

2018 Annual Drinking Water Quality Report

Wilson County Southwest Water District

Water System Number: 40-98-012

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 your source(s) of water, 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 Wilson County Water Services at (252) 399-2749. We want our valued customers to be informed about their water utility.

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 microbial 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. Wilson County SW Water 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>. 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 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 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 stormwater 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.

The water that is used by this system is ground water purchased from the Town of Black Creek.

Source Water Assessment Program (SWAP) Results

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 Black Creek 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

complete SWAP Assessment report for Black Creek and the City of Wilson may be viewed on the Web at:

www.ncwater.org/pws/swap.

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. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, 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 919-707-9098.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system’s potential to become contaminated by PCSs in the assessment area.

Violations that Your Water System Received for the Report Year

During 2018 or during any compliance period that ended in 2018 Wilson County Southwest Water District did not receive any violation that covered the time period of 2018.

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.

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Tables of Detected Contaminants

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) | NO | Absent | 0 | One positive monthly sample | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> (presence or absence) | NO | Absent | 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 <i>E. coli</i> positive) | Human and animal fecal waste |

Lead and Copper

| Contaminant (units) | Sample Date | Your Water | # of sites found above the AL | MCLG | Action Level (AL) | Likely Source of Contamination |
|--|-------------|------------|-------------------------------|------|-------------------|--|
| Copper (ppm) (90 th percentile) | 09/2017 | 0.168 | 0 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 th percentile) | 09/2017 | ND | 0 | 0 | AL=15 | Corrosion of household plumbing systems, erosion of natural deposits |

Asbestos Contamination

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range | | MCLG | MCL | Likely Source of Contamination |
|----------------------|-------------|-------------------|------------|-------|------|------|-----|---|
| | | | | Low | High | | | |
| Total Asbestos (MFL) | 12/3/2013 | NO | ND | ND | ND | 7 | 7 | Decay of Asbestos Cement water mains. 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 (ppm) | Likely Source of Contamination |
|---------------------------|--------------|-------------------|---------------------------|-------|------|-------|--|--------------------------------|
| | | | | Low | High | | | |
| TTHM (ppm) Location – B01 | 2018 | NO | 0.008 | N/A | N/A | 0.080 | Byproduct of drinking water disinfection | |
| HAA5 (ppm) Location – B01 | 2018 | NO | 0.002 | N/A | N/A | 0.060 | Byproduct of drinking water disinfection | |

For 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.

For 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.

Contaminant Group List

(BA) Total Coliform Bacteria includes Fecal/*E.coli* bacteria. Testing for Fecal/*E.coli* bacteria is required if repeat samples confirm presence of total coliform.

(AS) Asbestos - includes testing for Chrysotile, Amphibole and Total Asbestos.

(TTHM) - Total Trihalomethanes - include Chloroform, Bromoform, Bromodichloromethane, and Chlorodibromomethane.

(TOC) - Total Organic Carbon - includes testing for Alkalinity, Dissolved Organic Carbon (DOC), Total Organic Carbon (TOC) and Ultraviolet Absorption 254 (UV254). Source water samples must be tested for both TOC and Alkalinity. Treated water samples must be tested for TOC. Source water samples and treated water samples must be collected on the same day.

(HAA5)- Haloacetic Acids - include Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid.

(BB) Bromate/Bromide – includes testing for Bromate and/or Bromide.

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

(IC) Inorganic chemicals - includes Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Iron, Manganese, Mercury, Nickel, pH, Selenium, Sodium, Sulfate, and Thallium.

(LC) Lead and copper are tested by collecting one sample and testing that sample for both lead and copper.

(NT) Nitrate/ (NI) Nitrite – includes testing for nitrate and/or nitrite.

(RA) Radionuclides - includes Gross Alpha, Radon, Uranium, Combined Radium, Radium 226, Radium 228, Gross Beta, Tritium, Strontium 89, Strontium 90, Iodine 131, and Cesium 134.

