2007 Annual Drinking Water Quality Report
Town of Newport

PWS ID# 04-16-020
June 9, 2008

We are pleased to present to you this year's 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. 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 and to providing you with this information, because informed customers are our best allies. If you have any questions about this report or concerning your water, please contact the Newport Water Department at (252) 223-4749. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Town Council meetings. They are held at the Town Hall on the first Tuesday of each month.

What EPA Wants You to Know

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.

When You Turn on Your Tap, Consider the Source

Our ground water source in 2007 was two wells that draw water from the Castle Hayne Aquifer, with a new well that went on line in May of 2008. This is one of the highest quality and most productive aquifers in the State. The three wells are located at the water plant, in the woods at the end of Hargett St, and the new well will be located on Foxhall Rd. We are required by the EPA to provide this report to our customers by July 1 of each year. We also have an emergency interconnection with Morehead City, where we can provide water to each other in the event of a storm, main break, or other emergency.

Source Water Assessment Program (SWAP) Results

The Town of Newport has completed a Wellhead Protection Plan. This plan provided the data for the SWAP, and the wellhead protection areas can be viewed on line at the web site below. Now that our new well is on line, we will update our Wellhead Protection Plan with the new well data within the upcoming year.

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 the Town of Newport 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
Well #3	Moderate	March 15, 2005
Well #4	Moderate	March 15, 2005
Well #5	Not yet rated	

The complete SWAP Assessment report for Town of Newport 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 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 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

Violations that Your Water System Received for the Report Year

We had no reportable violations this year. We were guilty, however, of improperly competing the paperwork for a set of Bacteriological samples this year.

What If I Have Any Questions Or Would Like to Become More Involved?

If you have any questions about this report or concerning your water utility, please contact Clay Dulaney at (252) 223-4418**.** We want our valued customers to be informed about their water utility. If you want to

learn more, please attend any of our regularly scheduled Town Council meetings. They are held on the first Tuesday of each month at 7:30 PM in the town hall.

Water Quality Data Table of Detected Contaminants

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The tables below list 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, 2007.** 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.

Unregulated contaminants are those for which 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.

Important Drinking Water Definitions:

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.

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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) - Picocuries per liter is a measure of the radioactivity in water.

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 Residual Disinfection Level 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 contaminants.

Maximum Residual Disinfection Level (MRDL) – 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.

Maximum Contaminant Level (MCL) - 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 (MCLG) - 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: MCLs 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.

Microbiological Contaminants
We test the water system four times each month for coliform bacteria. We did not detect any bacteria in the water system in 2007.

Inorganic Contaminants
The following inorganic elements or compounds were monitored for in 2007 and not detected: Arsenic; Barium; Cadmium; Chromium; Cyanide; Manganese; Mercury; Nickel; Nitrate [2007 test]; Selenium; Sulfate; and Thallium. Fluoride was detected at a level of 0.11 mg/l, Sodium was detected at a level of 91 mg/l, and Sulfate was detected at a level of 5.4 mg/l. In 2003 our water system was certified free of asbestos, and granted a monitoring waiver for nine years.

Synthetic Organic Chemical (SOC) Contaminants Including Pesticides and Herbicides
We monitored for synthetic organic contaminants including pesticides and herbicides on September 6, 2007, and did not detect any of them: 2,4-D; 2,4,5-TP (Silvex); Alachlor; Atrazine; Benzo(a)pyrene (PAH); Carbofuran; Chlordane; Di(2-ethylhexyl)adipate; Di(2-ethylhexyl) phthalate; Dalapon; DBCP [Dibromochloropropane]; Dinoseb; Endrin; EDB [Ethylene dibromide]; Heptachlor; Heptachlor epoxide; Hexachlorobenzene; Hexachlorocyclo-pentadiene; Lindane; Methoxychlor; Oxamyl [Vydate]; PCBs [Polychlorinated biphenyls]; Pentachlorophenol; Picloram; Simazine; and Toxaphene. At the same time, we tested for the following unregulated synthetic organic contaminants including pesticides and herbicides, and did not detect any of them: Aldicard; Aldicard Sulfone; Aldicard Sulfoxide; Aldrin; Butachlor; Carbaryl; Dicamba; Dieldrin; 3-Hydroxycarbofuran; Methomyl; Metolachlor; Metribuzin; and Propachlor.

