

**Union County
Government**
EST. 1842



2020 drinking water **QUALITY** report

Union County Water System
Water System Number: 01-90-413
For Jan 1, 2019 to Dec 31, 2019

Union County
Department of Public Works
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Union County Public Works is the water and wastewater utility service provider to the unincorporated areas in Union County and all of the municipalities, except Monroe, Marshville and Wingate.

Public Works operates a countywide water and wastewater system solely funded by user fees and is not funded by tax dollars.

Este informe contiene información muy importante sobre su agua potable. Si desea asistencia con la traducción, comuníquese con el Condado de Union en ucommunications@unioncountync.gov.

Dear Union County Public Works Customer,

We are pleased to deliver the 2019 Annual Drinking Water Quality Report. This report provides a snapshot of Union County Public Works' 2019 water quality including our sources of water, what our water contains and how our water compares to standards set by State and Federal regulatory agencies.

Our team's mission is to provide the customers of Union County Public Works with safe and reliable drinking water. We are continually working to improve the water treatment process and protect our water resources so that we can provide you with the highest quality drinking water.

If you have any questions about this report or your water, contact Junior Honeycutt at (704) 289-7044. If you want to learn more, please visit our website at www.unioncountync.gov.

Sincerely,
Junior Honeycutt
Water Superintendent
Union County Public Works
500 North Main Street
Monroe, NC 28112

2019 Year in Review

For 365 days a year, rain, snow, sleet or hail, approximately 150 Union County water and wastewater employees strive to deliver our customers clean, safe drinking water.

Accomplishments include:

- Completed construction of 1 billion gallon reservoir to feed Catawba River Water Treatment Plant facility
- Continued galvanized water line replacement
- Added 18 miles of water main
- Added 1,110 new water customers



Facts About 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. Union County Public Work 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, that 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
- **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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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 Union County Public Works comes from two surface sources, the Catawba River located in Lancaster County, S.C. and the Pee Dee River located in eastern Anson County.

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 Union County 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:

| Source Name | Susceptibility Rating | SWAP Report Date |
|---------------|-----------------------|---|
| Pee Dee River | Moderate | September 2017 |
| Catawba River | Moderate | Originally April 2003 (Reviewed Annually) |

The complete SWAP Assessment report for Union County 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.

The complete SWAP Assessment for the Catawba River Water Treatment Plant can be obtained by contacting the Bureau of Water in Columbia, South Carolina at (803)898-4300 or on the web at www.scdhec.gov.

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 in the assessment area.

New Reservoir Completed at CRWTP

Construction for a new reservoir at the Catawba River Water Treatment Plant was completed in 2019.

The new reservoir provides a constant supply of raw water to the treatment plant in times of low flow, drought, or emergency situations. It holds one billion (1,000,000,000) gallons of raw water and incorporates a new 66 million gallon per day raw water pump station to feed the treatment facility.



How is my water treated?



How does drinking water get to your home? It's a process that you probably don't think about very often, and one that most of us take for granted. But a lot takes place for you to have drinking water that's fresh, clean and crystal clear. Let's take a look at what Union County does to bring you top-quality water.



The Source

It all begins at our water sources, the Catawba and Pee Dee Rivers. This water may look clean, but it's far from it. It contains bacteria, micro pollutants, viruses and other harmful particles. It's going to go through quite a journey before it's fit for you to drink. The first step is bringing water to the treatment plant. To get it there, pumps draw water from the rivers into our reservoirs and send it through pipes to our treatment plants.



Coagulation

Next, chemical coagulants are added. Coagulants act like magnets and cause impurities in the water to stick together. All of these impurities combine to form larger, heavier formations, which are much easier to remove from the water.



Sedimentation

The heavy, unwanted particles settle to the bottom of the tank, while water passes onto the next stage.



Filtration

The water flows through filters of anthracite and sand to remove any remaining unwanted particles.



Disinfection

Chloramines are added for microbial disinfection to ensure that the water is safe to drink when it reaches you. Water is now ready to be distributed.

How do we know your water is safe? Union County's certified operators and water quality specialists test and monitor water throughout the treatment process, all the way from source to your faucet. Hundreds of tests are conducted monthly on your drinking water to make sure you're only receiving safe, great tasting drinking water.



Yadkin Regional Water Supply Project



Where are we now?

