

Meeting Standards. Surpassing Expectations.

Fayetteville Public Works Commission 2017 Water Quality Report

At PWC, we care deeply about the quality of the water we provide for our customers, and we're proud of the exceptional standards we maintain. Each year, we publish a "Water Quality Report" with the results of testing we are required to perform. You can find full details of this report on our website – www.faypwc.com.

However, we don't test our water just because we "have to." It's part of our unparalleled commitment to provide you with the highest quality drinking water that meets – and surpasses – standard requirements.

Above and Beyond

PWC is proud to be a charter member of the National Partnership for Safe Water. We were the first utility in North Carolina to earn the Environmental Protection Agency (EPA) Director's Award for our extra efforts in providing clean, safe drinking water. And we have received the prestigious recognition for 17 consecutive years.

In 2011, PWC became a Charter Member of the Partnership for Safe Water Distribution System Optimization Program. This new program focused on the operation and maintenance of water treatment facilities, water mains and storage tanks. In 2014, when we completed the 18-month self-assessment phase of the program, we were among the first utilities in the country to be recognized for this achievement.

9 Billion Gallons. 150,000 Tests.

To make sure your drinking water is clean and safe, PWC's two Water Treatment Facilities – P.O. Hoffer and Glenville Lake – use advanced technology and proven methods to process the water we provide. In 2016, we treated 9.1 billion gallons of water! To ensure strict compliance with EPA regulations, we

continuously monitor our water quality, and this involves performing more than 150,000 tests a year.

Where Your Water Comes From

All of the water treated by PWC is "surface water." The water processed at our P.O. Hoffer Water Treatment Facility comes from the Cape Fear River. Water processed at our Glenville Lake Facility comes from the Cape Fear River, Big Cross Creek, and the Little Cross Creek Water-shed, which contains four bodies of water used for water storage – Bonnie Doone Lake, Kornbow Lake, Mintz Pond, and Glenville Lake. Both of our Treatment Facilities provide water to our general distribution system, so the water you drink is a blend of water we process from all sources.

How is Your Water Treated?

While the treatment process varies slightly at our two water treatment facilities, the basic steps are similar.

The Disinfection Method

PWC uses the disinfection method chloramination, which uses both ammonia and chlorine. Ammonia is added to the water at a carefully controlled level, and the chlorine and ammonia react chemically to produce chloramines.

Chloraminated drinking water is perfectly safe for drinking, cooking, bathing and other daily water uses. There are, however, two groups of people who need to take special care with chloraminated water: customers who use drinking water for kidney dialysis machines and fish owners.

For more information on chloramination, including special precautions these special groups should take, contact PWC.

As an extra measure of safety, the North Carolina Department of Environment and Natural Resources requires all water systems using chloramination to suspend the addition of ammonia for a one-month period each year. We do this each March to ensure control of any biological growth that may have occurred in the water distribution system.

The Treatment Process

PWC operations and maintenance staff at our facilities are committed to providing safe, high quality drinking water for our customers. When raw water enters the facility, ferric sulfate is added, causing small particles to adhere to one another. This makes the particles heavy enough to settle out of the water in a sedimentation basin. The water is then filtered through sand and anthracite to remove remaining particles. Ammonia and chlorine are added to kill harmful bacteria, protozoans, and viruses. Lime or caustic soda, and a corrosion inhibitor are added to minimize the potential for dissolving the lead used in older household plumbing. Fluoride is added as an aid in preventing tooth decay. Both facilities also add powdered activated carbon to reduce substances that produce unpleasant tastes and odors. Treated water proceeds through a series of pumps and storage facilities before being delivered to your home.

An Extra Measure of Concern

PWC adds fluoride to your water supply. Proven as a safe and healthy way to effectively prevent tooth decay, community water fluoridation has been recognized by the U.S. Centers for Disease Control (CDC) as one of ten great public health achievements of the 20th century.



Our Water is Safe to Drink

PWC annually tests for 118 elements and contaminants regulated by the EPA. PWC meets or surpasses all the standard requirements annually. We understand that news reports about 1,4-Dioxane cause concerns about the safety of our drinking water. While 1,4-Dioxane has been detected in the Cape Fear River as well as other areas in our region, state and nation, the Environmental Protection Agency (EPA) currently has no standards for 1,4-Dioxane and has not yet issued regulated safe limits. If the EPA believed 1,4-Dioxane was an immediate threat, a directive would have been issued.

