



"Pure Water for All Purposes"
City of Morganton
Department of Water Resources
Class – A Utility

CITY OF MORGANTON WATER DIVISION CONSUMER CONFIDENCE REPORT 2017

Since the early 1990's, the City of Morganton has provided its customers an annual water report. The federal government has adopted guidelines for water agencies to follow when communicating water information to consumers. The State of North Carolina tailored these guidelines into the Consumer Confidence Report. This format is intended to provide customers a summary of water quality data, key definitions, and other related information.

This report summarizes the quality of the water provided in 2017. It includes details about water source, what the water contains, and how it compares to standards set by the State of North Carolina. Morganton vigilantly monitors and safeguards its water supplies. We are pleased to report that your tap water met all Federal and State drinking water health standards. For more information about your water, call (828) 584-1460.

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 (800-4264791).

Morganton's water comes from the Catawba River. The water is treated at the Catawba WTP via the addition of Poly-Aluminum Chloride for coagulation, Sodium Hypochlorite for disinfection, Polyphosphate for corrosion control, and Hydrofluorosilicic Acid to promote dental health.

The Morganton City Council meets on the first Monday of each month at 6:00pm in the City Hall Council Chambers, 305 East Union Street. The community is welcome to participate in these meetings.

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 EPA's Safe Drinking Water Hotline (800-426-4791).

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. It also can pick up substances resulting from the presence of animals or from human activity.

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 and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the North Carolina Department of Environment and Natural Resources, Public Water Supply Branch prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems.

Source Water Assessment Program (SWAP) Summary

(The following information is provided by North Carolina Department of Environment and Natural Resources and is required to be included in this report. If you have any questions about this information call 919-715-2633)

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. 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.

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

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. The City of Morganton does not have any lead service lines or materials in our system. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in home 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 www.epa.gov/safewater/lead.

PRIMARY DRINKING WATER STANDARDS

(Mandatory Health Related Standards Established by the North Carolina Department of Environmental Quality)

Contaminant	Your Water	MCLG	MCL	Range	Typical Source of Contaminant
Alkalinity (mg/L)	17.5	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	7.7	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)	10.4 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)	0.026 RAA	N/A	0.060	0.017 - 0.037	By-Product of Disinfection
Total Organic Carbons (mg/L) - Source	1.98	TT	N/A	ND - 4.8	Naturally Occurring Element
Total Organic Carbons (mg/L) - Treated	2.05	TT	N/A	1.1 - 4.7	Naturally Occurring Element
Total Trihalomethanes (mg/L)	0.044 RAA	0	0.080	0.025 - 0.057	By-Product of Disinfection
Turbidity (NTU's)	0.097*	>0.2	0.3	0.028 - 0.097	Soil Runoff

*Turbidity Result was the highest recorded result from 2017. . The reading was taken on September 14, 2017. Average Turbidity was 0.048 NTU's for 2017.

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.

Terms and abbreviations used above:

- **Primary Drinking Water Standard or PDWS:** MCLs and MRDLs for contaminants that effect health along with their monitoring and reporting requirements, and water treatment requirements.
 - **Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
 - **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency treatment requirements.
 - **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the NCDENR.
 - **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 are set by the U.S. Environmental Protection Agency.
 - **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
 - **Regulatory Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment, or other requirements that a water system must follow.
 - **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **NA:** not applicable • **ND:** not detected • **NS:** no standard • **NTU:** Nephelometric Turbidity Units • **mg/L:** milligrams per Liter
- **ppm:** parts per million • **ppb:** parts per billion • **pCi/l:** picocuries per liter (a measure of radiation) • **MFL:** Million Fibers per Liter • **RAA:** running annual average



Facts about our System

- The Catawba River Treatment Plant has a rated capacity of 18 MGD. Annual daily production average is 9.1 million gallons a day (MGD).
- The City maintains and operates 8 booster pump stations and 11 tanks that maintain the pressure in over 330 miles of distribution lines.
- In 2017, our Water Distribution staff made 54 new water taps, replaced 196 meters, repaired 104 waterline breaks, repaired 7 hydrants, responded to 1004 service calls, exercised 145 valves, and performed 7727 utility locates.

How to Read Your Water Meter

Locate Your Water Meter

Locate the water meter on your property. It's usually located in a concrete box with a cast iron lid near the street, and clearly labeled. Note: Be very careful when removing your meter box lid. Use two large screwdrivers—one to stick in the hole and one to pry up the outer edge. Lift the lid just enough to slide it over to the side with your foot. Replace the lid by sliding it back into place.

Be careful not to drop the lid on the meter!

Anatomy of a Water Meter

Dial: The dial will rotate when water passes through the meter. One full rotation of the dial equals 1 cubic foot of water or 7.48 gallons.

Low Flow Indicator: The Low Flow Indicator will rotate with very little water movement. Any water moving through the meter is detected so even small leaks will register.

Odometer: The odometer records total water use in a similar way as the odometer in your car records miles driven. The water meter odometer records water use in cubic feet and displays as follows: The digits from right to left represent 1 cubic foot, 10 cubic feet, 100 cubic feet and so on. Like a car odometer, the water meter odometer cannot be altered.

How to Monitor Your Water Use

The following steps will show you how to determine how much water you use over a period of time.

Read the odometer and write it down completely. Then write down the date you read it. After a period of days (we suggest 7 days) read the odometer again and write it down and write down the date.

Subtract the first reading from the second reading. This is your water use in cubic feet during the period.

Multiply the water use by 7.48. This is your water use in gallons during the period.

Divide the water use in gallons by the number of days between readings. This is your average gallons per day during the period.

How to Watch for Leaks

Turn off all water indoors and outdoors including sprinklers, ice maker, etc. If the low flow indicator moves, this may indicate a leak in an appliance or pipe. If the meter shows no obvious movement, note the reading on the meter and return in 4 hours to see if there is any change. Note: if you use water during that time, the meter reading will change.

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 828-438-5276.





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.

Frequently Asked Questions

- Like to save money? Skip the bottled water at the local store and fill up on our water. You can fill your bottle once a day for 12 years for what you pay for one bottle of Evian! This also has a positive effect for the environment since you will not be contributing to the millions of bottles that are thrown away in a year.
- 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.
- 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 grow 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.
- We love informed customers! We are happy to answer any questions or address any concerns you may have.

STAY INFORMED

We encourage our customers to stay informed about their utilities department and the services we provide. The Water Department offers several ways for customers and the public to receive updates and information - web site, Facebook, or via Twitter. We invite you to take advantage of these resources. You may also want to attend regularly scheduled City Council meetings to share suggestions, ideas, and concerns regarding the City's municipal water and sewer systems. We also encourage everyone to visit <http://goo.gl/KPGXCI> to view up-to-date water quality data and analysis from the City of Morganton.

Important Contact Information

Water Resource Main Office is located at Morganton City Hall located at 305 W. Union Street.

Main Number / After Hours Emergencies: 828-438-5276

Water Treatment Plant: 828-584-1460

Water Laboratory: 828-584-1460

Waste Treatment Plant: 828-438-5375

Development & Design: 828-438-5260



Please visit our website at <http://morgantonnc.gov> for important news and updates.

Current Outage Information: <http://twitter.com/cityofmorganton> or <http://www.facebook.com/cityofmorganton/>

We value your feedback and any questions you may have about this report or your water in general. Please feel free to contact Raymond Presley, Water Treatment Superintendent at (828) 584-1460 or by email at rpresley@ci.morganton.nc.us.