From 2004 to 2011,

Union County conducted detailed studies to understand future water demand and the potential impacts and feasibility of a water supply project.

From those studies, the project team developed 12 alternatives for the County's water future.

Beginning in 2013,

the project underwent a comprehensive environmental study, and in 2015, the Final Environmental Impact Statement was published.

The project team identified the Lake Tillery Interbasin Transfer (IBT) Alternative as the best option.

From 2015 to 2017,

Union County worked to secure an IBT Certificate from the State of North Carolina.

The certificate allows the County to transfer water from the Yadkin River Subbasin, which is outside of its boundaries, into the Rocky River Subbasin.

From 2016 to 2018,

the project team held a series of public meetings to share information about the project with citizens.

During this time, the team also determined an initial pipeline route and created preliminary designs for the water intake, pump station and water treatment plant.

Currently,

the Federal Energy Regulatory Commission (FERC) is completing its final review of the project's permit to withdraw water from Lake Tillery. Once FERC approves the permit and Duke Energy issues it, construction can begin.

What is it?

The Yadkin Regional Water Supply Project (YRWSP) is a collaborative effort between Union County and the Town of Norwood, located in Stanly County, to provide a new water supply source to Union County and new infrastructure to the Town of Norwood.

It includes a new water intake and pump station on Lake Tillery in Norwood, approximately 28 miles of pipeline from the intake to a new water treatment plant in Union County, a 12 million gallon per day water treatment plant, and approximately 11 miles of pipeline connecting the new water treatment plant to the existing Union County water distribution system to serve current and future residents in the Yadkin River Basin.

Why do we need it?

The project addresses the County's need for a long-term, sustainable supply of water to provide long-term water security and support economic vitality.

Union County is growing, and it does not have a natural source of water. As a result, it has to transport water from lakes and rivers in surrounding counties to serve its residents.

Union County currently receives about 80 percent of its water from the Catawba River Water Supply Project (CRWSP), a joint venture between Union County and Lancaster County Water and Sewer District in South Carolina. The CRWSP includes a water treatment plant located on the Catawba River.

The remaining 20 percent of Union County's water supply comes from a water purchase agreement with Anson County, NC. Anson County draws its water from Blewett Falls Lake.

www.YadkinWater.com



Once completed, the YRWSP water treatment plant will be capable of providing 12 million gallons of clean water per day to customers in Union County's Yadkin River Basin service area.

Water Quality Data Tables of Detected Contaminants



We routinely monitor for over 150 contaminants in your drinking water in accordance with 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, 2019.** 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

Included in this report are tables containing levels of contaminants that have been detected in our water. In all cases, although they are present, they are below prescribed levels by the EPA, and pose no known health risk at these levels. We have listed a few definitions to help you understand the information in the tables.

AL (Action Level) - The concentration of a contaminant that triggers treatment or other required actions by the water supply.

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

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.

Maximum Residual Disinfectant 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 Disinfectant 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.

Non-Detects (ND) - Laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used.

Not-Applicable (N/A) - Not applicable.

Nephelometric Turbidity Unit (NTU) - measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb - Parts per billion or micrograms per liter (ug/L).

ppm - Parts per million or milligrams per liter (mg/L).

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

Turbidity - 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.



Putting it in Perspective

Some compounds found in water are measured in very small units – parts per billion (ppb) or parts per million (ppm). To help you visualize how very small these units are, here are a few illustrations. One part per billion equates to:

- One drop in a railroad tanker car
- One second in 32 years
- One penny in 10 million dollars
- One ounce in 7,350,000 gallons of water

Tables of Detected Contaminants for Union County

Microbiological Contaminants in the Distribution System - For systems that collect **40 or more** samples per month

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

* 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.

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) | 2019 | 0.19 | 0 | 1.3 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 th percentile) | 2019 | 0 | 3 | 0 | 15 | Corrosion of household plumbing systems; erosion of natural deposits |

Disinfectant Residuals Summary

| Contaminant (units) | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Range Low-High | MRDLG | MRDL | Likely Source of Contamination |
|---------------------|--------------|--------------------|--------------------------|----------------|-------|------|---|
| Chlorine (ppm) | 2019 | N | 1.24 | .57 - 1.85 | 4 | 4.0 | Water additive used to control microbes |
| Chloramines (ppm) | 2019 | N | 2.34 | .4 - 3.8 | 4 | 4.0 | Water additive used to control microbes |



