chase	Moderate
Well #8 Ogden Park	Moderate
Well #9 Bountiful Ln.	Moderate
Well #10 Harvest Rd.	Moderate
Well #11 Stoney Rd.	Moderate
Well #12 Berry St.	Moderate
Well #13 Prince George	Moderate
Well #15 Elkmont	Moderate
Well #16 Old Oak Rd.	Moderate
Well #17 Raintree/Brick St.	Higher
Well #18 Beawood/Brick St.	Higher
Well #19 Marsh Oaks/Marsh	Higher
Well #20 Old Marsh Oaks #2	Higher
Well #21 Brookfield	Moderate

Pass It On

Businesses and landlords are requested to pass this information on to their tenants, customers and employees. Please post this in a visible location. Additional copies of this report can be obtained by calling (910) 798-7139 during regular business hours or stopping by 230 Marketplace Dr. Suite 160. Extra copies can also be found on the web at www.nhcgov.com/ENG/ENGmain.asp. Thank you for helping us to provide this information to all who use our water.

Keeping in Touch

If you have any questions about this report or concerning your water utility, please contact **New Hanover County Engineering Department at (910) 798-7139**. We want our valued customers to be informed about their water utility. Water and Sewer District meetings are held during County Commissioner meetings. Meetings are normally held on every first Monday of each month at 5:30pm and every third Monday of each month at 9:00am in the New Hanover County Courthouse Room 301. The meetings may also be viewed on NHC -TV Time Warner channel 13 and Charter Communications channel 5. Check the web for changes at www.nhcgov.com/CC/CCmain.asp

Detected Contaminants

New Hanover County routinely monitors contaminants in your drinking water according to Federal and State laws. The table below summarizes the testing results for detected contaminants for the year 2005. Some tests are not taken every year and therefore may have an older date. More information about these substances and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking water Hotline at 1-800-426-4791 or

on the web at www.epa.gov/safewater/. The second set of tables contains unregulated contaminants, for which the 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.

Regulated Contaminants							
Contaminant (units)	MCLG	MCL	YOUR WATER	RANGE LOW / HIGH	MCL VIOLATION	SAMPLE DATE	TYPICAL SOURCE
Disinfection By-Product Contaminants							
TTHM (ppb) [Total Trihalomethanes]	N/a	80	55	ND / 123	No	January—December 2005	By-product of drinking water chlorination.
HAA5 (ppb) [Total Haloacetic Acids]	N/a	60	30	ND / 101	No	January—December 2005	By-product of drinking water disinfection.
Chlorine (ppm)	MRDLG=4	MRDL=4	0.8	0.2 / 2.2	No	January—December 2005	Water additive used to control microbes.
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.17	ND / 0.17	No	August 2003—March 2005	Erosion of natural deposits; water additive, which promotes strong teeth; discharge from fertilizer and aluminum factories.
Lead and Copper Contaminants							
Copper (ppm) (90 th percentile)	1.3	AL=1.3	0.499	N/a	No (no samples above AL)	August 2003	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb) (90 th percentile)	0	AL=15	7	N/a	No (two samples above AL)	August 2003	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate / Nitrite Contaminants							
Nitrate (ppm)	10	10	2	ND / 2	No	January—December 2005	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of Natural Deposits.
Synthetic Organic Contaminants							
Dalapon (ppb)	200	200	1	ND / 1	No	January 2003—October 2005	Runoff from herbicide used on rights of way.
Secondary Contaminants							
	August 2003—March 2005						
Contaminant (units)	Secondary MCL	YOUR WATER	RANGE LOW / HIGH				
Iron (ppm)	0.3	0.5	ND / 0.5	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.			
Manganese (ppm)	0.05	0.1	ND / 0.1				
PH	6.5 to 8.5	7.5	6.1 / 7.5				
Sodium (ppm)	N/a	69	11 / 69				
Unregulated Inorganic Contaminants							
	August 2003—March 2005						
Contaminant (units)	Proposed MCL	YOUR WATER	RANGE LOW / HIGH				
Sulfate (ppm)	500	31	ND / 31				
Unregulated Volatile Organic Contaminants							
	April 2003—December 2005						
Contaminant (units)	YOUR WATER	RANGE LOW / HIGH					
Bromodichloromethane (ppb)	18	ND / 18					
Bromoform (ppb)	1	ND / 1					
Chlorodibromomethane (ppb)	6	ND / 6					
Chloroform (ppb)	50	ND / 50					
Chloromethane (ppb)	1	ND / 1					