Since 1,4-Dioxane cannot be removed through our traditional water treatment process, we have partnered with other communities and the North Carolina Department of Environmental Quality (NCDEQ) to get this compound regulated and out of the Cape Fear River. We have helped fund research which is identifying its sources in order to reduce or eliminate it so there will be no long-term exposure to our customers. As a result of this partnership, NCDEQ has notified Greensboro, Reidsville and Asheboro to begin monthly monitoring for 1,4-Dioxane in their wastewater treatment facility discharges. Going forward, NCDEQ staff will use the data collected to determine the need for effluent limits to be established in the discharge permits for each of these three upstream municipalities. NCDEQ will establish limits as needed to protect the surface waters for their designated uses. You can find additional information on our website: www.faypwc.com/the-factsabout-1-4-dioxane/

Conserve and Protect

PWC works hard to provide all of our customers with clean, safe, good-tasting water. We are also committed to conservation and environmentally sound practices when it comes to our water supply. The PWC Watershed Management Program helps protect watersheds (four lakes and a pond, including areas that are part of our drinking water supply) through sound land management practices, water quality monitoring, and educational outreach. What's more, we encourage our customers to conserve our precious, "nite" water supply by providing water-saving tips and incentive programs. Our Odd-Even schedule for outdoor watering with sprinklers conserves water and helps us be better prepared for drought conditions.

For more information, including conservation tips and incentives, visit our website. Again, the complete 2016 Water Quality

Report, including testing results, can be found on our website. 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).

Your Drinking Water

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. Fayetteville PWC 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.

Fayetteville PWC Water Not Affected by GenX

With recent GenX reports, we understand the concern about safe drinking water. Please know that Fayetteville PWC water is safe and meets or exceeds all current EPA standards for safe drinking water. GenX found in the Cape Fear River is below the PWC/Fayetteville service area and has not affected your drinking water. Recent tests confirm GenX is not in Fayetteville PWC drinking water. State testing results are available at the NC Dept. of Environmental Quality website.



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In 2017, PWC tested 118 parameters for a total of more than 150,000 tests. Those presented in these tables were the only parameters that were detected with non-exceeding EPA limits.

Key to Abbreviations

| | |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MCL | Maximum Contaminant Level – The highest level of contaminant that is allowed in drinking water |
| MCLG | Maximum Contaminant Level Goal – The level of a contaminant in drinking water below which there is no known or expected risk to health |
| 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. |
| AL | Action Level – The concentration of a contaminant which triggers a treatment or other requirement which a water system must follow. |
| TT | Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water. |
| pCi/L | picoCuries per liter (a measure of radioactivity) |
| mrem/yr | Millirems per year (a measure of radiation absorbed by the body) |
| mg/L | Milligrams per liter |
| SDWR | Secondary Drinking Water Regulations (State Options). State regulatory agencies make the determination about whether a limit applies to controlling parameters that primarily affect the aesthetic qualities of drinking water. |
| NTU | Nephelometric Turbidity Units, a measure of the suspended material in water. |
| NS | No Standard |
| ug/L | Micrograms per liter |
| TTHM | Total Trihalomethanes |
| THAA | Total Haloacetic Acid |
| N/A | Not Applicable – Information not applicable/not required for that particular water system or for that particular rule. |
| MFL | Million Fibers per Liter – A measure of the presence of asbestos fibers that are longer than 10 micrometers. |
| VOC | Volatile Organic Compounds |
| Level 1 Assessment | A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system. |

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TABLE I - FILTERED WATER QUALITY DATA (Regulated)

Data presented in this table are from the most recent testing performed in accordance with Federal and State regulations.

