

**Brentwood Water
Consumer Confidence Report
2018**



We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. 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. This year's report includes sample data from both Jamestown Road (ID #0112104) and Highway 64 (ID #0112103) areas of Brentwood Water's system. Our water is purchased from the City of Morganton, which is treated surface water from the Catawba River

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. The Catawba River flows through the center of Burke County and Morganton. It is the source of Morganton's drinking water. 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.

Maintaining the quality of Brentwood Water continues from the City of Morganton's metering points to over 156 miles of water lines. Brentwood maintains these water lines ranging from two-inch PVC to 12-inch ductile iron. Brentwood employs six dedicated individuals to operate the distribution system supplying water to Brentwood's members.

I'm pleased to report that our drinking water is safe and meets federal and state requirements. Brentwood has never had to report to its customers any violations of a high contaminate of VOC's, SOC's or metals.

This report shows our water quality and what it means.

This report is intended to comply with 90CFR, parts 141 and 142, Consumer Confidence Reports. If you have any questions about this report or concerning your water utility, please contact David Perkins at 828-584-4566. We want our valued customers to be informed about their water utility. If you want to learn more, please attend our regularly scheduled annual meetings. They are held in August of each year at the Silver Creek School on Jamestown Road

Source Water Assessment Program (SWAP) Summary 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 to potential contaminant sources. The results of the assessment are available in SWAP Assessment reports.

Source Water Assessment Program (SWAP) Results The relative susceptibility rating of each source for the City of Morganton was determined by combining the contaminant rating and the vulnerability rating or the existing conditions of the watershed. The assessment findings are summarized in the table below. It is important to understand that a susceptibility rating of higher does not imply poor water quality, only the systems' potential to become contaminated by potential contaminant sources in the assessment area. The complete SWAP Assessment report for Morganton may be viewed on the web at: <http://www.deh.enr.state.nc.us/pws/swap>. Please note that because SWAP results and reports are periodically updated by the PWS Section, the results available on this site may differ from the results that were available at the time this CCR was prepared. To obtain a printed copy send a written request to: Source Water Assessment Program– Report Request, 1634 Mail Service Center, Raleigh, NC 27699-1634 or email swap@ncmail.net. This information is provided by North Carolina Department of Environment and Natural Resources and is required to be included in this report.

Source Name	Inherent Vulnerability Rating	Containment Rating	Susceptibility Rating
Catawba River	Higher	Moderate	Higher

The complete SWAP Assessment report for Brentwood Water and The City of Morganton may be viewed on the Web at <http://www.deh.enr.state.nc.us/pws/swap> Please 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@ncmail.net. Please indicate your system name, PWSID, 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 919-715-2633.

Brentwood Water Corporation routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st, 2018 to December 31st, 2018

Brentwood Water – Jamestown Rd & Highway 64 – 2018 TEST RESULTS

Contaminant	Date	Results	MCL in ccr units	MCLG in ccr units	Concentration	Likely Source of Contamination
ID 01-12-103-Highway 64						
Total asbestos	2/15/2011	<0.2	7.0	0.2	mfl	Decay of asbestos cement water mains erosion of natural deposits
Lead	7/2017	0.007 90 th Percentile	A.L.=.015	0	ppb	Corrosion of household plumbing systems erosion of natural deposits
Copper	7/2017	0.007 90 th Percentile	A.L.=1.3	1.3	ppm	Corrosion of household plumbing systems

Disinfection By-Products
HAA5: AVERAGE = 29 RANGE = 21 – 36 ppb MCL 60ppb * TTHM: AVERAGE = 47 RANGE = 27 - 74 ppb MCL 80ppb

Contaminant	Date	Results	MCL in ccr units	MCLG in ccr units	Concentration	Likely Source of Contamination
ID 01-12-104-Jamestown						
Total asbestos	2/15/2011	<0.2	7.0	0.2	mfl	Decay of asbestos cement water mains erosion of natural deposits
Lead	7/2017	0.006 mg/L 90 th Percentile	Al=.015	0	ppb	Corrosion of household plumbing systems erosion of natural deposits
Copper	7/2017	0.062 90 th Percentile	Al=1.3	1.3	ppm	Corrosion of household plumbing systems

