

DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2020

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Bowerston Water Department is pleased to present this year's Annual Water Quality Report. This report is required as part of the Safe Drinking Water Act and is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We want you to understand our efforts to continually improve the water treatment process and protect our water sources.

WHERE DOES THE WATER COME FROM?

Our water source is ground water from three (3) wells located near the Bowerston Park. The water treatment plant is also located in that area. *Chlorine is added there.* Our distribution system has three (3) storage tanks, each with a capacity of 100,000 gallons, at the following locations: 1) outside the Bowerston corporation off Plum Run Road off Harrison CR 8; 2) near Conotton at the L J Smith plant off SR 151; and 3) outside the Leesville corporation on Azalea Road off Carroll CR 22.

We have a current, unconditioned license to operate our water system.

SOURCE WATER ASSESSMENT

The Ohio EPA completed a study of the Bowerston Water Department's drinking water source to identify potential sources of contamination and to provide guidance on protecting the drinking water supply. According to the study, the aquifer (water-rich zone) that supplies water to the consumers within our distribution system has a *moderate* susceptibility to contamination. This determination was based on the following characteristics: *Presence of a relatively thin layer of clay/shale/other overlying the aquifer; no evidence to suggest that groundwater has been impacted by any significant levels of chemical contaminants from human activity; presence of significant potential contaminant sources in the protection area.* This means that under currently existing conditions, the possibility for contamination of the aquifer is not excessive. The likelihood of contamination can be minimized by implementing protective measures. This report can be seen at the Village Garage at 106 Boyce Drive. Call 740-269-9252 for information.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

The sources of drinking water (both tap & bottled water) include rivers, lakes, streams, ponds, springs, reservoirs, and wells. As water travels over the surface of the land or through the ground, it dissolves the naturally-occurring minerals and, in some cases, radioactive material, and it 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, which may come from wastewater 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 storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; *Pesticides & herbicides*, which may come from a variety of sources such as agriculture, urban storm 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 storm water runoff, and septic systems; *Radioactive contaminants*, which can be natural-occurring or the result of oil & gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. This does not necessarily indicate that the water you drink poses a health risk. To ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food & Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

DESCRIPTION OF WATER TREATMENT PROCESS

Your water is treated by disinfection which involves the addition of chlorine or other disinfectant to kill dangerous bacteria and micro-organisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

year of this report. Unless otherwise noted, the data presented in this table is from testing done in 2020. Although many more 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..

Contaminants	MCLG/	MCL/	Level	Range		Violation?	Sample	Typical Source
	MRDLG	MRDL	Found	Lo	Hi	Y/N	Year	
<u>Inorganic Contaminants</u>								
Nitrate (ppm)	10	10	<0.1	NA		N	2020	Runoff from fertilizer use:
Chromium (ppb)		100	1.48	NA		N	2018	Leaching from
Selenium (ppb)		50	1.00	NA		N	2018	septic tanks, sewage: Erosion of natural deposits
Fluoride (ppm)		4	0.21	NA		N	2018	Erosion of natural deposits: Additive which promotes strong teeth
Lead (ppb)		15	6.59	NA		N	2020	Corrosion of household Plumbing systems
Copper (ppm)		1.3	0.0938	NA		N	2020	Erosion of natural deposits
Barium (ppm)		2	0.01	NA		N	2018	Discharge of drilling waste; Erosion of natural deposits
<u>Disinfectants and Disinfectant By-Products</u>								
<i>(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)</i>								
Total								
Trihalomethanes	NA	80	27.1	11.6 – 27.1		N	2020	By-product of drinking water disinfection
TTHM (ppb)								
Total Haloacetic Acids		60	15.8	9.41 – 15.8		N	2020	
HAA5 (ppb)								
Total Chlorine (ppm)	4	4	1.41	NA		N	2020	Additive used to Control microbes
<u>Microbiological Contaminants</u>								
Total Coliform	0	1	0	NA		N	2020	Naturally present in the environment

Definitions for terms and abbreviations used in this report:

MCL (Maximum Contaminant Level) The highest level of contaminant allowable in drinking water.

MCLG (Maximum Contaminant Level Goal) The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level) The highest residual disinfectant level allowed.

MRDLG (Maximum Residual Disinfectant Level Goal) The level in drinking water below which there is no known or expected health risk.

ppm (parts per million) One part per million corresponds to one ounce in 7350 gallons of water.

ppb (parts per billions) One part per billion corresponds to one ounce in 7,350,000 gallons of water.

NA ~ Information is not available or not applicable.

For more information about your drinking water, you may contact Village Administrator Bart Busby at 740-269-9252. Also, Bowerston Village Council currently meets at the Park Community Building on the third Tuesday of each month at 6:00 PM. Public participation is encouraged.

WHO NEEDS TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer, undergoing chemotherapy; those who have undergone organ transplants; those with HIV, AIDS, or other immune system disorders; and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* or other microbial contaminants are available from the EPA Safe Drinking Water Hotline (800-426-4791) or at www.epa.gov/safewater.

INFORMATION ON LEAD

Elevated levels of lead, if present, 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. Bowerston Water Department 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 at www.epa.gov/safewater/lead or from the Safe Drinking Water Hotline.

SOURCE WATER PROTECTION TIPS

Protection of drinking water is everyone's responsibility. Here are some ways that you can help protect your community's drinking water source:

- *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 the system to reduce leaching to water sources.
- *Dispose of chemicals properly. Take used motor oil to a recycling center.

WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 100 gallons per person per day? There are many low-cost or no-cost ways to conserve water. Small changes can make a big difference.

- *Take short showers ~ a 5-minute shower uses 4-5 gallons compared to up to 50 for a bath.
- *Install a water-efficient showerhead ~ save up to 750 gallons per month.
- *Run your clothes washer and dishwasher only when full ~ save up to 1000 gallons per month.
- *Fix or replace leaky toilets and faucets ~ save more than 1000 gallons per month.
- *Teach 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 for more information.

MONITORING YOUR DRINKING WATER

The Ohio EPA requires regular sampling and testing to ensure drinking water safety. Sampling for bacteria (coliform) is done monthly. The results of all bacteriological tests done on Bowerston water samples collected during 2020 were negative (safe). The water is chlorinated on a continuous basis and is tested daily for chlorine residual. Sampling for radiological, inorganic, synthetic organic chemicals (SOC's) and volatile organic chemicals (VOC's) is done at intervals as required by the EPA or the State. Many of these tests are not required to be done every year because concentrations of certain contaminants do not vary significantly from year to year, or because the system is not considered vulnerable to these types of contamination. *Most contaminants listed by the EPA for monitoring have not been detected in Bowerston water*