2020 Annual Drinking Water Quality Report West Wilkes Water Association

Water System Number: NC 01-97-020

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

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 Maria or Nicole at 336-838-5614 or 336-838-7574. 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 on the third Tuesday of each month at the West Wilkes Water Association Office.

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. West Wilkes 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

We are a purchase water system. Our water is purchased from the Wilkesboro Water Treatment Plant which is drawn from the Yadkin River. We also purchase water from the North Wilkesboro Water Treatment Plant which is drawn from the Reddies River.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), 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 Wilkesboro and North Wilkesboro 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 | |
|--------------|-----------------------|------------------|--|
| Yadkin River | Moderate | September 2020 | |
| | | | |
| Source Name | Susceptibility Rating | SWAP Report Date | |

Moderate

The complete SWAP Assessment report for Wilkesboro and North Wilkesboro may be viewed on the Web at: https://www.ncwater.org/?page=600 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.

09/09/2020

It is important to understand that a susceptibility rating of "higher" <u>does not</u> imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

Reddies River

Protection of drinking water is everyone's responsibility. 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, volunteer in your community to participate in group efforts to protect your source, etc.).

Violations that Your Water System Received for the Report Year: NONE

Your water met all the drinking water standards.

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 <u>detected</u> in the last round of sampling for each particular contaminant group. The presence of contaminants does <u>not</u> 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, 2020.** 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.

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

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

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

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

REVISED TOTAL COLIFORM RULE:

Microbiological Contaminants in the Distribution System

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

Asbestos Contaminant

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination |
|----------------------|----------------|-------------------------|---------------|-------------------|------|-----|---|
| Total Asbestos (MFL) | 12/29/10 | N | ND | N/A | 7 | 7 | Decay of asbestos cement water mains; erosion of natural deposits |

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) | 8/01- 8/08/19 | 0.082 ppm | 0 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb) (90 th percentile) | 8/01 - 8/08/19 | ND | 0 | 0 | AL=15 | Corrosion of household plumbing systems; erosion of natural deposits |

Disinfectant Residuals Summary

| - | isinteetant Residuais Summai y | | | | | | | | |
|---|--------------------------------|-----------------|--------------------------|--------------------------------|-------------|------------|-------|------|---|
| | | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Rang Low | ge High | MRDLG | MRDL | Likely Source of Contamination |
| | Chlorine (ppm) | 2020 | N | 1.57 ppm | 0.71 - 2. | .08 ppm | 4 | 4.0 | Water additive used to control microbes |

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 |
| Location | | | | | | | |
| B01 | 2020 | N | 45 ppb | 26 - 54 ppb | N/A | 80 | Byproduct of drinking water disinfection |
| B02 | 2020 | N | 50 ppb | 30 - 52 ppb | N/A | 80 | Byproduct of drinking water disinfection |
| В03 | 2020 | N | 50 ppb | 34 - 54 ppb | N/A | 80 | Byproduct of drinking water disinfection |
| B04 | 2020 | N | 23 ppb | 15 - 29 ppb | N/A | 80 | Byproduct of drinking water disinfection |
| Location | | | | | | | |
| B01 | 2020 | N | 22 ppb | 16 - 26 ppb | N/A | 60 | Byproduct of drinking water disinfection |
| B02 | 2020 | N | 24 ppb | 17 - 29 ppb | N/A | 60 | Byproduct of drinking water disinfection |
| В03 | 2020 | N | 23 ppb | 16 - 25 ppb | N/A | 60 | Byproduct of drinking water disinfection |
| B04 | 2020 | N | 27 ppb | 15 - 27 ppb | N/A | 60 | 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.

Unregulated Contaminants / UCMR 3 / West Wilkes Water

Entry Point 001

| Contaminant (units) | Sample Date | Your Water | Range Low High |
|---------------------|-------------|---------------|--------------------------|
| Chromium | 2016 | 0.10 ppb | 0 - 0.21 ppb |
| Strontium | 2016 | 31.1 ppb | 25.2 - 34 ppb |
| Vanadium | 2016 | 0.43 ppb | 0.28 - 0.51 ppb |
| Hexavalent Chromium | 2016 | 0.038 | 0.089 - 0.061 ppb |
| Dioxane | 2016 | 0.007 ppb | 0.0 - 0.026 ppb |

Entry Point 002

| Contaminant (units) | Sample Date | Your Water | Range Low High |
|---------------------|-------------|---------------|-------------------|
| Chromium | 2016 | 0.06 ppb | 0.0 - 0.16 ppb |
| Strontium | 2016 | 28.5 ppb | 22.2 - 32.9 ppb |
| Vanadium | 2016 | 0.09 ppb | 0.076 - 0.12 ppb |
| Hexavalent Chromium | 2016 | 0.013 ppb | 0.0 - 0.050 ppb |

