



Waynesville Water- 2008 Annual Quality Report

Published 2009

We are pleased to provide you this year's **Annual Water Quality Report**. This 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. 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 Buried Valley Aquifer. Water is supplied from four (4) 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.

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 our utility department at (513) 897-3200. If you want to learn more, please attend any of our regularly scheduled meetings. Our Village council meets 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 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 results of our monitoring for the period of January 1st to December 31st, 2008. (Unless noted otherwise)

Test Results							
Contaminant	Violation	Level Detected	MCL	MCGL	Range of Detection	Date	Likely Source of Contamination
Regulated Inorganic Contaminants							
Fluoride	None	<0.50 ppm	4	4	<0.50 ppm	06/19/07	Erosion of natural deposits: water additive which promotes strong teeth; discharge from fertilizer and aluminum plant
Nitrogen, Nitrate+Nitrite	None	2.10 ppm	10	10	2.10 ppm	07/30/08	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Lead and Copper							
Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90 th percentile of each ranking is determined. If the 90 th percentile exceeds the Action Level, specific corrective actions are required. None of our 90 th percentiles exceeded the Action Levels. Ten samples were taken in 2006.							
Lead	None	6.0 ppb	15 ppb	0	<5.0 to 13.31 ppb	9/12/06	Corrosion of household plumbing systems; Erosion of natural deposit.
Copper	None	229 ppb 90 th Percentile	1300 ppb	1300 ppb	<5.0 to 269 ppb	9/12/06	Corrosion of household plumbing systems; Erosions of natural deposit. Leaching from wood preservatives.
UN regulated Volatile Compounds							
Bromodichloro methane	None	3.17 ug/L	N/A	N/A	3.17 ug/L	08/14/07	Disinfectant byproducts
Bromoform	None	1.2 ug/L	N/A	N/A	1.2 ug/L	08/14/07	Disinfectant byproducts
Chloroform	None	1.7 ug/L	N/A	N/A	1.7 ug/L	08/14/07	Disinfectant byproducts
Dibromochloro methane	None	3.2 ug/L	N/A	N/A	3.2 ug/L	08/14/07	Disinfectant byproducts
Residual Disinfectant							
Total Chlorine	None	1.01 ppm	MRDL= 4ppm	MRDL= 4ppm	1.05-.85 ppm	2008	Water additive used to control microbes

Definitions for table:

- MCL = *Maximum Contaminant level* – The highest level of a contaminate that allowed in drinking water.
- 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.
- MRDL = *Maximum Residual Disinfectant Level*
- ppm = *Parts per million* ug/l = *micrograms per liter* ppb = *Parts per Billion* < = *less than*

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.

Additional Water Source

From time to time, the Village of Waynesville will purchase water from the Warren County water department. This water source is located in northwest Warren County. It is bordered by Trenton-Franklin Road on the north, Twin Creek on the west, the Great Miami River on the south, and the Conrail tracks on the east. 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.

Detected Contaminants						
Substance	Highest Level Detected	Range of Detection	Violation	MCL	Ideal Goals (MCLG)	Sources of Substances
**Fluoride	1.06 ppm	0.81 to 1.06 ppm	No	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
* Nitrate/ Nitrite	2.78 ppm	2.78 ppm	No	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Chlorine	.90ppm	0.20 to .80 ppm	No	4.0 ppm	4.0 ppm	Element used for disinfection.
**Total Trihalo- methanes	7.840 ppb	15.30 - 31.34 ppb	No	80 ppb	0 ppb	By-products of drinking water chlorination.
Total HAA5 Haloacetic acids	<6.00 ppb	<6.00 ppb	No	60 ppb	0 ppb	By-products of drinking water chlorination

*The Ohio EPA sometimes requires us to monitor certain contaminants once per year. The value is the maximum detected concentration for the sample taken in 2008.
 ** The Ohio EPA requires that a minimum concentration of 0.8 ppm be maintained in fluoridated drinking water. The concentration was less than 0.8 ppm for (1) day because of equipment and operational problems.

Lead and Copper						
Action Levels (AL) control Copper and Lead. Samples are collected and ranked by how much lead or copper they contain. The 90 th percentile of each ranking is determined. If the 90 th percentile exceeds the Action Level, specific corrective actions are required. None of our 90 th percentiles exceeded the Action Levels. Thirty samples were taken in 2008.						
Substance	Detected	Range	MCL	MCLG	Sources	Number of Samples Greater Than Action Level
Copper	173 ppb 90 th percentile	24.6 to 398 ppb	AL = 1300 ppb	1300 ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	0
Lead	3.5 ppb 90 th percentile	<2.0 to 11 ppb	AL = 15 ppb	0 ppb	Corrosion of household plumbing; natural deposits.	0

No microbiological contaminants were detected in 300 routine samples.
 The average water hardness was 20 grains per gallon.
 SOC sample results were all below detectable limits.

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



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