Disinfection By-Products
HAA5: AVERAGE = 33 RANGE = 29 - 57 ppb MCL 60ppb * TTHM: AVERAGE = 58 RANGE = 26 – 96 ppb MCL 80ppb

Key:

Al* = # of sites above action level
90th = 90th percentile
NA = not applicable
Pci/l = picocuries/liter
mfl = million fibers/liter
ppb= parts per billion

ntu = nephelometric turbidity units
tt = treatment technique
al = action level
ppm = parts per million

The data presented in this report represent the most recent testing done in accordance with the regulations. *As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.*

Contaminants that may be present in source water before it is treated 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 storm water 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 storm water 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 storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead in Home Plumbing

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. Brentwood 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>.

Water Discoloration

Changes in water pressure, such as when water mains break or fire hydrants are used or flushed, can occasionally cause drinking water to be discolored. The discoloration is caused by sediments in pipes mixing with clear water. The sediments occur naturally from the oxidation of iron in pipes. While discolored water is ordinarily safe to drink, it is best to flush any discolored water from pipes by turning on all cold-water faucets in your home or business. Avoid turning on any hot-water faucets so the discolored water is not drawn into water heaters.

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.

Understanding the City of Morganton Treatment Process.

On average, they pump and treat over 8 Million Gallons per Day (MGD) from the Catawba River. The Plant's Operators add Poly-Aluminum Chloride and Caustic Soda to the incoming "raw" water to form clumps of "floc" that help to trap dirt and impurities found naturally in the Catawba. They then add Sodium Hypochlorite to neutralize any potential pathogens in the water before it is filtered. Shortly after filtration, several steps are performed: they adjust the pH (usually to 7.2) to prevent corrosion, Sodium Hypochlorite is then added to prevent re-growth of bacteria in the system, and then they add Fluoride to promote good dental health in community

The City of Morganton does add Fluoride to its water in an effort to reduce the number of cavities in our community. We adhere to all EPA and CDC regulations in the application of Fluoride in your drinking water. The level that we maintain in our system is 0.70 mg/L and that is the minimum acceptable dosage required by regulatory authorities.

Pink slime or black lines/spots that appears in your bathroom is not from our water supply. These are certain species of bacteria, mold, or mildew that are naturally present in the environment. These organisms love the warm, damp areas in your bathroom and will form into unattractive, yet harmless, growths by establishing colonies in these damp spots. The best way to avoid these growths is to clean damp areas regularly with a cleaner like Lysol or a chlorine-based cleaner.