(SOC) – Synthetic Organic Chemicals/Pesticides - SOC's are commonly used in industrial and manufacturing processes. SOC's include 2,4-D, 2,4,5-TP (Silvex), 3-Hydroxycarbofuran, Alachlor, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Aldrin, Atrazine, Benzo(a)pyrene, Butachlor, Carbaryl, Carbofuran, Chlordane, Dalapon, Dieldrin, Di(2-ethylhexyl)adipate, Di(2-ethylhexyl)phthalate, Dibromochloropropane (DBCP), Dicamba, Dinoseb, Endrin, Ethylene dibromide (EDB), Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methomyl, Metolachlor, Methoxychlor, Metribuzin, Oxamyl(vydate), PCBs, Propachlor, Pentachlorophenol, Picloram, Simazine, Toxaphene.

(VOC) - Volatile Organic Chemicals, - VOCs are commonly used in industrial and manufacturing processes. VOCs include p-Isopropyltoluene, Chloromethane, Dichlorodifluoromethane, Bromomethane, Chloroethane, Fluorotrichloromethane, Hexachlorobutadiene, Naphthalene, 1,2,4-Trichlorobenzene, Cis-1,2-Dichloroethylene, Dibromomethane, 1,1-Dichloropropene, 1,3-Dichloropropane, 1,3-Dichloropropene, 1,2,3-Trichloropropane, 2,2-Dichloropropane, 1,2,4-Trimethylbenzene, 1,2,3-Trichlorobenzene, n-Butylbenzene, 1,3,5-Trimethylbenzene, Tert-Butylbenzene, Sec-Butylbenzene, Bromochloromethane, Chloroform, Bromoform, Bromodichloromethane, Chlorodibromomethane, Xylenes (Total), Dichloromethane, o-Chlorotoluene, p-Chlorotoluene, m-Dichlorobenzene, o-Dichlorobenzene, p-Dichlorobenzene, Vinyl Chloride, 1,1,-Dichloroethylene, 1,1-Dichloroethane, Trans-1,2,-Dichloroethylene, 1,2-Dichloroethane, 1,1,1-Trichloroethane, Carbon Tetrachloride, 1,2-Dichloropropane, Trichloroethylene, 1,1,2-Trichloroethane, 1,1,1,2-Tetrachloroethane, Tetrachloroethylene, 1, 1,2,2-Tetrachloroethane, Chlorobenzene, Benzene, Toluene, Ethylbenzene, Bromobenzene, Isopropylbenzene, Styrene, and n-Propylbenzene.

Consumer Confidence Report Certification Form

Water System Name: Wilson County Southwest Water District

Water System No: 40-98-012 Report Year: 2018 Population Served: 4,057

The Community Water System (CWS) named above hereby confirms that all provisions under 40 CFR parts 141 and 142 requiring the development of, distribution of, and notification of a consumer confidence report have been executed. Further, the CWS certifies the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency by their NC certified laboratory. In addition, if this report is being used to meet Tier 3 Public Notification requirements, as denoted by the checked box below, the CWS certifies that public notification has been provided to its consumers in accordance with the requirements of 40 CFR 141.204(d).

Certified by: Ronald W. Ford II

Title: Water Services Director

Signature: _____

Phone #: 252-399-2749

Delivery Achieved Date: June 3, 2019

Date Reported to State: July 1, 2019

The CCR includes text which provides mandated Public Notice for a monitoring violation (check box, if yes)

ALL methods used for CCR distribution include:

Notification of Availability of Paper Copy (other than in the CCR itself)

Notification Method **On bill**

Notification of CCR at:

<http://www.wilson-co.com/departments/water-services/county-water-services-confidence-report>

Notification Method **On bill**

“Good faith” efforts (in addition to the above required methods) were used to reach non-bill paying consumers such as industry employees, apartment tenants, etc. Extra efforts included the following methods:

posting the CCR on the Internet at:

<http://www.wilson-co.com/departments/water-services/county-water-services-confidence-report>

2018 Annual Drinking Water Quality Report

Town of Black Creek

Water System Number: 04-98-035

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 your source(s) of water, 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 Greg Gates at 252-243-6439. 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 meetings. They are held at Town Meeting Hall the second Tuesday of each month at 7:30 pm.**

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 microbial 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. [Name of Utility] 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>.

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 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 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 stormwater 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

The Town of Black Creeks water source is from four ground water wells.