= within acceptable limits



= exceeds acceptable limits

Tables of Detected Contaminants for Union County

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 |
|------------------------|--------------|-------------------|---------------------------|----------------|------|-----|--|
| TTHM (ppb) | | | | | N/A | 80 | Byproduct of drinking water disinfection |
| B01 | 2019 | N | 54 | 19-65 | | | |
| B02 | 2019 | N | 23 | 14-46 | | | |
| B03 | 2019 | N | 52 | 18-56 | | | |
| B04 | 2019 | N | 52 | 19-59 | | | |
| B05 | 2019 | N | 19 | 15-22 | | | |
| B06 | 2019 | N | 17 | 14-20 | | | |
| B07 | 2019 | N | 50 | 19-52 | | | |
| B08 | 2019 | N | 16 | 12-19 | | | |
| HAA5 (ppb) | | | | | N/A | 60 | Byproduct of drinking water disinfection |
| B01 | 2019 | N | 37 | 15-42 | | | |
| B02 | 2019 | N | 12 | 0-37 | | | |
| B03 | 2019 | N | 55 | 15-38 | | | |
| B04 | 2019 | N | 52 | 14-50 | | | |
| B05 | 2019 | N | 20 | 7-26 | | | |
| B06 | 2019 | N | 19 | 9-25 | | | |
| B07 | 2019 | N | 47 | 30-48 | | | |
| B08 | 2019 | N | 18 | 6-26 | | | |



= within acceptable limits



= exceeds acceptable limits

Tables of Detected Contaminants for Catawba River Water Treatment Plant

Microbiological Contaminants

| Contaminant (units) | Violation Y/N | Level Detected | MCLG | MCL | Likely Source of Contamination |
|---|---------------|----------------|------------|--|--------------------------------------|
| Total Coliform Bacteria (present or absent) | N | 0 | 0 Presence | Presence of Coliform in 5% monthly samples | Naturally present in the environment |

Turbidity

| Contaminant (units) | Treatment Technique (TT) Violation Y/N | Your Water | MCLG | Treatment Technique (TT) Violation if: | Likely Source of Contamination |
|--|--|------------|-------|--|--------------------------------|
| Turbidity (NTU) - Highest single turbidity measurement | N | 0.5 NTU | <0.30 | Turbidity > 1 NTU | Soil runoff |

* 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.

Disinfectant Residuals Summary

| | MRDL Violation Y/N | Your Water (highest RAA) | Range Low -High | MRDLG | MRDL | Likely Source of Contamination |
|------------------------|--------------------|--------------------------|-----------------|-------|------|---|
| Chlorine (ppm) | N | 1.87 | 0.88-1.87 | 4.0 | 4.0 | Water additive used to control microbes |
| Chlorite (ppm) | N | 0.52 | 0.32-0.52 | 0.8 | 1.0 | Water additive used to control microbes |
| Chlorine Dioxide (ppm) | N | BDL | BDL-BDL | 0.8 | 0.8 | Water additive used to control microbes |

* BDL Below Detection Limit



= within acceptable limits



= exceeds acceptable limits

Tables of Detected Contaminants for Catawba River Water Treatment Plant

Disinfectants/Disinfectant By-products

| Contaminant (units) | Violation Yes/No | Your Water | MCLG | MCL | Likely Source of Contamination |
|-----------------------------------|------------------|------------|-----------------------|-----|--|
| Haloacetic Acids [HAA5s] (ppb) | N | 11 | No goal set for total | 60 | By-products of drinking water disinfectant |
| TTHMs Total Trihalomethanes (ppb) | N | 21 | No goal set for total | 80 | By-products of drinking water disinfectant |

Total Organic Carbon (TOC)

| Contaminant (units) | TT Violation Y/N | **RAA | Range of levels detected Low - High | MCLG | MCL | Sample Frequency | Likely Source of Contamination |
|--------------------------------------|------------------|-------|--|------|-----|------------------|--------------------------------------|
| Total Organic Carbon (removal ratio) | N | 1.23 | 1.3 2.1 | *TT | TT | Monthly | Naturally present in the environment |

*TT is a treatment technique that is a required process intended to reduce the level of contaminant in drinking water.