Volatile Organic Chemical (VOC) Contaminants
We most recently monitored for Volatile Organic Compounds on September 19, 2006. At that time, we only detected the disinfection byproducts discussed later in this report. We did not detect any of the following regulated VOC contaminants: Benzene; Carbon tetrachloride; Chlorobenzene; o-Dichlorobenzene; p-Dichlorobenzene; 1,2 – Dichloroethane; 1,1 – Dichloroethylene; cis-1,2-Dichloroethylene; trans-1,2-Dichloroethylene; Dichloromethane; 1,2-Dichloropropane; Ethylbenzene; Tetrachloroethylene; 1,2,4 –Trichlorobenzene; 1,1,1 – Trichloroethane; 1,1,2 – Trichloroethane; Trichloroethylene; Toluene; Vinyl Chloride; and Xylenes (Total). We also monitored for, and did not detect the following unregulated VOC compounds at the same time: Bromoform; Bromobenzene; Bromochloromethane; Bromomethane; n-Butylbenzene; sec-Butylbenzene; tert-Butylbenzene; Chloroethane; Chloroethane; o-Chlorotoluene; p-Chlorotoluene; Dibromomethane; m-Dichlorobenzene; Dichlorodifluoromethane; 1,1-Dichloroethane; 1,1-Dichloroethane; 1,3-Dichloropropane; 2,2-Dichloropropane; 1,1-Dichloropropene; 1,3-Dichloropropene; Fluorotrichloromethane; Hexachlorobutadiene; Isopropylbenzene; p-Isopropyltoluene; Naphthalene; n-Propylbenzene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; 1,2,3-Trichlorobenzene; 1,2,3-Trichloropropane; 1,2,4-Trimethylbenzene; and 1,3,5-Trimethylbenzene. The unregulated VOC compounds in the table below constitute the components of the disinfection byproducts discussed later in this report that were detected in our water system.

Unregulated VOC Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low	Range High
Chloroform (ppb)	2007	50.1	3	105
Bromodichloromethane (ppb)	2007	5.60	ND	10.0

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	# of sites found above the AL	MCLG	MCL	Likely Source of Contamination
Copper (ppm) (90^{th} percentile)	2007	0.88	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) (90^{th} percentile)	2007	5	2	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits

Radioactive Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	2006	N	ND	0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)	2006	N	ND	0	50 *	Decay of natural and man-made deposits
Combined radium (pCi/L)	2006	N	0.15 pCi/L #	0	5	Erosion of natural deposits
Uranium (pCi/L)	2006	N	ND	0	20.1	Erosion of natural deposits

* Note: The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.

Note: The counting error for this sample was 1.30 pCi/L, or over eight times the quantified results.

We have never detected any Radon. Radon does not occur naturally in this area.

Disinfectants and Disinfection Byproducts Contaminants

Contaminant (units)	MCL/MRDL Violation Y/N	Your Water (AVG)	Range Low High	MCLG	MCL	Likely Source of Contamination
TTHM (ppb) [Total Trihalomethanes]	N	43.5	3 / 106	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) [Total Haloacetic Acids]	N	68.6	14 / 170.9	N/A	60	By-product of drinking water disinfection
Chlorine (ppm) daily	N	2.78	0.04 / 4.6	MRDLG = 4	MRDL = 4	Water additive used to control microbes

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**.**

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Iron (ppm)	Daily	0.03	0.01 – 0.23	0.3
Manganese (ppm)	2007	N/D	N/A	0.05
Nickel (ppm)	2007	N/D	N/A	N/A
Sodium (ppm)	2007	91	N/A	N/A
pH	Daily	7.6	7.0 – 8.0	6.5 to 8.5