

# PROVIDING YOU WITH QUALITY ON TAP

Butler Water is once again proud to provide this Annual Water Quality Report which demonstrates that we are continuing to remain in compliance with state and federal water quality standards. This publication provides you with information about Butler Water and the fresh, clean drinking water we supply to the homes, businesses and industries in and around Butler County.

We take seriously our responsibility of transporting millions of gallons of water each day to approximately 4,800 customers and test the water routinely over the course of a month to ensure its quality. We are equally vigilant in our planning and maintenance to ensure that our facilities are reliable and available around the clock to bring high quality drinking water to all people who need it. The report covers all testing completed January through December 2009. If you have any questions regarding this report, please contact Alan Vilines, General Manager, at (270) 526-4656.

## ADDITIONAL INFORMATION ON WATER QUALITY

Butler County Water System Web Site: [www.butlerwater.com](http://www.butlerwater.com)  
Kentucky Rural Water Association: 270-843-2291 or [www.krwa.org](http://www.krwa.org)  
Kentucky Division of Water: 502-564-3410 or [www.water.ky.gov](http://www.water.ky.gov)  
U.S. EPA Safe Drinking Water Hotline: 800-426-4791  
U.S. EPA Web Site: [www.epa.gov/safewater/hfacts.html](http://www.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 7 p.m. on the third Tuesday of every other month at the Butler Water office located at 104 S. Tyler Street, Suite B, Morgantown, KY. Please call us at (270) 526-4656 for more information.

## THE BUTLER WATER BOARD OF COMMISSIONERS

Roland Stephens - President  
Weymouth Martin - Vice President  
Garry Robbins - Secretary/Treasurer  
David Martin  
Don Lindsey  
Richard Deye - Attorney

## BUTLER WATER STAFF

Alan Vilines - General Manager  
Jon Schubarth - Manager of Engineering & Construction  
Jeff Peeples - Manager of Finance & Administration

## ATTENCION

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

DELIVERING QUALITY AND COMMITMENT IN EVERY DROP.



# WHERE DOES MY WATER COME FROM?

## BUTLER WATER'S COMMITMENT TO COMMUNITY

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 plan includes a Source Water 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.

The customers that make up the Butler County community are our number one priority and an important part of our everyday customer service efforts. We strive each and every day to find ways to stay involved in our community. We also continue to develop ways to educate customers on water quality. Butler Water has created a revamped Web site, [www.butlerwater.com](http://www.butlerwater.com) that offers educational venues that provide customers with access to water quality information and facts about the utility that serves them. Also, general brochures, Consumer Confidence Reports (CCRs), and various other Butler Water publications are available for customer service and educational purposes.



## WATER QUALITY.

### Not Just a Commitment; A Profession

Each year Butler Water performs numerous tests to ensure that the drinking water delivered to you is safe. In 2009, the water was tested for over 100 regulated contaminants. We are pleased to report that the water delivered to you has met or exceeded the quality standards required by state and federal laws. This report provides you with information regarding the substances that we found to be present in your drinking water and will give you a better understanding of what steps we take to ensure that your water is safe and pleasant to drink.

## 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.

## CRYPTOSPORIDIUM IN DRINKING WATER

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Butler Water tests for cryptosporidium in our raw and finished water.

At the present time, there is no Maximum Contaminant Level (MCL) established for cryptosporidium. Therefore, we are not required to test for these organisms. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of low levels 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. The presence of these organisms does not cause concern, because we have not had detections in the finished water. Nevertheless, we will continue testing for the organisms to ensure the public health is protected.

## 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. 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.



# 2009 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		Violation	Likely Source	
Turbidity (NTU) (Continuously)	Never more than 1 NTU. Less than 0.3 NTU's 95% of monthly samples		0.14	100	No	Soil Runoff	
<b>Regulated Contaminant Test Results</b>							
Contaminant (Units)	MCL	MCLG	Report Level	Range of Detection	Date of Sample	Violation	Likely Source
<b>Radioactive Contaminants</b>							
Alpha Emitters (pCi/L) (Gross Alpha)	15	0	0.30	0.3 to 0.3	Feb-08	No	Erosion of natural deposits
Combined Radium (pCi/L) (Measured as Radium 228)	5	0	0.70	0.7 to 0.7	Feb-08	No	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.021	0.021 to 0.021	Feb-09	No	Drilling wastes; metal refineries; erosion of natural deposits
Copper (ppm) (Level found is 90th percentile. No sites exceeded the AL)	AL = 1.3	1.3	0.049	0.005 to 0.132	Jul-09	No	Corrosion of household plumbing systems
Fluoride (ppm)	4	4	0.9	0.79 to 1.03	Nov-09	No	Water additive which promotes strong teeth.
Nitrate (ppm)	10	10	1.63	1.09 to 1.63	Feb-09	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Disinfectants/Disinfection Byproducts and Precursors</b>							
Total Organic Carbon (ppm) (measured as ppm but reported as a ratio)	TT*	N/A	1.50 (lowest average)	1.07 to 3.02 (monthly ratios)	N/A	No	Naturally present in the environment.
* Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance							
Chlorine (ppm)	MRDL 4	MRDLG 4	1.39 (highest average)	0.57 to 2.09	N/A	No	Water additive used to control microbes.
HAA's or [haloacetic acids] (ppb)	60	N/A	42 (system average)	19 to 74 (range of individual sites)	N/A	No	By-product of drinking water chlorination.
TTHM [total trihalomethanes] (ppb)	80	N/A	58 (system average)	23 to 62 (range of individual sites)	N/A	No	By-product of drinking water chlorination.
HAA's or [haloacetic acids] (ppb) (BCWS)	60	N/A	IDSE Study	17 to 89 (range of individual sites)	IDSE initiated Oct - 08	No	By-product of drinking water chlorination
TTHM [total trihalomethanes] (ppb) (BCWS)	80	N/A	IDSE Study	22 to 101 (range of individual sites)	IDSE initiated Oct - 08	No	By-product of drinking water chlorination

### Additional comments about the test results shown

**Total Coliform Bacteria** - In 2009, BCWS conducted sampling for Total Coliform Bacteria 10 times each month. Coliforms were not found in any of the samples tested.

**Lead** - In 2009, BCWS conducted sampling for Lead 33 times. Lead was not found in any of the samples tested.

## 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.

## USE WATER WISELY

Now that we're into the warm months, it is important to remember the many steps you can take outdoors to create an attractive environment while also reducing the amount of water you'll need to keep the garden and landscape beautiful.

### WORK THE SOIL

Good soil:

- Holds water well
- Provides nutrients
- Is aerated
- Has large particles that allow water flow and absorption

### MULCH

Two to four inches of mulch:

- Retains soil moisture
- Slows evaporation
- Protects roots from overheating
- Reduces the need for weeding

## WATER YOUR GARDEN AND LAWN EFFICIENTLY

- Morning is the best time to water. Watering in the evening can invite fungus to grow on your plants at night.
- Put a rain gauge in your yard. If you get 1 inch of rain in a week, you can skip your next lawn watering.
- If you have an automatic sprinkler system, attach a rain sensor or moisture sensor shutoff device.
- Use a rain barrel to collect rainfall and runoff from downspouts. Use the rainwater to water container plants and gardens.