City of Morganton - PWS ID # 01-12-016 2018 Primary Drinking Water Standards

Contaminant	Your Water	MCLG	MCL	Range	Typical Source of Contaminant
Alkalinity (mg/L)	14.75	N/A	N/A	17.0 - 18.0	Erosion of Natural Minerals
Asbestos (MFL)	N/D	7	7	N/A	Decay of asbestos cement in water mains; erosion of natural deposits
Arsenic (ppb)	N/D	0	0.010	N/A	Natural Sources; Production Waste
Barium (ppm)	N/D	2.0	2.0	N/A	Metal Refineries; Natural Deposits
Beryllium (ppb)	N/D	0.004	0.004	N/A	Discharge from Coal Burning Facilities
Cadmium (ppb)	N/D	0.005	0.005	N/A	Erosion of Natural Deposits; Corrosion of Galvanized Pipes; Discharges by Refineries
Chromium (ppb)	N/D	0.1	0.1	N/A	Discharge from Steel or Pulp Mills; Natural Minerals
Copper (ppm)	0.089 mg/L	1.3	A.L.=1.3		Erosion of Household Plumbing; Naturally Occurring
Cyanide (ppb)	N/D	0.2	0.2	N/A	Discharge from Steel, Plastic, or Fertilizer Factories
Fecal Coliforms	0	0	0	N/A	Human or Animal Fecal Waste
Fluoride (ppm)	0.54	4.0	4.0		Additive to support Strong Teeth; Erosion of Natural Deposits
Iron (ppb)	N/D	0.3	0.3		Corrosion of Household Plumbing
Lead (ppb)	N/D	0	A.L.=0.015		Corrosion of Household Plumbing; Erosion of Natural Deposits
Manganese (mg/L)	N/D	0.05	0.05	N/A	Erosion of Natural Deposits
Mercury (ppb)	N/D	0.002	0.002	N/A	Erosion of Natural Deposits; Runoff from Landfills; Discharges from Factories
Nitrate (ppm)	N/D	10	10	N/A	Runoff from Fertilizer Use; Erosion of Natural Deposits
Nitrite (ppm)	N/D	1	1	N/A	Runoff from Fertilizer Use; Erosion of Natural Deposits
pH	7.6	N/A	N/A	N/A	Erosion of Natural Deposits
Selenium (ppb)	N/D	0.05	0.05	N/A	Discharge From Petroleum Refineries; Erosion from Natural Deposits
Sodium (mg/L)	7.2 mg/L	250	250	N/A	Soil Runoff
Thallium (ppb)	N/D	0.0005	0.002	N/A	Leaching from Ore-Producing Sites; Discharge from Electronics, Drug, or Glass Factories
Total Coliforms	0	0	>5% Month	N/A	Naturally Present in the Environment
Total Haloacetic Acids (mg/L)	0.035 RAA	N/A	0.060	0.020-0.602	By-Product of Disinfection
Total Organic Carbons (mg/L) - Source	2.1	TT	N/A	1.6 - 2.7	Naturally Occurring Element
Total Organic Carbons (mg/L) - Treated	0.95	TT	N/A	N/D - 1.6	
Total Trihalomethanes (mg/L)	0.0576 RAA	0	0.080	0.0229 - 0.1084	By-Product of Disinfection
Turbidity (NTU's)	0.125*	>0.2	0.3	0.022- 0.097	Soil Runoff

***Turbidity Result was the highest recorded result from 2018. The reading was taken on 04/21/2018.
Average Turbidity was 0.048 NTU's for 2018.**

The table above lists all the drinking water contaminants detected by the City of Morganton during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2017. The State requires the City of Morganton to monitor for certain contaminants less than once per year because the concentrations of these contaminants is 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.

GLOSSARY

Maximum Contaminant Level Goal or MCLG : The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for margin of safety.

Maximum Contaminant Level or 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.

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

Action Level: The concentration of a contaminant, which if exceeded, triggers additional treatment, or other requirements, which a water system must follow.

Non-Applicable (N/A) - Information not applicable or required

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

Parts per million (ppm) - one part per million (milligrams per liter) corresponds to one minute in two years, or as a single penny in \$10,000

Parts per billion (ppb) - one part per billion (micrograms per liter) corresponds to one minute in two thousand years, or as one penny in \$10 million.

Nephelometric Turbidity Unit (NTU) - a measure of the cloudiness of the water. Turbidity over 5 ntu is just noticeable to the average person. It is a good indicator of the effectiveness of our filtration system. Turbidity % - low levels are a goal for all substances except turbidity as a percentage. The turbidity rule requires that 95% or more of the monthly samples must be below 0.3 NTU's.

Total Organic Carbon (TOC) -has no health effects. However, TOC provides a medium for the formation of disinfection byproducts.

MFL: Million Fibers per Liter **Mg/L**: milligrams per liter

Extra note: MCL are set at very stringent levels. To understand the possible health effects for many regulated substances, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect,

We at Brentwood Water Corporation work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. It is the customer's responsibility to repair any leaks past their water meter. If you suspect a leak on the City's side of the meter or in the street, please call 828-584-4566.

Please call our office if you have questions.

828-584-4566