

Town of Holden Beach - 2016 Water Quality Results

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 Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare 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).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Holden Beach is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The Public Works Department would like to let you know that we are here to serve you with any of your water needs 24 hours a day. If you plan to dig you will need to contact public utilities for locates. If you have any water quality issues or feel that your meter is not working, please contact our office. We will be glad to work with you to solve any water issues.

Billing Office: (910) 842-6488

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 drinking 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 utility, please contact Chris Clemmons, Public Works Director at (910) 842-6488 or by fax at (910) 842-9315. We want our valued customers to be informed about their water quality.

The Town of Holden Beach purchases water from Brunswick County, County water comes from two sources, the Cape Fear River and groundwater from the Castle Hayne Aquifer. The Northwest Water Treatment Plant in Leland treats the water from the Cape Fear River. Their second source is utilized by the 211 Water Treatment Plant in Southport. Fourteen (14) different groundwater wells are tapped into the Castle Hayne Aquifer approximately 175 feet below the ground's surface. Citizens from the Town of Northwest to Sunset Beach receive water from the Northwest Water Treatment Plant.

We are pleased to report that our drinking water is safe and meets Federal and State requirements. We have a source water protection plan available from our office that provides more information, such as potential sources of contamination.

The NC Water Assessment Program (SWAP)

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 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 of each source for the Town of Holden Beach was determined by combining the contaminant rating (number and locations 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
Cape Fear River	Moderate
Well# 1,2,15,16 & 17	Lower
Well # 3,8,11,12,12A,18 &19	Moderate
Well # 5, 6A & 7	Higher

The complete SWAP Assessment Report for the Town of Holden Beach (Brunswick County) Water System may be viewed at <http://www.deh.enr.state.nc.us/pws/swap>. To obtain a printed copy of this report, please contact the Source Water Assessment staff 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 be contaminated by PCSs in the assessment area.

Sources of Drinking Water

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. 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.

Lead and Copper

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated levels in your home's water you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

TOWN OF HOLDEN BEACH – CONSUMER CONFIDENCE REPORT DATA

Terms & abbreviations used below:

- Maximum Contaminant Level Goal (MCLG): the level of a contaminant that is allowed in drinking water below which there is not known or expected risk to health. MCLGs allow for a margin of safety.
- 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.
- Action Level (AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water **system must follow**.
- N/A: not applicable
- Nd: not detectable at testing limit
- Ppb: parts per billion or micrograms per liter
- Ppm: parts per million of milligrams per liter
- pCi/l: Picocuries per liter (a measure of radiation)

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The table below lists the results of 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 from January 1 through December 31, 2015. The EPA or 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 water quality, is more than one year old.

Listed below are the results of water quality sampling performed from January 1, 2016 – December 31, 2016.
Contact Chris Clemmons, Public Works Director, (910) 842-6488 with questions or comments.

Microbiological Contaminants						
Contaminants (units)	EPA's MCL	MCLG	Level Detected	Unit Measurement	Violation Y/N	Source of Contaminant
Total Coliform Bacteria (presence or absence)	<5% of monthly samples are positive	0	ND	0	N	Naturally present in the environment
Asbestos	regulated	0	ND	MFL	N	Decay of asbestos cement water mains; erosion of natural deposits
	MCL Action Level			# of samples above AL		
Copper 90 th percentile Holden Beach	1.3ppm	0.080pp	90% of samples are <0.950ppm	0	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead 90 th percentile Holden Beach	0.015ppm 0.015ppm	0.3ppb	90% of samples are <0.003ppm	1	N	Corrosion of household plumbing systems; erosion of natural deposits
ORGANIC CHEMICALS	EPA's MCL			Range Low High	Violation Y/N	
Total Trihalomethanes Holden Beach	80ppb	N/A	Average 0.033ppb	0.019 0.035	N	By-product of disinfection
Total Haloacetic Acids Holden Beach	60ppb	N/A	Average 0.026ppb	0.019 .042	N	By-product of disinfection
UNREGULATED CONTAMINANTS						
Sodium	Non regulated	N/A	30.1ppm	N/A	N/A	Part of the treatment; erosion of natural deposits

The EPA has determined that your water is safe at these levels.

There were Three (3) Public Notices for 2016.

Please note that the Town of Holden Beach purchases water from Brunswick County Public Utilities and they have had three Tier III Public Notices for 2016.

For a complete view of Brunswick County's Water Quality Report and Public Notices, please visit their website at <http://www.brunswickcountync.gov/Department/Utilities/AnnualReports/tabid/272/Default.aspx>.

NOTICE TO THE PUBLIC

#1 - Brunswick County 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. In April 2016, they did not complete all monitoring for Chlorine Dioxide/ Chlorite and therefore cannot be sure of the quality of our drinking water during this time.

Chlorine Dioxide, a disinfectant, was monitored but Chlorite, a by-product of Chlorine Dioxide, was not monitored for as required by the NC Public Water Supply Section. There is nothing that you need to do at this time. All sample results before and after the missed samples were reported to be in compliance with state health standards. The water system returned to compliance on May 1, 2016 and they have no reason to believe the water quality was ever out of compliance. New staff and calendar reviews should help remove sampling irregularities.

(CD) Chlorine Dioxide/ Chlorite - includes testing for Chlorine Dioxide and/ or Chlorite.

#2 & 3 - Brunswick County 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. In July and August 2016, they did not complete all monitoring for turbidity and residual chlorine and therefore cannot be sure of the quality of our drinking water at that time.

On July 12, 2016, the water treatment plant took a direct lightning strike that affected several computer systems that record turbidity results and chlorine residuals. The treatment process never failed and your water quality was never compromised; however the computers that record the sampling results did fail for an extended period of time and that is what this violation is about. Portions of the computer system were restored on July 13 and August 6, 2016 and have since been replaced with additional historical backup systems.

Please share this information with all the other people who drink this water, especially those who may have not received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information on this public notice please contact: Glenn Walker, Water Resources Superintendent at PO Box 249, Bolivia, NC 28422 or a (910) 371-3490.

The LCFWASA water line break update: Now that repairs are complete on the 48" raw water supply line, Brunswick County and LCFWASA are taking a proactive approach to see if there may be other significant leaks on the pipe by using Smart Ball technology (sensors within a sphere) that will travel inside the pipe listening for leaks. The county anticipates that being proactive and finding leaks before they become a major problem will ensure that we can be better prepared to deal with air-related water treatment issues like the one we had back in October that caused the treatment technique NOV.