** Running Annual average. RAA must be greater than 1.0 to meet compliance.

Inorganic Contaminants

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range Low -High | MCLG | MCL | Likely Source of Contamination |
|-----------------------------|-------------|-------------------|------------|-----------------|------|------|---|
| Fluoride (ppm) | 2019 | N | 0.59 | 0.59-0.59 | 4.0 | 4.0 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (as Nitrogen) (ppm) | 2019 | N | 0.79 | 0.79-0.79 | 10.0 | 10.0 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

= within acceptable limits = exceeds acceptable limits

Tables of Detected Contaminants for Catawba River Water Treatment Plant

Lead and Copper Contaminants

| Contaminant (units) | Sample Date | Range of Levels Detected | Number of sites found above the AL | AL | Likely Source of Contamination |
|---------------------|-------------|--------------------------|------------------------------------|-----|--|
| Copper (ppm) | 2018 | 0.113 0.581 | 0 | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) | 2018 | 0.0 4.0 | 0 | 15 | Corrosion of household plumbing systems; erosion of natural deposits |

Unregulated Organic Contaminants

| Contaminant | Treatment Technique (TT) Violation Y/N | Range of Levels Detected | MCLG | MCL | Likely Source of Contamination |
|-------------------|--|--------------------------|------|-----|---|
| Metolachlor (ppm) | N | 0.00012 0.00012 | N/A | N/A | Herbicides/Pesticides for pre-plant weed control for farm crops |

General Interest Table

| Contaminant | Highest Level Recommended | Range of Levels Detected | Average Level |
|--|---------------------------|--------------------------|---------------|
| pH is a measurement of the degree in which water may be acidic or basic. Measured in standard units, on a scale of 0 (most acidic) to 14 (most basic) with 7 being neutral. | 6.58-8.5s.u. | 6.91 7.24s.u. | 7.09s.u. |
| ALKALINITY is an unregulated constituent measure(ppm) as calcium carbonate (CaCO ₃), and refers to a water's buffering capacity the ability to keep the pH stable as acid. | No Standard | 11 26ppm | 21.17ppm |
| HARDNESS denotes high mineral content, mainly calcium and magnesium (ppm) Drinking water is considered soft if less than 70 ppm or 4 grains per gallon. | No Standard | 14 27ppm | 25.5ppm |
| SODIUM is a necessary nutrient in the human body, and is found naturally in eroded natural deposits and leaching. Measured in ppm. Note: Tap water may contain sodium over 20 ppm recommended for sodium-restricted diets | No Standard | 14 14ppm | 14ppm |
| WATER TEMPERATURE in the distribution system measured in degrees Celsius. | No Standard | 9.9 29.6C | 20.52°C |
| Total Dissolved Solids measured as the dissolved minerals in the water. Measured thru conductivity in ppm | No Standard | 102.1 156ppm | 140.5ppm |



= within acceptable limits



= exceeds acceptable limits

Tables of Detected Contaminants for Anson County Treatment Plant

Turbidity*

| Contaminant (units) | Treatment Technique (TT) Violation Y/N | Your Water | MCLG | Treatment Technique (TT) Violation if: | Likely Source of Contamination |
|---|--|------------|------|--|--------------------------------|
| Turbidity (NTU) - Highest single turbidity measurement | N | .50 NTU | N/A | Turbidity > 1 NTU | |
| Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits | N | 99% | N/A | Less than 95% of monthly turbidity measurements are \leq 0.3 NTU | Soil runoff |

* 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) | Sample Date | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination |
|---------------------|-------------|-------------------|------------|----------------|------|-----|---|
| Fluoride (ppm) | 2019 | N | .759 | .08- 1.26 | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |

Nitrate/Nitrite Contaminants

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination |
|-----------------------------|-------------|-------------------|------------|----------------|------|-----|---|
| Nitrate (as Nitrogen) (ppm) | 2019 | N | .26 | N/A | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.



