

WATER QUALITY 2012 report

ABOUT THIS REPORT

Each year, the Cape Fear Public Utility Authority will prepare a Drinking Water Quality Report for its customers as mandated by Federal law (1996 amendment to the Safe Drinking Water Act (SDWA)). This report provides important details about the quality of the drinking water we provide to our community.

NO VIOLATIONS

We are pleased to report that during 2012 or during any compliance period ending in 2012 there were NO violations of drinking water standards.

STAGE 2 DISINFECTANTS/ DISINFECTION BY- PRODUCTS RULE

The Authority requested and was granted a waiver of the Stage 2 Disinfectants/Disinfection By-Products (DBP) Rule in March of 2012. This waiver allows the Authority to complete construction of the Sweeney Water Treatment Plant and to construct inter-connections, new pipelines and other modifications associated with improvements necessary to enable the Authority to comply with the new rules that became effective April 1, 2012. The waiver expires on March 30, 2014.

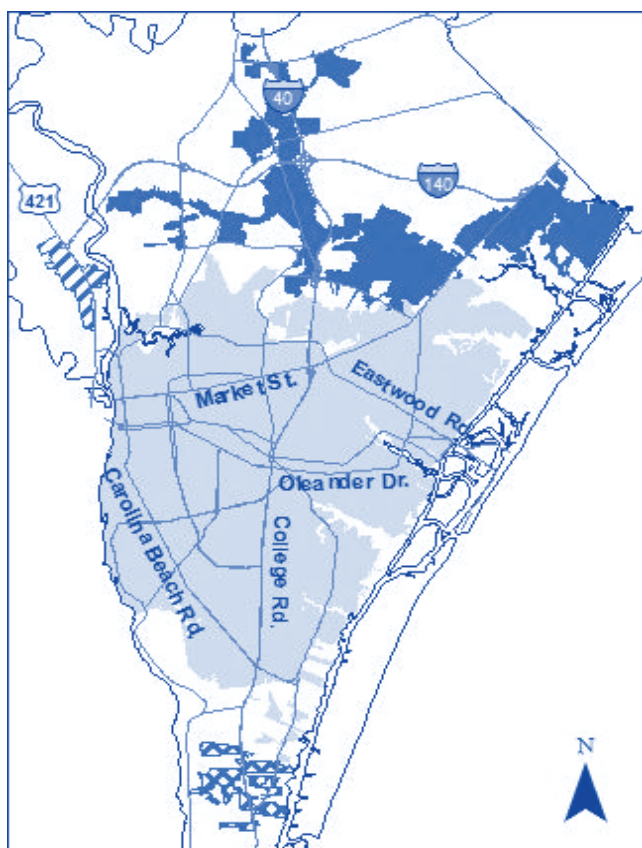
EN ESPANOL

Este informe contiene informacion muy importante. Traduzcalo o hable con un amigo quien to entienda bien.

CFPUA's Water Systems and Service Areas

When you turn on your tap, consider the source. The Cape Fear Public Utility Authority processes and distributes treated drinking water within New Hanover County through four different water systems. The largest system **CFPUA/City (PWS #04-65-010)** distributes water within the City of Wilmington city limits, parts of the Ogden area, parts of Monkey Junction and the King's Grant. Water is provided to the system by the Sweeney Water Treatment Plant, whose source water is surface water that is drawn from the Cape Fear River. The next largest system **CFPUA/NHC (PWS #04-65-232)** distributes water to portions of the northern part of New Hanover County including Murrayville, Wrightsboro, parts of Castle Hayne, Porters Neck and parts of the Ogden Area. Water is provided to this system by the CFPUA Nano-filtration Membrane Facility whose source water is groundwater wells drawing from the Castle Hayne and Pee Dee Aquifers. Two smaller systems **CFPUA/421 System (PWS #04-65-191)**, distributing water in the Flemington area, and **CFPUA/Monterey Heights water system (PWS #04-65-137)**, distributing water in Monterey Heights, Woodlake, Laurel Ridge/S. Myrtle Grove, Lord's Creek and Veteran's Park area provide treated groundwater from wells which draw water from the Castle Hayne and surficial aquifers. A staff of highly trained, state certified water treatment operators and a team of skilled maintenance technicians keep all these facilities fully operational 24 hours per day, 7 days per week to insure a safe, high quality, reliable drinking water source. Look through this report to learn more so you can make informed decisions about your drinking water and know the preventative measures taken to protect this valuable resource and ensure safe, clean drinking water.

