

# **2017 City of Brookville Water Quality Consumer Confidence Report**

## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

## **Where does my water come from?**

Brookville's water comes from the City of Dayton Treatment Plant through the Montgomery County Water Distribution System and is serviced by the Westbrook pump station. Storage is in a 500,000 gallon elevated tank. The source of this water is the Miami Valley Buried Aquifer. The Aquifer is a large underground area of water-bearing sand and gravel deposits. This groundwater is influenced by surface water. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells.

## **Source water assessment and its availability**

The Ohio EPA conducted a source water assessment of Dayton's water source. The assessment concluded that the aquifer supplying water to the City of Dayton's well fields has a high susceptibility to contamination. This determination is based on: the influence of surface water recharge to the aquifer; the presence of a relatively thin protective layer of clay overlying the aquifer; the shallow depth of the aquifer; contaminant plumes in Dayton's well field protection area; the presence of significant potential contaminant sources in the protection area; and the presence of contaminants in treated water. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling the Division of Environmental Management at (937) 333-3725.

## **Do I need to take special precautions?**

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline at (800) 426-4791.

## **Why are there contaminants in my drinking 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 can be obtained by calling the Environmental Protection Agency's (EPA) 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, 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, that 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **How can I get involved?**

If you would like to participate in decisions that affect drinking water quality, please contact the City of Dayton water department for information on water board or city/council meetings at (937) 333-6030.

## **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

## Source Water Protection Tips

*Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:*

- *Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.*
- *Pick up after your pets.*
- *If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.*
- *Dispose of chemicals properly; take used motor oil to a recycling center.*
- *Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.*
- *Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.*

## Water Conservation Tips

*Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.*

- *Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.*
- *Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.*
- *Use a water-efficient showerhead. They're inexpensive, easy to install, and can save up to 750 gallons a month.*
- *Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.*
- *Water plants only when necessary.*
- *Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.*
- *Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.*
- *Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!*
- *Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.*

## Monitoring and reporting of compliance data violations

In 2016, one sample tested e-coli positive due to a sampling error. Additional samples, both upstream and downstream from the original sample sight tested negative.

## Additional Information for Lead

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. City of Brookville 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 at 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

## Water Quality Data Table

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 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 our 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 or the State requires 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.

REGULATED SUBSTANCE	HIGHEST LEVEL ALLOWED (MCL)	IDEAL GOALS (MCLG)	HIGHEST LEVEL DETECTED	RANGE OF DETECTION	VIOLATIONS	SOURCES OF CONTAMINANTS
<b>Regulated at the Treatment Plant</b>						
Fluoride (ppm)	4	4	1.06	.64-1.06	No	Natural geology / supplement
Nitrate(ppm)	10	10	1.61	011-1.61	No	Fertilizer runoff / natural geology
Turbidity (NTU)	TT=1	N/A	0.73	0.02-0.43	No	Lime softening residuals
	TT=>95% must be < 0.3		100%			
Cis-1, 2 Dichloroethylene (ppb)	70	70	0.67	ND-0.67	No	Discharge from factories
Total Organic Carbon (TOC)	TT <sub>2</sub>	N/A	0.93 <sub>2</sub>	0.36-.93	No	Naturally in the environment

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source						
				Low	High									
<b>Disinfectants &amp; Disinfection By-Products</b>														
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)														
Haloacetic Acids (HAA5) (ppb)	NA	60		8.245	6	8.245	2016	No						
TTHMs [Total Trihalomethanes] (ppb)]	NA	80		62.8	31.4	62.8	2016	No						
<b>Microbiological Contaminants</b>														
E. coli (RTCR) - in the distribution system (positive samples)	0	Routine and repeat samples are total coliform positive and either is E. coli - positive or system fails to take repeat samples following E. coli positive routine sample or system fails to analyze total coliform positive repeat sample for E. coli.		1	NA	NA	2016	No						

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	.0364	2016	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Inorganic Contaminants</b>							
Lead - action level at consumer taps (ppb)	0	15	2.66	2016	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Unit Descriptions</b>	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.
positive samples	positive samples/yr: The number of positive samples taken that year

*Total Hardness of your water is 143.68 mg/L. The Calcium Hardness is 68 mg/L.*

*The City of Brookville has a current unconditional license to operate our public water system.*

### Important Drinking Water Definitions

Term	Definition
MCLG	<i>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.</i>
MCL	<i>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.</i>
TT	<i>TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.</i>
AL	<i>AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.</i>
Variances and Exemptions	<i>Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.</i>
MRDLG	<i>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.</i>
MRDL	<i>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.</i>
MNR	<i>MNR: Monitored Not Regulated</i>
MPL	<i>MPL: State Assigned Maximum Permissible Level</i>
Turbidity	<i>Turbidity: A measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 5 NTU at any time. As reported above, the City of Dayton's highest recorded turbidity result for 2016 was 0.73 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.</i>

*If you would like more information regarding water quality, you may contact us at:  
 City of Brookville Water Department, 301 Sycamore Street, Brookville, Ohio 45309.  
 Phone: (937) 833-2135.*

## **DRINKING WATER NOTICE**

### *Brookville Municipality PWS*

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the month of April 2017, we did not complete all of the monitoring or testing for coliform bacteria, collecting only 5 of the 6 required samples, and therefore cannot be sure of the quality of drinking water during that time.*

#### **What should I do?**

*There is nothing you need to do at this time. You do not need to boil water or take any other corrective actions. The samples that were analyzed tested within the necessary parameters for coliform bacteria.*

#### **What is being done?**

*The Brookville PWS has reviewed procedures and has increased accountability to ensure all required samples are being collected and analyzed.*

***Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.***

**For more information please contact:**

**City of Brookville Water Department  
301 Sycamore Street  
Brookville, Oh 45309  
Phone: 937-833-2135**