



New Hanover County 2005 WATER QUALITY REPORT



KINGS GRANT WATER SUPPLY
PWSID# NC 04-65-129

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 want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to insuring the quality of your water. The Kings Grant water supply serves the residents of Kings Grant, Kings Grant Extension, Heathfield Hall, Deerbrook, Crestwood, Wildflower, Weaver Woods, Parkwood and Church Hill Estates.

The Kings Grant water system utilizes ground water from four wells, which pump water out of the Pee Dee Aquifer. The wells are located in Kings Grant, Parkwood, and Smith Creek Estates. Water is stored in one 200,000-gallon water tower in Kings Grant.

Pass it On!

Businesses and landlords are requested to pass this information on to their tenants or customers. 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. Copies are also available on the web at www.nhcgov.com/ENG/ENGmain.asp, and then follow the links. 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. If you want to learn more, the Water and Sewer District Commissioners meet during County Commissioners meetings. They are generally 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. Check the web for changes at www.nhcgov.com/CC/CCmain.asp.

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.

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. **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.**

The relative susceptibility rating of each source for the "Kings Grant Water Supply", PWSID # NC 04-65-129, 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 are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCS's)

Source Name	Susceptibility Rating
Well #1	Moderate
Well #2	Moderate
Well #3	Moderate
Well #4	Lower

The complete SWAP Assessment report for the "Kings Grant Water Supply" 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 report was prepared. To obtain a printed copy of the swap 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.

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 small table at the bottom of this page 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	VIOLATION Yes / No	SAMPLE DATE	TYPICAL SOURCE
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.1	ND / 0.1	No	June 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	0.362	N/a	No (no samples above AL)	July & Aug 2005	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead (ppb) (90 th percentile)	0	AL = 15	0	N/a	No (no samples above AL)	July & Aug 2005	Corrosion of household plumbing systems; erosion of natural deposits.
Volatile Organic Contaminants							
Dichloromethane (ppb)	0	5	0.2	ND / 0.2	No	Apr - Oct 2005	Discharge from pharmaceutical and chemical factories.
Disinfection By-Product Contaminants							
TTHM [Total Trihalomethane] (ppb)	N/a	80	47	N/a	No	September 2005	By-product of drinking water chlorination.
HAA5 (ppb) {Total Haloacetic Acids}	N/a	60	17	N/a	No	September 2005	By-product of drinking water disinfection.
Chlorine (ppm)	MRDLG= 4	MRDL = 4	0.8	0.4 / 1.3	No	Jan - Dec 2005	Water additive used to control microbes.
Secondary Contaminants * June 2005							
Contaminant (units)	SECONDARY MCL	YOUR WATER	RANGE LOW / HIGH				
Iron (ppm)	0.3	0.5	0.1 / 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	0.017	ND / 0.017				
Ph	6.5 to 8.5	7.8	7.1 / 7.8				
Sodium (ppm)	N/a	26	15 / 26				

This second table 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.

Unregulated Contaminants Contaminant (units)	PROPOSED MCL	YOUR WATER	RANGE LOW / HIGH
Volatile Organic Contaminants April 2005 - October 2003			
Chloroform (ppb)	N/A	15	2 / 15
Bromodichloromethane (ppb)	N/A	4	2 / 4
Chlorodibromomethane (ppb)	N/A	2	1 / 2
Unregulated Inorganic Contaminants June 2005			
Sulfate (ppm)	500	18	ND/ 18

EN ESPAÑOL

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.

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. MCLs are set as close to the MCLGs 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. MCLGs 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
PPM - Parts per million or Milligrams per liter (mg/l) - 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.
N/a - Does not apply.
ND - Not detected.



NEW HANOVER COUNTY ENGINEERING
 WATER / SEWER
 230 MARKETPLACE DR. SUITE 160
 WILMINGTON, NC 28403

IMPORTANT TELEPHONE NUMBERS

Water - Sewer Finance 910-798-7162
 (Billing)

Engineering 910-798-7139
Water - Sewer (M-F 7:30am to 5pm only)
 (Maintenance, Water Leaks, Water Problems, etc.)

Emergency (Nights and Weekends) 910-341-4110