Find your service area...



Look at the map to the left and locate the area you live in.

Use the legend below to determine what water system you're connected to.

- PWS #04-65-010**
- PWS #04-65-232**
- PWS #04-65-191**
- PWS #04-65-137**

Refer to the data tables on the following pages to review the test results for your water system.

If you're unsure what water system services your area, if you have questions about the data tables or test results, or just have a general inquiry, contact CFPUA's Water Treatment Division at **332-6739** for assistance.

**Only Tap Water
Delivers®**

What the EPA wants you to know...

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some natural substances. The presence of these substances does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to substances 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 substances are available from the Safe Drinking Water Hotline.

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. Substances that may be present in source water include **microbial substances**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; **inorganic substances**, such as salts and metals, which can be naturally-occurring or result from urban stormwater 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 stormwater runoff, and residential uses; **organic chemical substances**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and **radioactive substances**, which can be naturally-occurring or be the result of oil production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain substances in water provided by public water systems. FDA regulations establish limits for substances in bottled water that must provide the same protection for public health.



The new facility includes a combined administrative/maintenance building, a UV treatment facility, an upgraded residuals system (the system that treats discarded water), ten new filters, two new SuperPulsator treatment trains, and a new finished water high service pump station that will allow the plant to treat and pump greater volumes of water.

The Sweeney Water Treatment Plant is the larger of two water treatment facilities operated and maintained by the Cape Fear Public Utility Authority.

The Sweeney Water Treatment Plant, originally capable of treating seven million gallons of water a day (MGD), was put into service in 1943. The facility was named for Mr. John H. Sweeney who, in 1881, became the City of Wilmington's first appointed Chief Engineer. Mr. Sweeney served 50 years in that position until his death in 1931. In 1958, the Sweeney Water Treatment Plant underwent an expansion project which enabled treatment capacity to be increased to 12 MGD and yet another expansion project in the early 1980's increased capacity to 25 MGD. With the latest expansion project now complete, the Sweeney Water Treatment Plant incorporates the latest, most innovative water treatment technologies, and the capacity of water that can be treated has been increased to 35 MGD. The \$68,000,000 expansion and upgrade project initially began while still part of the City of Wilmington's Public Utilities Department but actual construction began in late 2008, shortly after CFPUA opened its doors. Plant operations stayed online and continued to process and distribute clean drinking water throughout the entire construction process. This facility expansion and upgrade is important to regional growth and to CFPUA's commitment to stewardship, sustainability and service.

Water quality data tables of detected substances

We routinely monitor for over 150 substances in your drinking water according to Federal and State laws. The tables on the following pages list all the drinking water substances that CFPUA detected in the last round of sampling for the particular substance group. The presence of these substances does **not** necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in these tables is from testing done January 1 through December 31, 2012.** The EPA and the State of North Carolina requires us to monitor for certain substances less than once per year because concentrations of these substances 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 substances are those for which the EPA has not established drinking water standards. The purpose of unregulated substance monitoring is to assist the EPA in determining the occurrence of unregulated substances in drinking water and whether future regulation is warranted. A glossary of terms used in these tables can be found on page 6 of this report.

2012 ANNUAL WATER QUALITY REPORT

CFPUA/ CITY – PWS ID #04-65-010 (Surface Water/Sweeney Water Treatment Plant)

Service to City of Wilmington, Ogden, Monkey Junction, Kings Grant

MICROBIOLOGICAL SUBSTANCES					
Substance (units)	MCL Violation	Your Water	MCLG	MCL exceeded if:	Likely Source
Total Coliform Bacteria (presence or absence)	NO	0.2%	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	NO	0	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive)	Human and animal fecal waste

TURBIDITY * - Systems with population $\geq 10,000$					
Substance (units)	TT Violation	Your Water	MCLG	Treatment Technique (TT) Violation if:	Likely Source
Turbidity (NTU) Highest single turbidity measurement	NO	0.121	N/A	Turbidity > 1 NTU	Soil runoff
Turbidity (NTU) Lowest monthly percentage (%) of samples meeting turbidity limits	NO	100%	N/A	Less than 95% of monthly turbidity measurements are ≤ 0.3 NTU	

- Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 NTU

INORGANIC SUBSTANCES								
Substance (units)	Sample Date	MCL Violation	Your Water	Range		MCLG	MCL	Likely Source
				Low	High			
Fluoride (ppm) Sweeney WTP surface water source	Nov 21, 2012	NO	0.69	N/A	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizers and aluminum factories

UNREGULATED INORGANIC SUBSTANCES					
Substance (units)	Sample Date	Your Water	Range		Secondary MCL
			Low	High	
Sulfate (ppm)	Nov 21, 2012	44.7	N/A	N/A	250

LEAD AND COPPER [†] (See page 6 for more information)						
Substance (units)	Sample Date	Your Water	# of Sites Found Above the AL	MCLG	MCL	Likely Source
Copper (ppm) 90 th percentile	June/Sept 2011	0.193 ppm	0	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) 90 th percentile	June/Sept 2011	<3.0 ppb	0	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits

DISINFECTION BYPRODUCT PRECURSORS							
Our water system used [Step 1] as the method to comply with the disinfectants/disinfectant byproducts treatment technique requirements							
Substance (units)	MCL/TT Violation	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio		MCLG	MCL	Likely Source
			Low	High			
Total Organic Carbon (TOC) Removal Ratio - TREATED	NO	1.96	120%	178%	N/A	TT	Naturally present in the environment

Note: Depending on the TOC in our source water, the system MUST have a certain % removal of TOC or must achieve alternative compliance criteria. If we do not achieve that % removal, there is an alternative % removal. If we fail to meet the alternative % removal, we are in violation of a Treatment Technique (TT). Minimum % removal achieved was 59%.

TOC Removal Requirements			
Source Water TOC (mg/L)	Source Water Alkalinity mg/L as CaCO ₃ (in percentages)		
	0-60	> 60 - 120	> 120
> 2.0 – 4.0	35.0	25.0	15.0
> 4.0 – 8.0	45.0	35.0	25.0
> 8.0	50.0	40.0	30.0

DISINFECTANTS AND DISINFECTION BYPRODUCTS

Substance (units)	MCL/MRDL Violation	Your Water (AVG)	Range		MCLG	MCL	Likely Source
			Low	High			
TTHM† (ppb) Total Trihalomethanes**	NO	73.0	23.0	130.0	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) Total Haloacetic Acid	NO	21.0	9.0	32.0	N/A	60	By-product of drinking water disinfection
Bromate (ppb)	NO	2.0	0	4.0	0	10	By-product of drinking water disinfection
Chlorine (ppm)	NO	0.97	0.06	1.77	MRDLG = 4	MRDL = 4	Water additive used to control microbes

**Compliance based on Running Annual Average of all distribution samples

† 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

WATER CHARACTERISTICS SUBSTANCES

Secondary Substances, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic substances normally do not have any health effects and normally do not affect the safety of your water.

Substance (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Sweeney WTP surface water source				
• Iron (ppm)	Nov 21, 2012	<0.06	N/A	0.3 mg/L
• Manganese (ppm)	Nov 21, 2012	0.01	N/A	0.05 mg/L
• Nickel (ppm)	Nov 21, 2012	<0.1	N/A	N/A
• pH (s.u.)	Nov 21, 2012	7.3	N/A	6.5 to 8.5
• Sodium (ppm)	Nov 21, 2012	35.3	N/A	N/A
• Sulfate (ppm)	Nov 21, 2012	44.7	N/A	250 mg/L

CFPUA/ 421 WATER SYSTEM - PWS ID #04-65-191 (Groundwater)

Service to Flemington

MICROBIOLOGICAL SUBSTANCES

Substance (units)	MCL Violation	Your Water	MCLG	MCL exceeded if:	Likely Source
Total Coliform Bacteria (presence or absence)	NO	24 tested / 0 positive	0	More than 1 sample a month is positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N/A	0	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive)	Human and animal fecal waste

LEAD AND COPPER † (See page 6 for more information)

Substance (units)	Sample Date	Your Water	# of Sites Found Above the AL	MCLG	MCL	Likely Source
Copper (ppm) 90 th percentile	June 2012	0.059	0	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) 90 th percentile	June 2012	ND	0	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits

NITRATE/NITRITE SUBSTANCES

Substance (units)	Sample Date	MCL/MRDL Violation	Your Water (AVG)	Range		MCLG	MCL	Likely Source
				Low	High			
Nitrate-as Nitrogen (ppm)	Feb 2012	NO	1.90	N/A	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

DISINFECTANTS AND DISINFECTION BYPRODUCTS

Substance (units)	Sample Date	MCL/MRDL Violation	Your Water (AVG)	Range		MCLG	MCL	Likely Source
				Low	High			
TTHM (ppb) Total Trihalomethanes	July 2012	NO	18	N/A	N/A	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) Total Haloacetic Acid	July 2012	NO	3	N/A	N/A	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	Jan-Dec 2012	NO	0.98	0.26	1.36	MRDLG = 4	MRDL = 4	Water additive used to control microbes

WATER CHARACTERISTICS SUBSTANCES

Secondary Substances, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic substances normally do not have any health effects and normally do not affect the safety of your water.

Substance (units)	Sample Date	Your Water	Range	Secondary MCL
Manganese (ppm)	Feb 2005	0.029	N/A	0.05
pH (s.u.)	Feb 2005	7.6	N/A	6.5 to 8.5
Sodium (ppm)	Feb 2005	29	N/A	N/A

CFPUA/NHC - PWS ID #04-65-232 (Groundwater/Nano-filtration)

Service to Northern New Hanover County, Ogden, Porters Neck, Murrayville, Wrightsboro, Castle Hayne

MICROBIOLOGICAL SUBSTANCES					
Substance (units)	MCL Violation	Your Water	MCLG	MCL exceeded if:	Likely Source
Total Coliform Bacteria (presence or absence)	NO	484 tested / 1 positive	0	5% of monthly samples are positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	N/A	0	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive)	Human and animal fecal waste

INORGANIC SUBSTANCES								
Substance (units)	Sample Date	MCL Violation	Your Water	Range		MCLG	MCL	Likely Source
				Low	High			
Fluoride (ppm)	Jan-Dec 2012 (Daily)	NO	0.79	0.13	0.79	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizers and aluminum factories

LEAD AND COPPER † (See page 6 for more information)						
Substance (units)	Sample Date	Your Water	# of Sites Found Above the AL	MCLG	MCL	Likely Source
Copper (ppm) 90 th percentile	June-Sept 2012	0.402	0	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) 90 th percentile	June-Sept 2012	ND	0	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits

RADIOLOGICAL SUBSTANCES *Note: The MCL for beta particles is 4 mrem/year. EPA considers 50pCi/L to be the level of concern for beta particles.						
Substance (units)	Sample Date	MCL Violation	Your Water	MCLG	MCL	Likely Source
Gross Beta (pCi/L)	Sept 2010	NO	ND	0	*50	Decay of natural and man-made deposits
Combined Uranium (pCi/L)	Sept 2010	NO	ND	0	20.1	Erosion of natural deposits
Uranium (pCi/L)	Sept 2010	NO	ND	0	20.1	Erosion of natural deposits

DISINFECTANTS AND DISINFECTION BYPRODUCTS								
Substance (units)	Sample Date	MCL/MRDL Violation	Your Water (AVG)	Range		MCLG	MCL	Likely Source
				Low	High			
TTHM (ppb) Total Trihalomethanes	Jan-Dec 2012	NO	39	26	53	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) Total Haloacetic Acid	Jan-Dec 2012	NO	17	15	21	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	Jan-Dec 2012	NO	0.92	0.21	1.48	MRDLG = 4	MRDL = 4	Water additive used to control microbes

WATER CHARACTERISTICS SUBSTANCES				
Secondary Substances, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic substances normally do not have any health effects and normally do not affect the safety of your water.				
Substance (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Iron (ppm)	Jan-Dec 2012 (Daily)	1.02	0.01 / 1.02	0.3
Manganese (ppm)	Jan-Dec 2012 (Daily)	0.240	ND / 0.240	0.05
pH (s.u.)	Jan-Dec 2012 (Daily)	7.89	4.52 / 7.89	6.5 to 8.5
Sodium (ppm)	Dec 2012	11.0	N/A	N/A