| Parameters | Unit | MCL | MCLG | MCL Violation Y/N | Your Water Level | Range of Detected Levels | Date Most Recent Testing Completed (a) | Source |
|----------------|------|--------|------|-------------------|------------------|--------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Barium | mg/L | 2 | 2 | N | <0.400 | | 1/17 | Erosion of natural deposits; discharge of drilling wastes; discharge from metal from refineries |
| Copper | mg/L | AL-1.3 | 1.3 | N | 0.061 | <0.05–0.11 | 9/17 | Corrosion of household plumbing systems; erosion of natural deposits leaching from wood preservatives |
| Fluoride | mg/L | 4 | 4 | N | 0.643 | 0.11–0.835 | 12/17 | Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum deposits |
| Lead | ug/L | AL-15 | 0 | N | 0.001(a) | 0.001–0.004 | 9/17 | Corrosion of household plumbing systems; erosion of natural deposits |
| Nitrate | mg/L | 10 | 10 | N | <1.0 | | 2/17 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Total Asbestos | MFL | 7 | 7 | N | <0.2 | N/A | 6/11 | Decay of asbestos cement water mains; erosion of natural deposits |

(a) Lead and Copper action levels are exceeded if the concentrations in more than 10% of tap water samples collected during any monitoring period are greater than the MCL Action Levels shown in the table above.

TABLE II - FILTERED WATER QUALITY DATA (Non-Regulated)

| Parameters | Unit | Your Water Detected Levels | SDWR | MCLG | Source |
|------------|----------|-------------------------------|------------|------|------------------------------------------------------------------|
| Alkalinity | mg/L | 22.8 | NS | NS | Erosion of natural deposits, water treatment processes |
| Hardness | mg/L | 31.2 | NS | NS | Presence of mineral deposits most commonly calcium and magnesium |
| Iron | mg/L | <0.20 | 0.3 | NS | Erosion of natural deposits |
| Manganese | mg/L | <0.20 | 0.05 | NS | Erosion of natural deposits |
| pH | pH units | 7.7 | 7.0 – 8.65 | NS | Measurement of acid or base neutralizing capacities of water |
| Sodium | mg/L | 16.5 | NS | NS | Erosion of natural deposits, chemical use in water treatment |
| Sulfate | mg/L | 29.0 | 250 | NS | Erosion of natural deposits, decay or organic matter |

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TABLE III – VOC CONTAMINANTS (Non-Regulated)*

| Parameters | Unit | Your Water Detected Levels | Range of Detected Level | Sample Date |
|----------------------|------|-------------------------------|----------------------------|-------------|
| Chloroform | ug/L | 11.16 | 6.00 – 22.13 | 11/17 |
| Bromodichloromethane | ug/L | 12.59 | 7.25 – 19.63 | 11/17 |
| Bromoform | ug/L | 9.67 | 1.50 – 16.38 | 11/17 |
| Chlorodibromomethane | ug/L | 15.22 | 2.75 – 27.88 | 11/17 |

** These compounds are associated with chlorine disinfection.*

TABLE IV - 1,4-DIOXANE (Unregulated)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determine the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

| Sample Dates 2016 | P.O. Hoffer WTF Point of Entry (ug/L) | Sample Dates 2017 | P.O. Hoffer WTF Point of Entry (ug/L) |
|----------------------|---------------------------------------------|----------------------|---------------------------------------------|
| 1/11/16 | 1.20 | 1/26/17 | 3.80 |
| 2/24/16 | 1.60 | 2/22/17 | 4.20 |
| 3/16/16 | 1.20 | 3/16/17 | 2.30 |
| 4/13/16 | 1.20 | 4/5/17 | 1.40 |
| 5/11/16 | 2.60 | 5/3/17 | 0.75 |
| 6/14/16 | 2.00 | 6/20/17 | 1.90 |
| 7/20/16 | 1.90 | 7/13/17 | 0.72 |
| 8/23/16 | 0.64 | 8/15/17 | 0.41 |
| 9/20/16 | 1.40 | 9/19/17 | 2.80 |
| 10/26/16 | 0.72 | 10/12/17 | 2.40 |
| 11/28/16 | 1.40 | 11/14/17 | 2.40 |
| 12/27/16 | 1.10 | 12/11/17 | 3.60 |

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Since 1,4-Dioxane cannot be removed through our traditional water treatment process, we have partnered with other communities and the North Carolina Department of Environmental Quality (NCDEQ) to get this compound regulated and

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out of the Cape Fear River. We have helped fund research which is identifying its sources in order to reduce or eliminate it so there will be no long-term exposure to our customers. As a result of this partnership, NCDEQ has notified Greensboro, Reidsville and Asheboro to begin monthly monitoring for 1,4-Dioxane in their wastewater treatment facility discharges. Going forward, NCDEQ staff will use the data collected to determine the need for effluent limits to be established in the discharge permits for each of these three upstream municipalities. NCDEQ will establish limits as needed to protect the surface waters for their designated uses.