Maximum Residence Time 001

| Contaminant (units) | Sample Date | Your Water | Range Low High |
|---------------------|-------------|---------------|-------------------|
| Chromium | 2016 | 0.078 ppb | 0.0 - 0.17 ppb |
| Strontium | 2016 | 27.75 ppb | 0.0 - 39.1 ppb |
| Vanadium | 2016 | 0.38 ppb | 0.0 - 0.63 ppb |
| Hexavalent Chromium | 2016 | 0.063 ppb | 0.0 = 0.15 ppb |

Maximum Residence Time 002

| Contaminant (units) | Sample Date | Your Water | Range Low High |
|---------------------|-------------|---------------|-------------------|
| Chromium | 2016 | 0.05 ppb | 0.0 - 0.20 ppb |
| Strontium | 2016 | 22.55 ppb | 0.0 - 31.4 ppb |
| Vanadium | 2016 | 0.079 ppb | 0.0 - 0.12 ppb |
| Hexavalent Chromium | 2016 | 0.030 ppb | 0.0 - 0.055 ppb |

Unregulated Contaminants / UCMR 4 / West Wilkes Water

Entry Point 001

| Contaminant (units) | Sample Date | Your Water | Range Low High |
|---------------------|-------------|---------------|-------------------|
| Micocystins (ug/L) | 2018 | ND | N/A |

Entry Point 002

| Contaminant (units) | Sample Date | Your Water | Range Low High |
|---------------------|-------------|---------------|-------------------|
| Micocystins (ug/L) | 2018 | ND | N/A |

Entry Point 001

| Contaminant (units) | Contaminant (units) Sample Date | | Range Low High | |
|---------------------|---------------------------------|-----------|-------------------|--|
| Manganese (ppb) | 2019 | < 1.0 ppb | ND - < 1.0 ppb | |

Entry Point 002

| Contaminant (units) | Contaminant (units) Sample Date | | Range Low High | |
|---------------------|---------------------------------|----------|-------------------|--|
| Manganese (ppb) | 2019 | <1.0 ppb | ND - <1.0 ppb | |

Entry Point 002

| Contaminant (units) | Sample Date | Your Water | Range Low High | |
|---------------------|-------------|---------------|-------------------|--|
| Manganese (ppb) | 2020 | 0.422 ppb | ND - 0.422 ppb | |

Wilkesboro Water

When You Turn on Your Tap, Consider the Source

Surface water from the Yadkin River is treated by our system. Our intake is located at 1309 North Collegiate Drive.

Source Water Assessment Program (SWAP) Results

The North Carolina Department of Environmental Quality (DEQ), 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 for the Town of Wilkesboro's source 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 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 |
|--------------|-----------------------|------------------|
| Yadkin River | Moderate | September 2020 |

The complete SWAP Assessment report for the Town of Wilkesboro may be viewed on the Web at: https://www.ncwater.org/?page=600 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" <u>does not</u> imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

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 | 0.10 NTU | N/A | Turbidity > 1 NTU | |
|---|---|----------|-----|--|-------------|
| Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits | N | 100% | N/A | Less than 95% of monthly turbidity measurements are ≤ 0.15 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 0.15 NTU.

Inorganic Contaminants

| Contaminant (units) | Sample | MCL Violation | Your | Ra | nge | MCLG | MCL | Likely Source of Contamination | |
|---------------------|-------------------------------|------------------|-------|------|------|-------|------|---|--|
| Contaminant (units) | Date | Y/N | Water | Low | High | WICLG | WICL | Likely Source of Contamination | |
| Fluoride (ppm) | 01/01/20 - 12/31/20 | N | 0.80 | 0.63 | 0.95 | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories | |

Lead and Copper Contaminants

| caa 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) | 06/01/20 - 09/30/20 | < 0.050 | 0 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits | | | |
| Lead (ppb) (90 th percentile) | 06/01/20 - 09/30/20 | < 3 | 0 | 0 | AL=15 | Corrosion of household plumbing systems; erosion of natural deposits | | | |

. Radiological Contaminants

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination | | |
|-------------------------|----------------|-------------------------|---------------|-------------------|------|------|--------------------------------|--|--|
| Alpha emitters (pCi/L) | 07/12/12 | N | ND | ND ND | 0 | 15 | Erosion of natural deposits | | |
| Combined radium (pCi/L) | 05/07/15 | N | < 1.0 | < 1.0 < 1.0 | 0 | 5 | Erosion of natural deposits | | |
| Uranium (pCi/L) | 07/12/12 | N | ND | ND ND | 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.

