

“2020” Annual Drinking Water Quality Report

City of Randleman

Water System Number: 02-76-015

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 Scott Pyrtle at 336-669-2936. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 7:00PM on the first Tuesday of each month in the Randleman City Hall Annex.**

What EPA Wants You to Know

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. [Name of Utility] is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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

When You Turn on Your Tap, Consider the Source

Our main water source in 2020 was Piedmont Triad Regional Water Authority near Randleman and we purchased some treated water from Asheboro, both of which are surface water.

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 the City of Randleman 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
Randleman Lake PTRWA	Higher	Sept. 10 2020
Lake Reece Asheboro	Higher	Sept. 10 2020
Lake Bunch Asheboro	Moderate	Sept. 10 2020
Lake Lucas Asheboro	Moderate	Sept. 10 2020

The complete SWAP Assessment report for the City of Randleman 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” does not imply poor water quality, only the system’s potential to become contaminated by PCSs in the assessment area.

Help Protect Your Source Water

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

The City of Randleman received no violations in 2020.

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Water Quality Data Table from Asheboro

Detected Contaminants from Asheboro

REVISED TOTAL COLIFORM RULE:

CCR Data for 2020 Report

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

Contaminant (units)	MCL Violation Y/N	Your Water	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (presence or absence)	N	0	N/A	TT*	Naturally present in the environment
<i>E. coli</i> (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> <u>Note:</u> 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

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	0.58 NTU	N/A	Turbidity > 1 NTU	Soil runoff
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	

* 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.

Unregulated Inorganic Contaminants

Contaminant (units)	Sample Date	Your Water (average)	Range	
			Low	High
Sulfate	2020	35.9ppm	N/A	
Sodium	2020	25.8ppm	N/A	

Lead and Copper Contaminants

Contaminant (units)	Sample Date	Your Water	Number of sites found above the AL	MCLG	AL	Likely Source of Contamination
Copper (ppm) (90 th percentile)	6/2020	0.38ppm	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90 th percentile)	6/2020	<2.0ppb	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	1.38	1.21-1.57	N/A	TT	Naturally present in the environment	

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	0.5	0.03/3.1	4	4.0	Water additive used to control microbes
Chloramines (ppm)	2020	N	2.0	0.6 /3.9	4	4.0	Water additive used to control microbes
Chlorine dioxide (ppb)	2020	N	139	<100/820	800	800	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	35	27/44	N/A	80	
B02	2020	N	34	27/43	N/A	80	
B03	2020	N	33	27/39	N/A	80	
B04	2020	N	35	27/41	N/A	80	
HAA5 (ppb)					N/A	60	Byproduct of drinking water disinfection
Location B01	2020	N	41	32/42	N/A	60	
BO2	2020	N	41	33/40	N/A	60	
BO3	2020	N	38	34/41	N/A	60	
BO4	2020	N	41	34/40	N/A	60	

Water Quality Data Table (PTRWA)

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the regulated drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA and/or the State of North Carolina require us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfectant By-Products								
(The addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (ppm)	4	4	2.98	2.86	3.10	2020	No	Water additive used to control microbes
Chloramine (ppm)	4	4	2.56	2.61	3.04	2020	No	Water additive used to control microbes
Inorganic Contaminants								
Fluoride (ppm)	4	4	0.72	0.68	0.76	2020	No	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes dental health.
Synthetic Organic Chemical Contaminants								
Simazine (ppb)	4	4	0.215	0.17	0.26	2020	No	Herbicide runoff, aquatic weed treatment.
Turbidity								
Turbidity (NTU)	NA	0.3	100%	NA		2020	No	Soil runoff
100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.05. Any measurement in excess of 1 is a violation unless otherwise approved by the state. 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.								

Total Organic Carbon (TOC)								
<u>Contaminants</u>	<u>TT Violation</u>	<u>Compliance Method</u>	<u>Your Water (RAA Removal Ratio)</u>	<u>Range Monthly Removal Ratio</u>		<u>MCLG</u>	<u>TT</u>	<u>Typical Source</u>
Total Organic Carbon (Removal Ratio) – Treated TOC	No	Step 1	1.60	1.45	1.76	N/A	TT	Naturally present in the environment

Unregulated Contaminants – These samples are generally collected as one time sampling events for special purposes.

Contaminant (units)	Sample Date	Your Water (Average)	Range
Quinoline (ppb)	8/29/2018	0.05	N/A
Volatile Organic Compounds – 1,4-Dioxane (ppb)	4/15/2020	1.2	N/A
Unit Descriptions			
Term		Definition	
mg/L		mg/L: Number of milligrams of substance in one liter of water	
ppm		ppm: parts per million, or milligrams per liter (mg/L)	
NTU		NTU: Nephelometric Turbidity Units. 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.	
ppb		ppb: parts per billion or ug/L	
ug/L		ug/L: number of micrograms of a substance in one liter of water	
NA		NA: not applicable	
ND		ND: Not detected	
NR		NR: Monitoring not required, but recommended.	

Important Drinking Water Definitions

Term	Definition
MCLG	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.
MCL	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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

Contact Name: Gregory Flory**Address: P.O. Box 1326, Randleman, NC 27317****Phone: (336) 498-5510****Website: www.ptrwa.org**

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.

Parts per trillion (ppt) or Nanograms per liter (nanograms/L) - One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/L) - One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

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.

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.

Level 2 Assessment - A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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.

BEWARE OF THE Grease Goblin



LAST SEEN:
Loitering in Sinks
and Drains

WANTED FOR:
Causing Sewer
Overflows

DID YOU KNOW...

Most sanitary sewer backups occur between your home and the town's sewer main?

You can help prevent a costly and unsanitary overflow by following a few simple steps:



- ✓ Scrape excess grease in a container and dispose of it in the garbage.
- ✓ Place food scraps in waste containers or garbage bags for disposal with solid wastes, or start a compost pile; promote use of scraping ware prior to washing.
- ✓ Place a wastebasket in the bathroom to dispose of solid wastes. Disposable diapers, condoms, and personal hygiene products do not belong in the sewer system.
- ✓ Promote the concept of "3 R's": Reduce, Reuse, Recycle.



- ⊘ Pour grease, fats, and oils from cooking down the drain.
- ⊘ Use the toilet as a wastebasket.
- ⊘ Use the sewer as a means of disposing food scraps.

The Grease Goblin and associated materials are provided by the N.C. Division of Pollution Prevention and Environmental Assistance (DPPEA) located in the Department of Environment and Natural Resources (DENR). Samples of materials using the Grease Goblin image must be provided to DPPEA.