Water Plant Tours & School Presentations Available

Have you ever wondered where your water comes from or how it gets to the tap? Schedule a tour of the Sweeney Water Treatment or Nano Filtration (Groundwater) Plant for your school group, boy/girl scout troop or other organization. As you embark on a guided tour through the treatment facility, you'll learn where your water comes from and how it's processed into safe, clean drinking water. Unable to arrange a tour? We'll come to you. We offer interactive, informative presentations covering a wide variety of utility/environmental topics including water treatment, wastewater treatment, water conservation, environmental management, utilities engineering and more. Contact us today via phone (910) 332-6579 or e-mail communications@cfpuia.org to schedule a plant tour or presentation.

CFPUA/ MONTEREY HEIGHTS WATER SYSTEM - PWS ID #04-65-137 (Groundwater)

Service to Monterey Heights, Woodlake, Laurel Ridge/S. Myrtle Grove, Lord's Creek, Veteran's Park

MICROBIOLOGICAL SUBSTANCES					
Substance (units)	MCL Violation	Your Water	MCLG	MCL exceeded if:	Likely Source
Total Coliform Bacteria (presence or absence)	NO	102 tested / 0 positive	0	More than 1 sample a month is positive	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence)	NO	0	0	0 (Note: The MCL is exceeded if a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive)	Human and animal fecal waste

INORGANIC SUBSTANCES								
Substance (units)	Sample Date	MCL Violation	Your Water	Range		MCLG	MCL	Likely Source
				Low	High			
Fluoride (ppm)	March 2004 & Feb 2011	NO	0.14	0.10	0.14	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizers and aluminum factories

LEAD AND COPPER †						
Substance (units)	Sample Date	Your Water	# of Sites Found Above the AL	MCLG	MCL	Likely Source
Copper (ppm) 90 th percentile	July-Dec 2012	0.430	0	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb) 90 th percentile	July-Dec 2012	7	0	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits

DISINFECTANTS AND DISINFECTION BYPRODUCTS								
Substance (units)	Sample Date	MCL/MRDL Violation	Your Water (AVG)	Range		MCLG	MCL	Likely Source
				Low	High			
TTHM (ppb) Total Trihalomethanes	Aug 2012	NO	59	51	64	N/A	80	By-product of drinking water chlorination
HAA5 (ppb) Total Haloacetic Acid	Aug 2012	NO	37	25	47	N/A	60	By-product of drinking water disinfection
Chlorine (ppm)	Jan-Dec 2012	NO	0.81	0.22	1.93	MRDLG = 4	MRDL = 4	Water additive used to control microbes

WATER CHARACTERISTICS SUBSTANCES				
Secondary Substances, required by the NC Public Water Supply Section, are substances that affect the taste, odor, and/or color of drinking water. These aesthetic substances normally do not have any health effects and normally do not affect the safety of your water.				
Substance (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Iron (ppm)	Mar 2004 & Feb 2011	0.157	ND / 0.157	0.3
Manganese (ppm)	Mar 2004 & Feb 2011	0.020	0.012 / 0.030	0.05
pH (s.u.)	Mar 2004 & Feb 2011	7.9	7.7 / 7.9	6.5 to 8.5
Sodium (ppm)	Mar 2004 & Feb 2011	17	5 / 17	N/A

† LEAD & COPPER

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 Cape Fear Public Utility Authority 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>.

DEFINITIONS **AL/Action Level** = The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. The action levels are reported at the 90th percentile for homes at greatest risk. **Average** = Approximate or summary concentration, determined by dividing the total of all results by the number of analysis. **MCL** (Maximum Contaminant Level)** = The highest level of a contaminant that is allowed in drinking water based on potential health effects. **MCLG (Maximum Contaminant Level Goal)** = The level of a contaminant in drinking water below which there is no known or expected risk to health. **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. **MRDL (Maximum Residual Disinfection Level)** = the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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. **N/A** = Not applicable. **ND (Non-Detects)** = Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used. **NTU (Nephelometric Turbidity Unit)** = A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. **pCi/L (Picocuries per liter)** = measures radioactivity in water. **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 (ug/L)** = One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000. **Range** = These are the lowest to the highest levels detected. **TT (Treatment Technique)** = A required process intended to reduce the level of contaminant in drinking water. **Turbidity MCL** = Less than 0.3 NTU's in 95% of all samples collected. ****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.

