

2018 WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017

BUTLER COUNTY WATER SYSTEM

butlerwater.com

PWSID KY0160052



Butler County
Water System

WHERE DOES MY WATER COME FROM?

Butler County Water System, Inc. draws its water from the Green River, a surface water source, which flows through Butler County. The water is supplied to the areas north and south of the Green River and is treated by Butler Water at its water treatment plant located in Morgantown.

The Safe Drinking Water Act, amended in 1996, requires Community Public Water Systems to prepare a source water assessment report. The report includes a Source Water Assessment Plan (SWAP) that summarizes our susceptibility to contamination.

An analysis indicates that our system's susceptibility to contamination is generally moderate. Areas of concern include potential contaminant sources such as bridges, underground storage tanks, an active landfill and agricultural chemical use in the area near and surrounding the raw water intake.

The final source water assessment plan with complete information of the system's susceptibility to potential sources of contamination is available for review at the Barren River Area Development District office located at 177 Graham Avenue in Bowling Green, Kentucky.

Our goal is to provide the best water and customer service to Butler County residents. Our customers are our top priority and an important part of our everyday efforts. We continually look for ways to stay involved in our community and to develop ways to educate customers on water quality. Our website, butlerwater.com, provides customers access to water quality information and facts about their water utility. Also, general brochures, Consumer Confidence Reports (CCRs), and various other Butler Water publications are available for customer service and educational purposes.

WATER QUALITY

Delivering Quality and Commitment in Every Drop!

Butler Water continually performs numerous tests to ensure your drinking water is safe. Butler Water tests the purity of the water over 3,000,000 times a year to ensure the safety of your drinking water. In 2017, the water was tested for over 100 regulated contaminants, and met or exceeded all state and federal quality standards.

WHY ARE THERE CONTAMINANTS IN MY 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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

The sources of drinking water, both tap 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 may pick up substances resulting from the presence of animals or from human activity. To ensure that tap water

is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. FDA regulations establish limits for contaminants in bottled water that shall provide the same protection for public health.

WHAT ARE THESE CONTAMINANTS?

MICROBIAL CONTAMINANTS

Viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

INORGANIC CONTAMINANTS

Salts and metals, that may be naturally occurring or result from urban stormwater runoff, industrial or domestic waste water discharges, oil and gas production, mining, or farming.

PESTICIDES AND HERBICIDES

May come from a variety of sources such as agricultural, urban stormwater runoff, and residential uses.

ORGANIC CHEMICAL CONTAMINANTS

Synthetic and volatile organic chemicals, which are by products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems.

RADIOACTIVE CONTAMINANTS

May be naturally-occurring or be the result of oil and gas production and mining activities.

SPECIAL HEALTH INFORMATION

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. Butler 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>.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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.



2017 TEST RESULTS

The data presented in this report are from the most recent testing done in accordance with Administrative Regulation 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected.

	Allowable Levels		Highest Single Measurement	Lowest Monthly %	Violation	Likely Source	
Turbidity (NTU) (Continuously)	Never more than 1 NTU. Less than 0.3 NTU's 95% of monthly samples		0.18	100	No	Soil Runoff	
Regulated Contaminant Test Results							
Contaminant (Units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source
Radioactive Contaminants							
Combined Radium (pCi/L) (measured as Radium 226)	5	0	1.5	1.5	Jan-14	No	Erosion of natural deposits
Inorganic Contaminants							
Arsenic (ppb)	10	0	0.2	0.2	Feb-17	No	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes.
Barium (ppm)	2	2	0.028	0.028	Feb-17	No	Drilling wastes; metal refineries; erosion of natural deposits
Chromium (ppb)	100	100	0.3	0.3	Feb-17	No	Discharge from steel and pulp mills erosion of natural deposits
Copper (ppm) (Level found is 90th percentile. No sites exceeded the AL)	AL = 1.3	1.3	0.065	0.004 to 0.110	Aug-15	No	Corrosion of household plumbing systems
Cyanide (ppb)	200	200	20	20	Feb-17	No	Discharge from plastic and fertilizer factories, discharge from steel/metal factories
Lead (ppb) (Level found is 90th percentile. No sites exceeded the AL)	AL = 15	15	0.8	0 to 2.5	Aug-15	No	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride (ppm)	4	4	0.4	0.3 to 0.4	Feb-17	No	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	1.9	1.9	Feb-17	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Contaminants							
Atrazine (ppb)	3	3	0.4	0 to 0.4	2017	No	Runoff from herbicide used on row crops
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) (measured as ppm but reported as a ratio)	TT*	N/A	1.84 Lowest Average	1.04 to 2.58 Monthly Ratios	2017	No	Naturally present in the environment.
Chlorine (ppm)	MRDL 4	MRDLG 4	1.3 Highest Average	0.39 to 2.22	2017	No	Water additive used to control microbes.
HAA's [haloacetic acids] (ppb) (Individual Sites)	60	N/A	48	17 to 61	2017	No	By-product of drinking water chlorination.
TTHM [total trihalomethanes] (ppb) (reported as highest locational running average)	80	N/A	45	19 to 69	2017	No	By-product of drinking water chlorination.

