

CITY OF WILLARD
WATER TREATMENT PLANT
Drinking Water Consumer
Confidence Report (CCR)
For 2017

The Willard Water Treatment Plant has prepared the following report and is pleased to provide this information to you, the consumer, about the quality of our drinking water, which has shown measurable improvement this year. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

The Willard Water Treatment Plant is proud to inform you that we did not have any violations during the 2017 monitoring period. Our water meets or exceeds all federal and state requirements. **We have a current, unconditional license to operate our water system.**

Our water system supplies drinking water to approximately 9255 area residents of Willard, Celeryville, New Haven, the Village of Plymouth and to rural area customers.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. Each year the City of Willard completes many capital improvement projects. These capital improvement projects include up-grades or additions to our existing distributions system, repairs or replacement of equipment, and machinery needed to produce the quality of water that you expect.

The Willard Water Treatment Plant receives its source water from the West Branch of the Huron River. Water is pumped into the Willard Up-ground Reservoir, which is 3 miles East of Willard. These two bodies of water are considered to be surface water sources. This is where our treatment process begins.

The City of Willard public water system uses surface water drawn from an intake on the West Branch of the Huron River. For the purpose of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. By their nature, surface waters are readily accessible and can be contaminated by chemicals and pathogens which may rapidly arrive at the public drinking intake with little warning or time to prepare. The City of Willard's drinking water source protection area contains potential contaminant sources such as agriculture, above ground storage tanks, home construction, septic systems, wastewater treatment discharges, commercial and industrial sources, junkyards, roadways and railways.

The City of Willard's public water system treats the water to meet water quality standards, but no single treatment technique can address all potential contaminants. The potential for water quality impacts can be further decreased by implementing measures to protect the West Branch of the Huron River. More detailed information is provided in the City of Willard's Drinking Water Source Assessment report, which can be obtained by calling Scott Pifher, or Bob Niedermier at 419-933-4001.

The sources of drinking water (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 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 result 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 amounts 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.

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 Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than others in 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 infection. 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 (1-800-426-4791)

The EPA requires regular sampling to ensure drinking water safety. The Willard Water Treatment Plant conducts sampling for bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminant sampling from January 1 to December 31, 2017. Samples were collected for a total of 123 different contaminants, none of which were detected in significant measure in the Willard Water Plant water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

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. The Willard Water System is responsible for providing high quality drinking water, but does not 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>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your homes water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-425-4791).

Public participation and comment are encouraged at regular meetings of the Willard City Council, which meets the first and third Mondays at 7:30 PM in Willard City Hall Council Chambers. For more information on your drinking water contact Scott Pifher, or Bob Niedermier at (419-933-4001) Monday thru Friday between the hours of 7AM to 3PM.

The following is a list of definitions and terms used in this report:

Turbidity: This is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration systems. The turbidity limit set by the EPA is .3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table the Willard Water Plant's highest recorded turbidity result for 2017 was .19 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%

Maximum Contaminant Level Goal (MCLG): 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.

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Parts per Million (ppm) or milligrams per liter (mg/l): Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days. Parts per Billion (ppb) or micrograms per liter (µg/l) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

Action level (AL): The concentration of a contaminant which if exceeded triggers treatment or other requirements which water systems must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

The “<” symbol: A symbol, which means ‘less than’. A result of “<5” means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Picocuries per liter (pCi/L): Picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU): Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Locational Running Annual Average (LRAA): Sample results added together and then divided by the total number of samples taken for a certain period.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectant to control microbial contamination.

The following is information on those contaminants that were found in the Willard Water System Drinking water for the year 2017.

CONTAMINANTS	UNITS	MCLG	MCL	Level Found	Range of Detection's	Violation	Sample Year	Typical Source of Contaminants
MICROBIOLOGICAL CONTAMINANTS								
Turbidity	NTU	N/A	TT	.11	.04 - .19	NO	2017	Soil runoff
Turbidity (% Meeting Standard)	NTU	N/A	TT	**	**	NO	2017	
	** Turbidity is the measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. Turbidity limit set by the EPA is {0.3 NTU} in 95% of the daily samples & shall not exceed 5 NTU at any time. As reported above, Willard's highest recorded turbidity result for 2017 was 0.19 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%. We were within range 100% of the time.							
Total Organic Carbon		N/A	TT	1.21	1.00 - 3.08	NO	2017	Naturally present in the environment
	The value reported under "Level Found" for Total Organic carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.							
RADIOACTIVE CONTAMINANTS								
No detects	pCi/L						2012	Erosion of natural deposits
INORGANIC CONTAMINANTS								
Fluoride	ppm	4	4	1.06	.76 - 1.16	NO	2017	Erosion of natural deposits, water additive which promotes strong teeth; discharge from fertilizer factories.
Nitrate	ppm	10	10	1.16	<.10 - 1.16	NO	2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium	ppm	2	2	.034	N/A	NO	2017	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Lead	ppb	0	AL=15	2.0	N/A	NO	2017	Corrosion of household plumbing systems; erosion of natural deposits
	Zero (0) out of twenty-one samples was found to have lead levels in excess of the Action Level of 15 ppb							
Copper	ppm	1.3	AL=1.3	.036	N/A	NO	2017	Corrosion of household plumbing systems; erosion of natural deposits
	Zero (0) out of twenty-one samples was found to have copper levels in excess of the Action Level of 1.3 ppm							
SYNTHETIC ORGANIC CONTAMINANTS (Including Pesticides and Herbicides)								
Simazine	ppb	4	4	.082	N/A	NO	2017	Herbicides runoff
VOLATILE ORGANIC CONTAMINANTS								
Total Trihalomethanes (TTHM)	ppb	0	80 LRAA	51 LRAA	22.3 - 54.4	NO	2017	By-products of drinking water chlorination
Total Haloacetic Acids (HAA5)	ppb	0	60 LRAA	28.0 LRAA	10.6 - 28.2	NO	2017	By-products of drinking water chlorination
RESIDUAL DISINFECTANTS								
Total Chlorine Residual	ppm	MRDLG 4	MRDL 4	1.79	1.58 - 2.18	NO	2017	Water additives used to control microbes

