



Waynesville Water- 2016 Annual Quality Report

Published 2017

We are pleased to provide you this year's **Annual Water Quality Report**. This Consumer Confidence Report is designed to inform you about the quality and services we deliver to your home or business each day, every day. We work hard to protect our water resources and to continually improve the water treatment process. We have a current, unconditioned license to operate our water system. Our goal is to provide you with a safe and dependable water supply, by protecting and improving water quality.

Our water source is known as the Little Miami Valley Buried Aquifer. Water is supplied from Three (3) wells, located in the **Waynesville Water** well field. The Aquifer that supplies the Waynesville well field has been determined to have a high susceptibility to contamination

due to: Presence of significant potential contaminant sources in the protection area, No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities. The OEPA conducted a water source assessment and information about it is available by calling the Village office.

We want our valued customers to be informed about their water utility. If you have any questions about this report or concerning your water utility, please contact at (513) 897-8015. If you want to learn more, please attend any of our regularly scheduled council meetings on the first and third Monday of each month at the Waynesville Government Center, 1400 Lytle Road, at 7:30PM.

At **Waynesville Water**, we work around the clock to provide top quality water to every tap. We ask that our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. The Village of Waynesville Water currently has an unconditional OEPA License to operate.

The sources of drinking water both tap water and bottled water includes 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 materials, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- (B) **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or results from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;
- (C) **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- (D) **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;
- (E) **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, 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. Some people may be more vulnerable to contaminants in drinking water than 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 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**.

Waynesville Water routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the most recent results of our monitoring for the period of the last 5 years. Only contaminants with detections are provided. Copies are available by calling 513-897-8015.

Village of Waynesville Water Production 2016 Table of Contaminants

Regulated Contaminants

Contaminant	Violation?	Level Detected	MCL	MCGL	Range of Detection	Year Sampled	Likely Source of Contamination
Barium (ppm)	No	0.0744 ppm	4	4	n/a	2016	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrogen, Nitrate+Nitrite (ppm)	No	2.80 ppm	10	10	n/a	2016	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Water Distribution System 2016 Table of Contaminants

Lead and Copper

The Ohio EPA establishes Action Levels (AL) that control Copper and Lead.
 . If the 90th percentile exceeds the Action Level, specific corrective actions are required.
 Ten samples were taken in 2015.

Lead (the 90 th percentile result)	No	7.2 ppb	AL=15 ppb	0	n/a	2015	Corrosion of household plumbing systems; Erosion of natural deposit.
Copper (the 90 th percentile result)	No	215 ppb	AL=1300 ppb	1300 ppb	n/a	2015	Corrosion of household plumbing systems; Erosions of natural deposit. Leaching from wood preservatives.

One Lead sample result was above the Action Level with a result of 18.7 ppb.

Zero Copper samples were above the Action Level.

Volatile Organic Compounds

Total Trihalomethanes TTHMs (ppb)	No	16.5 ppb	80 ppb	80 ppb	6.3- 16.5 ppb	2016	Disinfectant byproducts
Total Haloacetic Acids (ppb)	No	6.4 ppb	60 ppb	60 ppb	< 6.0- 6.4 ppb	2016	Disinfection Byproducts

Regulated Radioactive Contaminants

Alpha Emitters pCi/L	No	6.38	15	0	n/a	2013	Erosion of natural deposits
Combined Radium pCi/L	No	1.6	5	0	n/a	2013	Erosion of natural deposits

2016 Compliance Monitoring and Disinfection Requirements

Total Chlorine	No	2.1 ppm	4 ppm	4ppm	0.4 – 2.1 ppm	2016	Water disinfection additive used to control microbes
Total Coliform Monitoring, 36 samples taken and none were positive	No	none	1	None	n/a	2016	Naturally present in the environment

The average water hardness was 20 grains per gallon

Awareness of Lead in Drinking Water Service Lines and 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 compounds associated with water service lines and home plumbing. The Village of Waynesville and the Franklin-Clearcreek Water Systems are 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 possibly being in your water, you may consider having 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 <http://www.epa.gov/safewater/lead> or one may call the Safe Drinking Water Hotline at 1-800-426-4791.

