

# Annual Drinking Water Quality Report

MD0050201

BENEDICTINE SCHOOL

Annual Water Quality Report for the period of January 1 to December 31, 2023

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

Name Mr. Carlton Pippin

Phone 410-829-3860

BENEDICTINE SCHOOL is Ground Water

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

## Sources of Drinking Water

The sources of drinking water (both 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 resulting from the presence of animals or from human activity.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage 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 water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water 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 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 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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 from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

***Annual Drinking Water Quality Report***  
The Benedictine School --- ID #: MD 005-0201  
January 1, through December 31, 2023

Page 1 of 9

We are pleased to present to you this year's Annual Water Report. This report is designed to inform you about water quality and services we deliver to you every day. Our constant goal is to provide you with a dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Our water source is from ground water that is drawn from two wells in the Aquia Aquifer and the Federalsburg Aquifer. If you have any questions about this report or concerning your water utility, please contact Mr. Carlton Pippin at 410-829-3860. We want our school personnel, parents and students to be informed about their water utility.

We routinely monitor for contaminants in your drinking water according to State and Federal laws. The test results that are shown are for the year 2023 unless otherwise noted. As water travels over the land or underground it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. Below you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

*Non-Detects (ND)* - Laboratory analysis indicates that the constituent 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.

Page 2 of 9

*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.

*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.

*Maximum Contaminant Level* - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

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

Nitrate: When Nitrate is above half of the MCL (above 5 mg/l) "Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider."

## TESTS RESULTS BENEDICTINE SCHOOL 2023 WELLS #3 AND #5

---

Page 3 of 9

Contaminant	MCLG	MCL	Violation Y/N	Level Detected	Unit	Likely Source of Contamination
<b>Microbiological:</b>						
Total Coliform Bacteria	Presence of coliform bacteria in 1 monthly sample	0	N	< 1	100/ml	Naturally present in the environment
Fecal coliform and E. coli	A routine sample and repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive	0	N	< 1	100/ml	Human and animal fecal waste
<b>Radioactive:</b>						
Bata/photon emitters 5.27.21	0	50	N	5.0	pCi/l	Erosion of natural and deposits man-made deposits
<b>Lead and Copper:</b>						
Copper (2022)	1.3	1.3	N	0.4441	mg/l	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (2022)	0	15	N	0.0010	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.

**Inorganic Contaminates**

Fluoride (2023)	4	4.0	N	1.77	mg/l	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (2023)	10	10	N	3.74	mg/l	Erosion of natural deposits; leaching from septic tanks; sewage, fertilizer runoff.
Arsenic 3.21.23	0	10	N	0.0021	mg/l	Erosion of natural deposits; runoff from orchards; Runoff from glass and electronics production waste.
Barium 3.21.23	2	2	N	0.34	mg/l	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

	<b>MCLG</b>	<b>MCL</b>	<b>Violation Y/N</b>	<b>Level Detected</b>	<b>Unit</b>	<b>Likely Source of contamination</b>
--	-------------	------------	--------------------------	---------------------------	-------------	---

Chromium 3.21.23	0.0070	0.0070	N	ND	ppb	Discharge from steel and pulp mills; Erosion of natural deposits.
---------------------	--------	--------	---	----	-----	---

**Disinfection and  
Disinfection By-  
Products:**

Chlorine (2023)	MRDLG = 4	MRDL = 4	N	1.2	mg/l	Water additive used to control microbes.
-----------------	-----------	----------	---	-----	------	--

5 of 9

Total Trihalomethanes (TTHM) (2021)	No goal for the total	80	N	1.1	ppb	By-product of drinking water disinfection.
--	--------------------------	----	---	-----	-----	---

**Unregulated:**

Sodium (2023 )	n/a	none	N	102	mg/l	Naturally present in the Environment;;by-product of drinking water processes.
----------------	-----	------	---	-----	------	---

Note: Some testing is not required annually.

### Water Quality Test Results:

Definitions: The following tables contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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.

Level 1 Assessment: A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known risk to health. MCLGs allow for a margin of safety.

Level 2 Assessment: A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why E. coli MCL violation has occurred and/or why total coliform have been found in our water system on multiple occasions.

Maximum residual disinfectant level or 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 or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Na: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.

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



## The Benedictine School 2023

Page 7 of 9

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic and organic chemicals and radioactive substances. More information about contaminants and potential health effects can be obtained by contacting the Environmental Protection Agency's Safe Drinking Water Hotline at **1-800-426-4791**.

**MCL's** are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

**Lead:** "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 Benedictine School 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 drinking 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>."

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system.

Page 8 of 9

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 at 1-800-426-4791.

Mr. Pippin and his staff work very hard to provide top quality water to every tap. We ask that all of our residents help us protect our water sources, which are the heart of our community, our way of life and our children's future.

This report was prepared by:

**Donald L. Young**

**Water and Wastewater Operation: 410-490-0382**

### Recommended PFAS Statement for CCR (CY2023)

PFAS – short for per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: <https://mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx>.

The Environmental Protection Agency (EPA) proposed regulations for 6 PFAS compounds in drinking water in March 2023. The MCLs for PFOA and PFOS are proposed to be 4.0 parts per trillion (ppt). The proposal for HFPO-DA (GenX), PFBS, PFNA and PFHxS is to use a Hazard Index of 1.0 (unitless) to determine if the combined levels of these PFAS pose a risk and require action.

The 5<sup>th</sup> Unregulated Contaminant Monitoring Rule (UCMR5) began testing for 29 PFAS compounds and lithium in 2023, and testing will run through 2025. The UCMR5 should test all community water systems with populations of at least 3300 people. Three randomly selected systems in Maryland with populations less than 3300 people will also be tested under the UCMR5. Detections greater than the minimum reporting levels for each constituent should be reported in the CCR.