Source Water Assessment Program (SWAP) Results

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 Black Creek 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 # 1 | Lower | May 2018 |
| Well # 3 | Lower | May 2018 |
| Well # 5 | Lower | May 2018 |
| Well # 8 | Lower | May 2018 |

The complete SWAP Assessment report for Black Creek may be viewed on the Web at: www.ncwater.org/pws/swap. 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. If you are unable to access your SWAP report on the web, you may mail a written request for a printed copy to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634, or email requests to swap@ncdenr.gov. Please indicate your system name, number, 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 919-707-9098.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the system’s potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

Protection of drinking water is everyone’s responsibility. The Town of Black Creek has implemented a Well Head Protection Program, to protect our water sources. You can help protect your community’s drinking water source(s) in several ways: (examples: dispose of chemicals properly; take used motor oil to a recycling center.

Water Quality Data Tables 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 each 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, 2018.** The EPA and the State allow 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 regulations are 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.

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

Million Fibers per Liter (MFL) - Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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 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.

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.

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.

Tables of Detected Contaminants

Inorganic Contaminants

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range | | MCLG | MCL | Likely Source of Contamination |
|---------------------|-------------|-------------------|------------|-------|------|------|-----|---|
| | | | | Low | High | | | |
| Cyanide (ppb) | 02/11/18 | N | ND | N/A | | 200 | 200 | Discharge from steel/metal factories; discharge from plastic and fertilizer factories |
| Fluoride (ppm) | 02/11/18 | N | 2.30 | N/A | | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |

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) (90 th percentile) | 6/14/16 | .359 | 0 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 th percentile) | 6/14/16 | .003 | 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) | | | | | | N/A | 80 | Byproduct of drinking water disinfection |
| Location B01 | 2018 | N | 0.001 | N/A | | N/A | | |
| HAA5 (ppb) | | | | | | N/A | 60 | Byproduct of drinking water disinfection |
| Location B02 | 2018 | N | 0.001 | N/A | | N/A | | |

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Elevated Fluoride Levels Detected in BLACK CREEK, TOWN OF (Exceedance of the Secondary Maximum Contaminant Level)

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2.0 milligrams per liter (mg/l) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). The drinking water provided by your community water system [BLACK CREEK, TOWN OF] has a fluoride concentration of 2.3 mg/l.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

Drinking water containing more than 4.0 mg/l of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4.0 mg/l of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2.0 mg/l because of this cosmetic dental problem.

For more information, please call GATES, GREG of BLACK CREEK, TOWN OF at 252-243-6439. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP.

Please share this information with all the other people who drink this water, especially those who may not have 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, please contact:

| | | |
|----------------------------------|-------------------------------------|--|
| Responsible Person Greg Gates | System Name BLACK CREEK, TOWN OF | System Address (Street) 112 West Center St. |
| Phone Number 252-243-6439 | System Number NC0498035 | System Address (City, State, Zip) Black Creek, N.C. 27813 |

Awareness Date: March 18, 2019

Date Notice Distributed: June 1, 2019

Method of Distribution: CCR

2018 Annual Consumer Confidence Report Information for Wilson County
City of Wilson
P.O. Box 10
Wilson, NC 27894
PWS ID # NC0498010

City of Wilson's Water Treatment Facilities

| Turbidity* | | | | | |
|---|---|------|------------|--------------------------------|--|
| Contaminant (Units) | Treatment Technique (TT) Violation if: | MCLG | Your Water | Likely Source of Contamination | Treatment Technique (TT) Violation Y/N |
| Turbidity (NTU) - Highest Single Turbidity Measurement | Turbidity >1 NTU | N/A | 0.28 NTU | Soil runoff | NO |
| Turbidity (NTU) - Lowest Monthly Percentage (%) of Samples Meeting Turbidity Limits | Less than 95% of Monthly Turbidity Measurements are ≤ 0.3 NTU | N/A | 100% | | |