You can find additional information on our website: www.faypwc.com/thefactsabout-1-4-dioxane/

TABLE V – TURBIDITY (a)

| Parameters | Unit | MCL | Your Water | Average | Range | MCLG Violation | Source |
|------------|------|----------------------|---------------|---------|-------------|----------------|-------------|
| Turbidity | NTU | 95% of samples <0.30 | 100% <0.3 NTU | 0.06 | 0.03 - 0.23 | N | Soil runoff |

(a) Turbidity is a measure of the cloudiness of the water. PWC monitors it because it is a good indicator of the effectiveness of PWC's filtration system.

**TABLE VI – MICROBIOLOGICAL CONTAMINANTS
PWC Surface Water Distribution**

| Parameters | MCL Violation Y/N | Your Water | MCLG | MCL | Source |
|---------------------------|-------------------|------------|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Total Coliform Bacteria | N/A | N/A | N/A | TT(a)(b) | Naturally present in the environment |
| Fecal Coliform or E. coli | N | 0 | 0 | <p>Routine and repeat samples are total coliform-positive and either is <i>E. coli</i>-positive or system fails to take repeat samples following <i>E. coli</i>-positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i></p> <p><u>Note:</u> If either an original routine sample and/or its repeat samples(s) are <i>E. coli</i> positive, a Tier 1 violation exists.</p> | Human and animal fecal waste |

(a) If a system collecting 40 or more samples per month finds greater than 5% of monthly samples are positive in one month, an assessment is required.

(b) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. In April of 2017, we had multiple coliform positive samples along a short section of 8-inch PVC pipe along Skibo Rd, indicating the need to look for potential problems in an isolated section of our distribution system. When this occurred, we were required by NCDEQ to conduct a Level 1 Assessment, under the Revised Total Coliform Rule, in order to identify and correct any problems. Results of the Level 1 Assessment were there appeared to be a bio-film buildup on the interior of this section of 8-inch pipe. Therefore, our corrective action was to immediately isolate that section of pipe, and to replace it. We have had no coliform-positive results in this area, since the 8-inch pipe was replaced. During year 2017, the Public Works Commission was only required to complete this one Level 1 Assessment. As stated above, we completed the assessment and implemented the corrective actions identified in the Assessment.

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TABLE VII – LEAD AND COPPER CONTAMINANTS

| Contaminant (units) | Sample Date** | Your Water | # of sites found above the AL | MCLG | MCL | Likely Source of Contamination |
|------------------------------------------------|---------------|------------|-------------------------------|------|---------|--------------------------------------------------------------------------------------------------------|
| Copper (mg/L) (90 th percentile) | 6/17 | 0.061 | 0 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead (ug/L) (90 th percentile) | 6/17 | 0.001 | 0 | 0 | AL=.015 | Corrosion of household plumbing systems, erosion of natural deposits |

**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 Public Works Commission 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 (1-800-426-4791), or at <http://www.epa.gov/safewater/lead>.*

****Contaminants tested every three years.**

TABLE VIII – DISINFECTION BY-PRODUCTS PRECURSORS CONTAMINANTS

| Contaminant (units) | Sample Date | MCL/TT Violation Y/N | Your Water | Range Low-High | MCLG | MCL | Compliance Method | Likely Source of Contamination |
|-------------------------------------------|-------------|----------------------|------------|----------------|------|-----|-------------------------------------|--------------------------------------|
| Total Organic Carbon (ppm) (TOC) – RAW | Monthly | N | N/A | 3.0-6.80 | N/A | TT | N/A | Naturally present in the environment |
| TOC Removal Ratio (TOC) – TREATED | Monthly | N | 1.61 | 1.0-2.30 | N/A | TT | Alt 4 (SUVA \leq 2.0 L/mg-min) | Naturally present in the environment |

Cryptosporidium

PWC monitored for Cryptosporidium in the Cape Fear River and Glenville Lake during 2017. The highest concentration was 0.09 oocysts/liter in February 2017, from the Cape Fear River. Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. 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.

