Annual Drinking Water Quality Report
Town of Bowling Green, VA Water Supply

INTRODUCTION

This Annual Drinking Water Quality Report for calendar year **2018** is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH). If you have questions about this report, want additional information about any aspect of your drinking water, or want to know how to participate in decisions that may affect the quality of your drinking water, please contact Billy Deavers, Director of Public Works at (804) 221-1834.

GENERAL INFORMATION

Drinking water, including bottled drinking 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 can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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/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 (800-426-4791).

The sources of drinking water (both tap and bottled) include wells, rivers, lakes, and springs. As water travels over the surface of the land or through the ground, it may pick up substances, including: microbial contaminants (bugs), inorganic chemical contaminants (salts and metals), organic chemical contaminants (natural and synthetic), and/or radioactive contaminants. To ensure that tap water is safe to drink, the US EPA prescribes and the Virginia Department of Health enforces regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration and Virginia Department of Agriculture address bottled water.

SOURCE(S) AND TREATMENT OF YOUR DRINKING WATER

The Town of Bowling Green water system consists of three drilled wells; a 60,000 gallon elevated storage tank, a 100,000 gallon elevated storage tank, a 200,000 gallon ground storage tank with two booster pumps and a hypochlorination system. The water system uses hypo-chlorination to disinfect the water prior to the water going out for distribution. In 2018, the chlorine residual at the wells ranged from .20 to 2.13 ppm and in the distribution system it ranged from .20 to 2.00 ppm.

DEFINITIONS

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The tables on the next page show the results of our monitoring. In the tables and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

Non-detects (ND) - lab analysis indicates that the contaminant is not present

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

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

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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

Maximum Contaminant Level, or MCL - 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.

Maximum Contaminant Level Goal, or 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.

Level 1 Assessment - A Level 1 assessment is a study of the waterworks to identify potential problems and determine, if possible, why total coliform bacteria have been found in our waterworks.

Level 2 Assessment - A Level 2 assessment is a very detailed study of the waterworks to identify potential problems and determine, if possible, why an E. coli PMCL violation has occurred and why total coliform bacteria have been found in our waterworks on multiple occasions.

WATER QUALITY RESULTS

I. Microbiological Contaminants

Contaminant	Level Allowed	No. of Samples	Violation/Assessment(Y/N)	Mon & Yr	Typical Source of Contamination
Total Coliform Bacteria	Presence of coliform bacteria in one sample per month	0	N	2018	Naturally present in the environment
E. coli Bacteria	One unconfirmed sample per month.	0	N	2018	Human and animal fecal waste

II. Lead and Copper Contaminants

Contaminant	Units of Measurement	Action Level	MCLG	Results of Samples for the 90th Percentile Value	# of Sampling Sites Exceeding Action Level	Action Level Exceeded (Y/N)	Mon & Yr of Sample	Typical Source of Contamination
Lead	ppb	15	0	1.3	0	N	08/2016	Corrosion of household plumbing systems.
Copper	ppm	1.3	1.3	0.04	0	N	08/2016	Corrosion of household plumbing systems.

Lead Education Statement

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 Town of Bowling Green 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 15 to 30 seconds or until it becomes cold or reaches a steady

temperature before using water for cooking or drinking. 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 *http://www.epa.gov/safewater/lead.*

III. Other Chemical and Radiological Contaminants

Contaminant	Units of Measure	MCLG	MCL	Level Detected	Range of Detection at Sampling Points	Violation Y/N	Mon & Yr of Sample	Typical Source of Contamination
Nitrate	ppm	10	10	ND		N	7/24/18	Erosion of natural deposits, or fertilizers.
Fluoride	ppm	4	4	0.3	.3-0.3	N	2017	Erosion of natural deposits. OR Water additive which promotes strong teeth.
Gross Alpha	pCi/L	0	15	7.	4-7	N	2014-2017	Decay of natural minerals.
Combined Radium	pCi/L	0	5	2	0-2	N	2016	Decay of natural & man-made minerals.
Total Tri-halomethanes	ppb	ND	80	7.7	7.7	N	2017	By-product of drinking water chlorination
Haloacetic Acids	ppb	N/A	60	ND		N	9/2018	By- product of drinking water chlorination

We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. The tables list only those contaminants that had some level of detection. Many other contaminants have been analyzed but were not present or were below the detection limits of the lab equipment. The state allows 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.

MCLs are set at very stringent levels by the U.S. Environmental Protection Agency. In developing the standards EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

VIOLATION INFORMATION
Your water system did not have any violations during 2018.
The Town of Bowling Green Public Utilities Department
219 Anderson Avenue
Bowling Green, VA 22427
(804) 633-9474
e-mail: Bdeavers@townofbowlinggreen.com