= within acceptable limits



= exceeds acceptable limits

Tables of Detected Contaminants for Anson County Treatment Plant

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) | 2018 | .086 | 0/30 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 th percentile) | 2018 | .0012 | 0/30 | 0 | AL=15 | Corrosion of household plumbing systems; erosion of natural deposits |

Total Organic Carbon (TOC)

| Contaminant (units) | TT Violation Y/N | Your Water (RAA Removal Ratio) | Range Monthly Removal Ratio Low - High | MCLG | TT | Likely Source of Contamination | Compliance Method (Step 1 or ACC#__) |
|--|------------------|--------------------------------|--|------|----|--------------------------------------|--------------------------------------|
| Total Organic Carbon (removal ratio) (TOC)-TREATED | N | 1.625 | 1.8-2.5 | N/A | TT | Naturally present in the environment | Step 1 |

Disinfectant Residuals Summary

| | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Range Low High | MRDLG | MRDL | Likely Source of Contamination |
|-------------------|--------------|--------------------|--------------------------|----------------|-------|------|---|
| Chlorine (ppm) | 2019 | N | 1.3 | 0.7-1.9 | 4 | 4.0 | Water additive used to control microbes |
| Chloramines (ppm) | 2019 | N | 2.47 | 0.86-4.2 | 4 | 4.0 | Water additive used to control microbes |

Stage 2 Disinfection Byproduct Compliance -

| Disinfection Byproduct | Year Sampled | MCL Violation Y/N | Your Water (highest LRAA) | Range Low High | MCLG | MCL | Likely Source of Contamination |
|------------------------|--------------|-------------------|---------------------------|----------------|------|-----|--|
| TTHM (ppb) | 2019 | N | 51.25 | 32 - 65 | N/A | 80 | Byproduct of drinking water disinfection |
| HAA5 (ppb) | 2019 | N | 36.75 | 22 - 53 | N/A | 60 | Byproduct of drinking water disinfection |

Based upon Locational Running Annual Average (LRAA)

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.



= within acceptable limits



= exceeds acceptable limits

Tables of Detected Contaminants for Anson County Treatment Plant

The PWS Section requires monitoring for other misc. contaminants, some for which the EPA has set national secondary drinking water standards (SMCLs) because they may cause cosmetic effects or aesthetic effects (such as taste, odor, and/or color) in drinking water. The contaminants with SMCLs normally do not have any health effects and normally do not affect the safety of your water.

Other Miscellaneous Water Characteristics Contaminants

| Contaminant (units) | Sample Date | Your Water | Range Low-High | SMCL |
|---------------------|-------------|------------|----------------|------------|
| Iron (ppm) | 2019 | .025 | 0-0.100 | 300 |
| Manganese (ppm) | 2019 | 0.010 | 0 - 0.0280 | 0.05 mg/L |
| Sodium (ppm) | 2019 | 17.6 | 17.6 – 17.6 | N/A |
| Sulfate (ppm) | 2019 | 20 | 20 | 250 mg/L |
| pH | 2019 | 7.2 | 6.0 – 8.9 | 6.5 to 8.5 |

NOTICE TO THE PUBLIC

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

ANSON COUNTY WATER SYSTEM HAS NOT MET MONITORING REQUIREMENTS

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the compliance period specified in the table below, we ['did not monitor or test' or 'did not complete all monitoring or testing'] for the contaminants listed and therefore cannot be sure of the quality of your drinking water during that time.

| CONTAMINANT GROUP** | FACILITY ID NO./SAMPLE POINT ID | COMPLIANCE PERIOD BEGIN DATE | NUMBER OF SAMPLES/SAMPLING FREQUENCY | WHEN SAMPLES WERE OR WILL BE TAKEN (Water System to Complete) |
|---|---------------------------------|------------------------------|--------------------------------------|--|
| ENTRY POINT RESIDUAL DISINFECTANT CONCENTRATION | P01/EP1 | MAY AND JUNE 2019 | CONTINUOUS MONITORING | |

** See back of this notice for further information on contaminants.

What should I do? There is nothing you need to do at this time.

What is being done? [Describe corrective action.]

The monitoring Meter was repaired.

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 <u>Amy G. Dawkins</u> | System Name ANSON COUNTY WATER SYSTEM | System Address (Street) 567 Filtration Plant Road |
| Phone Number 704-848-4849 | System Number NC0304010 | System Address (City/State/Zip) Lilesville NC 28091 |

Violation Awareness Date: July 25, 2019

Placed on a web page

Date Notice Distributed: 5-20-2020 Method of Distribution: that page was posted in a local paper
Delivered to All ~~town~~ County residence

Public Notification Certification:

The public water system named above hereby affirms that public notification has been provided to its consumers in accordance with all delivery, content, format, and deadline requirements specified in 15A NCAC 18C .1523.

Owner/Operator: Amy G. Dawkins
(Signature)

Amy G. Dawkins
(Print Name)

5-20-20
(Date)