*Ratio is the monthly % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance.

Butler County Water System was found to be in violation of the Consumer Confidence Rule for failing to provide the state of Kentucky a certification letter prior to the deadline following the distribution of the calendar year 2015 CCR. Future certification letters will be provided in a timely manner. The 2016 CCR did not list a violation for failure to submit the LT2 source water monitoring form. Future schedules will be submitted in a timely manner.

Terms to know when reading the water test results:

AL (ACTION LEVEL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system shall follow.

BDL (BELOW DETECTION LEVEL)

Laboratory analysis indicates that the contaminant is not present

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.

MRDL (MAXIMUM RESIDUAL DISINFECTANT LEVEL)

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

MRDLG (MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL)

The highest 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.

NTU (NEPHELOMETRIC TURBIDITY UNIT)

A measure of the clarity of water. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

N/A (NOT APPLICABLE)

Does not apply.

PPM (PARTS PER MILLION)

One part per million corresponds to one minute in two years, or a single penny in \$10,000.

PPB (PARTS PER BILLION)

One part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

pCi/L (PICOCURIES PER LITER)

A measure of radioactivity in water.

TT (TREATMENT TECHNIQUE)

A required process intended to reduce the level of a contaminant in drinking water.

New Water Meter Reading Technology

Butler Water owns and maintains approximately 4,800 water meters. Each meter is an essential part of Butler Water's distribution system, responsible for measuring each customer's actual water use for billing purposes.

Butler Water reads each water meter once per month. The process is labor intensive and time consuming. The meter reader carefully removes the meter box lid, lifting the protective cap on the water meter to reveal the face of the meter, and manually enters the details into a handheld electronic data logger. Water consumption information from the device is then uploaded into our billing system and posted to each customer account.

While this method served Butler Water well for many years, we are modernizing by automating meter reads in Butler County. Butler Water has been researching and planning behind the scenes for several years to launch the new Automated Meter Reading (AMR) technology in 2018 and to complete replacements/installations by the summer of 2019.

AMR meters will enable Butler Water meter readers to read meters remotely, safely, and accurately from a vehicle, via wireless signals. AMR meters are safe, precise, and adept at capturing the same information collected from the manually read meters, yet in a faster and more efficient manner.

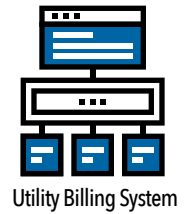
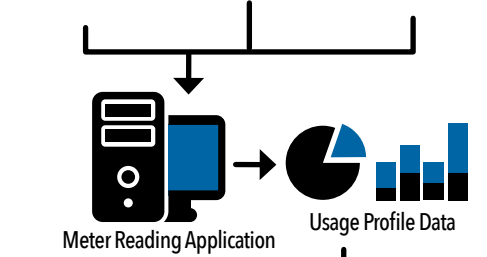
AMR offers multiple benefits to customers, Butler Water, and the environment, including:

- Eliminating manual, labor intensive meter reading.
- Providing more accurate data useful for detecting water loss and leaks in the system which will result in water and cost savings for customers.
- The new AMRs require less maintenance.
- Ability to detect backflow (reverse flow) and continuous leaks in a customer's water service.
- Securely transmit data remotely to data collection units in the vehicle.
- Increases daily meter read ability of a reader.
- Reduce pollution from vehicles driven by meter readers.

For questions or additional information regarding AMR, call 270-526-4656 or e-mail info@butlerwater.com.



Itron Equipped Meter



ADDITIONAL INFORMATION ON WATER QUALITY

Butler County Water System, Inc. :
270-526-4656 butlerwater.com

Kentucky Rural Water Association:
270-843-2291 krwa.org

Kentucky Division of Water:
502-564-3410 water.ky.gov

U.S. EPA Safe Drinking Water Hotline:
800-426-4791 epa.gov/safewater/hfacts.html

GET INVOLVED

We appreciate your comments and the opportunity to serve you. Butler Water Board Meetings are open to the public and are held at 4:30 PM on the third Tuesday of every other month at the Butler Water office located at 1118 South Main Street, Suite 1, Morgantown, KY. Please call us at 270-526-4656 for more information.

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ATTENCION

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



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