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 the susceptibility of each drinking water source (well or surface water intake) to Potential Contamination 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 complete SWAP Assessment report for the Cape Fear Public Utility Authority may be viewed at: <http://www.ncwater.org/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 water quality report 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.

Source Name	Source Status	System Name	Susceptibility Rating*	SWAP Report Date
NHC 421 Well #4	Active	04-65-191	Higher	March 2010
NHC 421 Well #3	Active	04-65-191	Higher	March 2010
Monterey Heights Well #3	Active	04-65-137	Moderate	March 2010
Monterey Heights Well #2	Active	04-65-137	Moderate	March 2010
Monterey Heights Well #1	Active	04-65-137	Higher	March 2010
NHC Well # 30 O	Active	04-65-232	Moderate	March 2010
NHC Well #29 N	Active	04-65-232	Higher	March 2010
Well #8 Ogden Park	Active	04-65-232	Moderate	March 2010
NHC Well #28 M	Active	04-65-232	Higher	March 2010
NHC Well #23	Active	04-65-232	Moderate	March 2010
NHC Well #22	Active	04-65-232	Moderate	March 2010
Well #15 Elkmont	Active	04-65-232	Moderate	March 2010
Lower Cape Fear WSA	Active	04-65-010	Moderate	February 2010
Lords Creek	Active	04-65-010	Lower	February 2010
Cape Fear River Kings Bluff	Active	04-65-010	Moderate	February 2010
Well #4 White Rd.	Emergency	04-65-232	Moderate	March 2010
Well #20 Old Marsh Oaks #2	Emergency	04-65-232	Higher	March 2010
Well #16 Old Oak Rd.	Emergency	04-65-232	Higher	March 2010
Sea Spray Rd.	Emergency	04-65-010	Higher	February 2010
Sea Pines	Emergency	04-65-010	Moderate	February 2010
Masonboro Forest	Emergency	04-65-010	Lower	February 2010

Susceptibility of Sources to Potential Sources (PCSs)

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.



Questions? Information?

CFPUA

235 Government Center Dr.
Wilmington, NC 28403
(910) 332-6550
www.cfpua.org

EPA

Safe Drinking Water Hotline
1-800-426-4791

If you have any questions or concerns about this report or the quality of your drinking water, please contact CFPUA's Water Treatment Division at (910) 332-6739. We want our valued customers to be informed about their water utility. If you want to learn more, consider attending an Authority Board Meeting. The CFPUA Board meets on the 2nd Wednesday of each month at 9:00 a.m. in Room 601 of the New Hanover County Government Center.

Pass it on...

Businesses and landlords are requested to pass this information on to their tenants and customers. Additional copies can be obtained by calling (910) 332-6739 or (910) 332-6550 during regular business hours. This report is also available online at: www.cfpua.org/2012WQReport.

Thank you for helping us provide this information to all those who use and depend on our water.



This report is printed using
recycled paper and soy ink.



Cape Fear
Public Utility Authority

Stewardship. Sustainability. Service.

Cape Fear Public Utility Authority • 235 Government Center Drive • Wilmington, NC 28403

Helpful CFPUA phone numbers...

Water/Sewer Emergencies (24-hour).....	332-6565
Customer Service - Billing Information, New Connections, System Shutoff.....	332-6550
Water Treatment (Sweeney Water Plant).....	332-6739
Nano-Filtration Membrane Facility.....	332-6739
Human Resources.....	332-6570
Board Information.....	332-6543
Communications.....	332-6704
Community Compliance.....	332-6558

Learn more about your utilities...

Would you like to learn more about CFPUA, the role it plays in your life, how it does its job and how those operations are funded? Perhaps you have a specific concern regarding the rates you pay or the infrastructure that serves you. CFPUA recently announced a renewed effort to reach out to community groups, homeowners associations, civic organizations, school classes or other groups interested in learning more about CFPUA. We're available morning, noon and night to meet with your group and will tailor a presentation to touch upon areas of interest to you. A question-and-answer session will then follow each presentation to allow for an open exchange of questions and concerns.

For more information about having CFPUA speak to your organization, please contact Mike McGill, Chief Communications Officer, at (910) 332-6704 or by email at communications@cfpua.org.