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 | 1.1 | 1.0 1.2 | N/A | TT | Naturally present in the environment | ACC 2 |

^{*}Wilkesboro Utilizes Alternative Compliance method 2 in place of Step 1 Removal Ratios

Disinfectant Residuals Summary

| | Year Sampled | MRDL Violation Y/N | Your Water (highest RAA) | Ra Low | nge High | MRDLG | MRDL | Likely Source of Contamination |
|----------------|-----------------|--------------------------|--------------------------------|-----------|-------------|-------|------|---|
| Chlorine (ppm) | 2020 | N | 1.6 | 0.5 | 2.0 | 4 | 4.0 | Water additive used to control microbes |

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

| Disinfection Byproduct | Year Sampled | MCL Violation Y/N | Your Water (highest LRAA) | Ra Low | nge High | MCLG | MCL | Likely Source of Contamination |
|---------------------------|-----------------|-------------------------|---------------------------------|-----------|-------------|------|-----|--|
| TTHM (ppb) | | | | | | N/A | 80 | Byproduct of drinking water disinfection |

| BO1 | 2020 | N | 53 | 31 | 72 | | | |
|------------|------|---|----|----|----|-----|----|--|
| BO2 | 2020 | N | 44 | 24 | 66 | | | |
| HAA5 (ppb) | | | | | | N/A | 60 | Byproduct of drinking water disinfection |
| B01 | 2020 | N | 24 | 19 | 29 | | | |
| BO2 | 2020 | N | 24 | 17 | 29 | | | |

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.

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 | Rai Low | nge High | SMCL |
|---------------------|-------------------|---------------|------------|-------------|------------|
| Sodium (ppm) | 11/19/20 | 14.5 | 14.5 | 14.5 | N/A |
| Sulfate (ppm) | 11/19/20 | 18.4 | 18.4 | 18.4 | 250 mg/L |
| рН | 01/01/20-12/31/20 | 8.5 | 8.2 | 8.9 | 6.5 to 8.5 |

Cryptosporidium

Our System monitored for Cryptosporidium from October 2016 through September 2018 and detected levels of 0.09 (oo)cysts/L in 5 of 24 samples collected from the Yadkin river.

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. 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.

North Wilkesboro Water

When You Turn on Your Tap, Consider the Source

The water that is used by this system is drawn from the Reddies River.

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 Town of North Wilkesboro 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 |
|---------------|-----------------------|------------------|
| Reddies River | Moderate | 09/09/2020 |

The complete SWAP Assessment report for Town of North Wilkesboro, 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" <u>does not</u> imply poor water quality, only the system's potential to become contaminated by PCSs in the assessment area.

Turbidity*

| <u>i ui biuity</u> | | | | | |
|---|--|------------------|------|--|-----------------------------------|
| 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 | . 299 NTU | .300 | Turbidity >1 NTU | |
| Turbidity (NTU) - Lowest monthly percentage (%) of samples meeting turbidity limits | N | 100% | N/A | Less than 95% of monthly turbidity measurements are ≤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) | 6/10/20 | N | .73 ppm | | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |

Asbestos Contaminant

| Contaminant (units) | Sample Date | MCL Violation Y/N | Your Water | Range Low High | MCLG | MCL | Likely Source of Contamination |
|----------------------|----------------|-------------------------|---------------|-------------------|------|-----|---|
| Total Asbestos (MFL) | 11/13/13 | N | ND | N/A | 7 | 7 | Decay of asbestos cement water mains; erosion of natural deposits |

Lead and Copper Contaminants

| ceau and copper contain | ad 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) | 9/04/20 | .32 ppm | 0 | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits | | | |
| Lead (ppb) (90 th percentile) | 9/04/20 | 0 | 0 | 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 | .87 | 0 - <1.0 | 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) | 2020 | N | 1.44 ppm | .6 - 2.1 ppm | 4 | 4.0 | Water additive used to control microbes |

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

| Disinfection Byproduct | Year Sampled | MCL Violation Y/N | Your Water (highest LRAA) | Range Low High | MCLG | MCL | Likely Source of Contamination |
|---------------------------|-----------------|-------------------------|---------------------------------|--------------------|------|-----|--|
| TTHM (ppb) | 2020 | N | 41 ppb | 30 - 50 ppb | N/A | 80 | Byproduct of drinking water disinfection |
| HAA5 (ppb) | 2020 | N | 36 ppb | 21-40 ppb | N/A | 60 | Byproduct of drinking water disinfection |

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 |
|---------------------|-------------|---------------|-------------------|------|
| Sodium (ppm) | 6/10/20 | 8.04 ppm | NA | N/A |

| рН | 6/10/20 | 7.7 | NA | 6.5 to 8.5 | |
|--------|---------|-----|----|------------|--|
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