- An OEPA violation was issued to the Village of Waynesville for an insufficient 2015 CCR. The CCR was corrected, reposted on the Village website, redistributed, and hard copies were made available at the Village Office.

Additional Water Source Provided by Warren County from their Franklin-Clearcreek Water Production PWSID 8301603

The well field is located in northwest Warren County and is owned and operated by the Warren County Commissioners. It is bordered by Trenton-Franklin Road. This is an area of the confluence of the Twin Creek and Great Miami Buried Valley Aquifers. The water quality is exceptional and does not require treatment other than the addition of fluoride and chlorine. The Aquifer that supplies the Franklin-Clearcreek wellfield has been determined to have a high susceptibility to contamination due to:

- ❖ Presence of significant potential contaminant sources in the protection area,
- ❖ No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities.

License- The Franklin-Clearcreek Water System currently has an unconditioned license to operate. This report is based upon tests conducted by the Warren County Laboratory and its contract laboratory.

The table below lists all the drinking water contaminants that were tested for between January 1 and December 31, 2016. The presence of the contaminants in the water does not necessarily indicate that the water poses a health risk.

Franklin-Clearcreek Warren County Compliance Monitoring and Disinfection Requirements 2016						
Substance	Highest Level Detected	Range of Detection	Violation?	MCL	Ideal Goals (MCLG)	Sources of Substances
Fluoride	1.10 ppm	0.8 to 1.3ppm	No	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Chlorine	1.4 mg/l	0.2 to 2.0 mg/l	No	4.0 ppm	4.0 ppm	Element used for disinfection
Total Coliform Monitoring	none	NA	No	None	None	Safely removed using chlorine. 360 samples taken with none positive for Total Coliforms

Franklin-Clearcreek Warren County Detected Contaminants 2016						
Substance	Highest Level Detected	Range of Detection	Violation	MCL	Ideal Goals (MCLG)	Sources of Substances
Barium	0.0721 ppm	N/ A	No	2 ppm	2 ppm	Discharge of drilling waste, metal refineries erosion of natural deposits
Nitrate Nitrite	2.47 ppm	N/A	No	10ppm	10ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Trihalo-methanes	49.78 ppb	N/ A	No	80 ppb	0 ppb	By-products of drinking water chlorination.
HAA5 Haloacetic	7.63 ppb	N.A.	No	60 ppb	0 ppb	By-products of drinking water Chlorination.

Action Levels (AL) control Copper and Lead. If the 90th percentile exceeds the Action Level, specific corrective actions are required.

No lead or copper samples were found to have levels in excess of the Action Level. **Thirty Warren County samples were taken in 2014.**

Substance	Level Detected	Range	MCL	MCLG	Sources	Number of Samples Greater Than Action Level
Copper	223 ppb (90 th percentile)	N/A	AL = 1300 ppb	1300 ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	0
Lead	<5.0 ppb (90 th percentile)	N/A	AL = 15 ppb	0 ppb	Corrosion of household plumbing; natural deposits.	0

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

Definitions for all tables:

MCL = Maximum Contaminant level – The highest level of a contaminate that allowed in drinking water. MCL’s are set to the very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

MCLG = Maximum contaminate level goal – The level of contaminant in drinking water below which there is no known or expected risk to health.

AL = Action Level – The concentration of a contaminant which triggers a treatment or other requirements which a water system must follow as required by the OEPA.

Picocuries per liter (pCi/L)= A common measure of radioactivity

MRDL= Maximum Residual Disinfectant Level, the highest level of disinfectant allowed in drinking water

ppm= Parts per million- corresponds to one second in 11.5 days ppb=parts per billion, corresponds to one second in 31.7 years

< less than symbol N/A and n/a, not applicable Total Chlorine Residual MCL is MRDLG less than 4 ppm

All 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 the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the

Environmental Protection Agency’s Drinking Water Hotline at 1-800-426-4791.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The cost of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. *Visit our website: www.waynesville-ohio.org*