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TABLE IX – 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 Low-High | MCLG | MCL | Likely Source of Contamination |
|------------------------|--------------|-------------------|--------------------------------------|----------------|------|-----|------------------------------------------|
| <i>TTHM (ppb)</i> | | | 50 | | N/A | 80 | Byproduct of drinking water disinfection |
| Location B01 | 2017 | N | (Location Code: B07 – Golfview Rd.) | 24-74 | N/A | 80 | |
| Location B02 | 2017 | N | | 25-72 | N/A | 80 | |
| Location B03 | 2017 | N | | 17-66 | N/A | 80 | |
| Location B04 | 2017 | N | | 26-72 | N/A | 80 | |
| Location B05 | 2017 | N | | 29-67 | N/A | 80 | |
| Location B06 | 2017 | N | | 25-53 | N/A | 80 | |
| Location B07 | 2017 | N | | 28-70 | N/A | 80 | |
| Location B08 | 2017 | N | | 22-67 | N/A | 80 | |
| <i>HAA5 (ppb)</i> | | | 30 | | N/A | 60 | Byproduct of drinking water disinfection |
| Location B01 | 2017 | N | (Location Code: B06 - Grip Dr.) | 14-26 | N/A | 60 | |
| Location B02 | 2017 | N | | 13-31 | N/A | 60 | |
| Location B03 | 2017 | N | | 15-31 | N/A | 60 | |
| Location B04 | 2017 | N | (Location Code: B05 - Blackwell St.) | 15-29 | N/A | 60 | |
| Location B05 | 2017 | N | | 13-32 | N/A | 60 | |
| Location B06 | 2017 | N | | 13-34 | N/A | 60 | |
| Location B07 | 2017 | N | | 15-28 | N/A | 60 | |
| Location B08 | 2017 | N | | 15-28 | N/A | 60 | |

TABLE X – DISINFECTANT RESIDUALS SUMMARY

| | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Range Low-High | MRDLG | MRDL | Likely Source of Contamination |
|-------------------|--------------|--------------------|--------------------------|----------------|-------|------|-----------------------------------------|
| Chlorine (ppm)* | 2017 | N | 1.59 | 0.40 – 2.30 | 4 | 4 | Water additive used to control microbes |
| Chloramines (ppm) | 2017 | N | 2.77 | 1.00 - 3.70 | 4 | 4 | Water additive used to control microbes |

**Chlorine disinfection is used only during the month of March each year.*

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TABLE XI– RADIOLOGICAL CONTAMINANTS

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range Low - High | MCLG | MCL | Likely Source of Contamination |
|---------------------|-------------|-------------------|------------|------------------|------|------|----------------------------------------|
| Gross Alpha (pCi/L) | 11-2016 | N | 3.40 | N/A | 0 | 15 | Erosion of natural deposits |
| Gross Beta (pCi/L) | 11-2016 | N | 4.60 | N/A | 0 | 50* | Decay of natural and man-made deposits |
| Radium 226 (pCi/L) | 11-2016 | N | <1.0 | N/A | 0 | 3 | Erosion of natural deposits |
| Radium 228 (pCi/L) | 11-2016 | N | <1.0 | N/A | 0 | 2 | Erosion of natural deposits |
| Uranium 226 (pCi/L) | 11-2016 | N | <.2.0 | N/A | 0 | 20.1 | Erosion of natural deposits |

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

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (NCDEQ), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for The Public Works Commission 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 |
|-----------------|-----------------------|------------------|
| Cape Fear River | Higher | August 2017 |
| Glenville Lake | Moderate | August 2017 |
| | | |

The complete SWAP Assessment report for The Public Works Commission 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. When corresponding with NCDEQ regarding the Public Works Commission, please indicate our system Public Water Supply ID number: 03-26-010, and provide your name, mailing address and phone

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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.