

TOWN OF SURF CITY

2015 Annual Drinking Water Quality Report

This report prepared by the **Town of Surf City**, public water system I.D. No. 04-71-015 on May 16, 2016 covers the period of January 1st through December 31st 2015.

We're very pleased to provide you with this year's **Annual Drinking Water Quality Report**. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is groundwater drawn from wells located on our property. Our wells draw from the Castle Hayne Aquifer.

If you have any questions about this report or concerning your water, please contact Dean Wise at (910) 328-3921. We want our valued customers to be informed about their water utility.

In order to ensure your water is safe to drink, **Town of Surf City**, routinely monitors for contaminants in your drinking water according to Federal and State regulations. The following tables show the results of our monitoring for the period of January 1st to December 31st, 2015 and the last test results of contaminants that were not due to be tested in 2015.

In these tables 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:

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 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.

Action Level – (AL) the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which must be followed.

Maximum Contaminant Level – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water.

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. MCLGs allow for a margin of safety.

Maximum Residual Disinfection Level Goal (MRDLG) – The level of 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.

Maximum Residual Disinfection Level (MRDL) – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants

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

Low (L) – Lowest Level of contaminant detected. .

High (H) – Highest level of contaminant detected.

Average (Avg.) – Average Level of contaminant detected for all samples.

Locational Running Annual Average (LRAA) – The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters under the Stage 2 Disinfectants and Disinfection Byproducts Rule.

TEST RESULTS
Town of Surf City PWS ID# 04-71-015

Microbiological Contaminants in the Distribution System - For systems that collect less than 40 samples per month

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	0	1 positive sample / month*	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (presence or absence)	N	0	0	Note: If either an original routine sample and/or its repeat samples(s) are fecal coliform or <i>E. coli</i> positive, a Tier 1 violation exists.	Human and animal fecal waste

* If a system collecting fewer than 40 samples per month has two or more positive samples in one month, the system has a MCL violation.

Nitrate/Nitrite Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Nitrate (as Nitrogen) (ppm)	11-24-15	N	ND	N/A		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as Nitrogen) (ppm)	11-24-15	N	ND	N/A		1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
Fluoride (ppm)	12-12-14	N	0.1	n/a		4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Secondary Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range		SMCL
			Low	High	
Sodium (ppm)	12-12-14	60.4	n/a		N/A
pH	MONTHLY 2015	7.44	7.31	7.58	6.5 to 8.5
Orthophosphate as PO4	MONTHLY 2015	1.447	0.22	3.85	

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.

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90th percentile)	1/1/15 thru 6/30/15	0.8507	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	1/1/15 thru 6/30/15	1.8	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) (90th percentile)	7/1/15 thru 12/31/15	0.575	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile)	7/1/15 thru 12/31/15	0	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits

Stage 2 Disinfection Byproduct Compliance - Based upon Locational Running Annual Average (LRAA)

Disinfection Byproduct	Year Sampled	MCL Violation Y/N	Your Water (highest LRAA)	Range		MCLG	MCL	Likely Source of Contamination
				Low	High			
TTHM (ppb)								
B01	2015	N	13.75	104	12	N/A	80	Byproduct of drinking water disinfection
B02	2015	N	13	86	11	N/A	80	Byproduct of drinking water disinfection
HAA5 (ppb)								
B01	2015	N	16	81	11	N/A	60	Byproduct of drinking water disinfection
B02	2015	N	16	76	14	N/A	60	Byproduct of drinking water disinfection

TTHM: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

HAA5: Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Disinfectant Residuals Summary

	Year Sampled	MRDL Violation Y/N	Your Water (highest RAA)	Range		MRDLG	MRDL	Likely Source of Contamination
				Low	High			
Chlorine (ppm)	2015	N	1.22	0.9	1.5	4	4.0	Water additive used to control microbes

All Sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic chemicals and radioactive substances. All 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 the water poses a health risk. 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 systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protections for public health. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hot Line at 1-800-426-4791.

MCL's 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.

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 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 result of the assessment is 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 Town of Surf City 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:

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.

Source Name	Susceptibility Rating	SWAP Report Date
Well # 3	Higher	July 12, 2015
Well # 5	Moderate	July 12, 2015

The complete SWAP Assessment report for Town of Surf City 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.

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. Town of Surf City 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 2 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>.

Thank you for allowing us to continue providing you with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding

We at TOWN OF SURF CITY work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.



DON'T FLUSH IT!



Toilet paper and human waste are the only things that should be put in the toilet. All other materials, like wipes, cotton balls, Q tips, and paper products will back up before they break down.

Put these items in the trash to avoid financially and environmentally costly sewer spills.

**It may say 'flushable' on the package,
but most times that's the worst thing you can do.**

Products labeled as 'flushable' might go down the toilet, but they don't break down in the system as they should. A wipe, for example, won't break down for days; even weeks and can get clogged in your household plumbing. Imagine how many are flushed each day, and the potential situation building under your feet.

And it doesn't stop there. If wipes and other flushed materials make it to the larger collection system throughout your neighborhoods, they can back up sewer collection lines and pump stations and cause financially and environmentally costly sewer spills.

And fats, oil and grease. What a mess. When it goes down the drain, it builds up along the pipes and debris in the pipes and can cause backups into homes and overflows into streets, the creeks and river.

Don't flush it, or put it down the drain.

Do your part. Put it in the trash.

For more information, contact Surf City Public Works at 329-1055 or visit www.surfcity.govoffice.com



Don't Feed the Grease Goblin!

DO

- ✓ Put oil and grease in collection containers
- ✓ Remove oil and grease from kitchen utensils, equipment and food preparation areas with scrapers/towels/brooms
- ✓ Keep grease out of wash water
- ✓ Place food scraps in collection containers

DO NOT

- ⊗ Pour oil and grease down drains
- ⊗ Wash fryers/griddles, pots/pans and plates with water until oil and grease are removed
- ⊗ Use hot water to rinse grease off surfaces
- ⊗ Put food scraps down drains



¡No Alimente a el Duende de Grasa!

SÍ

- ✓ Ponga la grasa en contenedores apropiados
- ✓ Remueva el aceite y la grasa de utensilios de cocina, equipos, y áreas de preparación de comidas con espátulas/toallas/escobas
- ✓ Mantenga la grasa fuera de el agua de lavar
- ✓ Ponga los desperdicios de comida en contenedores adecuados

NO

- ⊘ No tire aceite o grasa en los drenajes
- ⊘ No lave con agua freidoras/planchas, ollas/cacerolas y platos hasta que el aceite y la grasa hayan sido removidos
- ⊘ No use agua caliente para limpiar la grasa de las superficies
- ⊘ No tire desperdicios de comida en los drenajes