*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 Contaminants

| Contaminant (Units) | Year Sampled | MCL | MCLG | Level Detected | Range Detected | Likely Source of Contamination | MCL Violation Y/N |
|---------------------|--------------|-----|------|----------------|----------------|--|-------------------|
| Fluoride (ppm) | 2018 | 4 | 4 | 0.72 | 0.51 - 0.90 | Erosion of natural deposits; water additives which promotes strong teeth; discharge from fertilizer and aluminum factories | NO |

Disinfection By-Product Precursors Contaminants

| Contaminant | TT | MCLG | Compliance Method (Step 1 or ACC#) | Level Detected (RAA Removal Ratio) | Range (Monthly Removal Ratio) | Likely Source of Contamination | MCL Violation Y/N |
|--|----|------|------------------------------------|------------------------------------|-------------------------------|--------------------------------------|-------------------|
| Total Organic Carbon (TOC) (Removal Ratio) - Treated Water | TT | N/A | Step 1 | 1.6 | 1.44 - 1.80 | Naturally present in the environment | NO |

City of Wilson's Distribution System

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

| Disinfection Byproducts | Year Sampled | MCL | MCLG | Your Water (Highest LRAA) | Range Detected | Likely Source of Contamination | MCL Violation Y/N |
|-------------------------|--------------|-----|------|---------------------------|----------------|---|-------------------|
| THM (ppb) | 2018 | 80 | N/A | 65.5 | 12 - 111 | By-product of drinking water disinfection | NO |
| HAA5 (ppb) | 2018 | 60 | N/A | 49.0 | 12 - 70 | By-product of drinking water disinfection | NO |

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

Disinfectant Residuals Summary

| Contaminant (Units) | Year Sampled | MRDL | MRDLG | Your Water (Highest RAA) | Range Detected | Likely Source of Contamination | MRDL Violation Y/N |
|---------------------|--------------|------------|-----------|--------------------------|----------------|---|--------------------|
| Chlorine (ppm) | 2018 | MRDL = 4.0 | MRDLG = 4 | 0.64 | 0.20 - 1.23 | Water additive used to control microbes | NO |

Regulated at the Tap - Lead and Copper Contaminants

| Contaminant (Units) | Date Last Tested | AL | MCLG | Your Water | Number of Sites Found Above AL | Likely Source of Contamination | MCL Violation Y/N |
|--|------------------|----------|------|---------------------------------|--------------------------------|--|-------------------|
| Lead (ppb) (90 th Percentile) | 2016 | AL = 15 | 0 | None Detected (90th percentile) | 2 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | NO |
| Copper (ppm) (90 th Percentile) | 2016 | AL = 1.3 | 1.3 | 0.281 (90th percentile) | 0 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives | NO |

City of Wilson's Source Waters

Cryptosporidium

Our system monitored for Cryptosporidium during 2018 and had detections in one sample at Wiggins Mill Reservoir for an average of 0.021 oocysts/Liter and detections in three samples at Toisnot Reservoir for an average of 0.032 oocysts/Liter. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

The City of Wilson obtains its water supply from two sources. The first source is Contentnea Creek and consists of the Buckhorn Lake and the downstream Wiggins Mill Reservoir. Buckhorn Lake is the City's largest water supply reservoir and is an impoundment on the Contentnea Creek approximately 12 miles west of the city. Water is released from Buckhorn Lake into Contentnea Creek and is pumped from the downstream Wiggins Mill Reservoir to the Wiggins Mill Water Treatment Plant and to the Toisnot Water Treatment Plant. The other water supply source for the City is Toisnot Reservoir and consists of Lake Wilson and the downstream Toisnot Reservoir, which together provide water for the Toisnot Water Treatment Plant. A connection from the Tar River Reservoir to upstream of Lake Wilson is also available as a water supply during emergency conditions.

TT Treatment Technique- A required process intended to reduce the level of a contaminant in 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 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 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 Disinfectant 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 Disinfectant 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.
NA Not applicable- Information not applicable/not required for that particular water system or for that particular rule.
NTU Nephelometric Turbidity Units- Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
ppm parts per million- One part per million corresponds to one inch in 16 miles.
ppb parts per billion- One part per billion corresponds to one in 16,000 miles.
ppt parts per trillion- One part per trillion would correspond to one square inch in 250 square miles.
LRAA Locational Running Annual Average-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.