# WATER QUALITY

**2022 ANNUAL REPORT** 

January 2022 - December 2022



During the entire year of 2022, drinking water was supplied to the Berry College community by the Floyd County Water Department. The Berry Water Treatment Plant was out of service during renovations of the Possum Trot Dam. The data in this report reflects sampling collected from the Berry water distribution system. This annual report is meant to inform you of how our community's drinking water is produced and tested.

As health scientists learn more about our environment and the effect of substances in the environment on human health, new standards will continue to be set for drinking water. Berry College is committed to meeting future standards.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some substances. All water sources, including surface water reservoirs such as ours, are fed by water that passes over the surface of the land or through the ground. The water dissolves naturally occurring minerals and materials, and can pick up substances resulting from the presence of animals or from human activity.

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

Additional information sources include www.awwa.org and www.epa.gov.dw.

Report prepared June 14, 2023 by Chris Peterson.

#### TREATMENT PROCESS

Berry College Waterworks is located on the Mountain Campus. As water from the reservoir reaches the treatment plant, chlorine gas and aluminum sulfate are added. Chlorine is a powerful disinfectant and also helps to remove iron and manganese. Aluminum sulfate is a coagulant that binds together finely divided particles, making them more dense so that they will settle. The settled water is then filtered to further remove any particles that did not settle.

Sodium carbonate is added to the filtered water to adjust the pH. Fluoride is added to the filtered water to prevent tooth decay. Phosphate is also added to the filtered water to inhibit corrosion within the distribution system. Approximately 750,000 gallons of water are stored in the tanks at the water plant. The college uses approximately 300,000 gallons per day. The per capita water use in 2022 was 110 gallons per day.

#### **FILTER PERFORMANCE**

Turbidity is a measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

#### MONITORING WAIVER

As authorized by Georgia EPD, our system has reduced monitoring requirements for certain contaminants to less often than once per year because the concentration of these contaminants is not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

#### SUBSTANCES THAT MAY BE PRESENT IN SOURCE WATER

- Microbiological contaminants such as viruses and/or bacteria that come from sewage treatment plants, septic systems, agricultural operations and wildlife.
- Inorganic contaminants such as salts and metals which can be naturally occurring or result from industrial or domestic wastewater discharges.
- Pesticides and herbicides may come from agricultural activities, urban storm water runoff or residential use.
- Organic chemicals including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production.
- Radioactive material can be naturally occurring, the result of mining or oil and gas production.

#### NOTICE TO IMMUNO-COMPROMISED PEOPLE

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, persons 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 from their health care providers about safe drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available by calling the EPA Safe Drinking Water Hotline (1-800-426-4791).

## **DEFINITION OF REPORT ACRONYMS**

#### MCL

Maximum Contaminant Level. 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.

#### MCLG

Maximum Contaminant Level Goal. 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.

#### MRDL

Maximum Residual Disinfectant Level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants.

#### ΑĪ

Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

#### **MRDLG**

Maximum Residual Disinfectant Level Goal. 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 disinfectants to control microbial contaminants.

#### **PPM**

Parts per million means 1 part per 1,000,000 (same as milligrams per liter) and corresponds to one minute in two years, or one penny in \$10,000.

#### PPB

Parts per billion means 1 part per 1,000,000,000 (same as micrograms per liter) and corresponds to one minute in 2,000 years, or one penny in \$10,000,000.

#### N/A

Not applicable or this item does not apply to our report.

# **DRINKING WATER ANALYSIS**

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DETECTED INORGANIC CONTAMINANTS TABLE							
SUBSTANCE TESTED AND DETECTED	MCL	MCLG	AMOUNT DETECTED (Results)	RANGE OF DETECTION	SAMPLE DATE	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Fluoride (ppm)	4 ppm	4 ppm	.75 ppm	.61 to .89 ppm	JAN-DEC 2022	No	Water additive that promotes strong teeth
Chlorine (ppm)	4 ppm	4 ppm	.21 ppm	.08 to .45 ppm	JAN-DEC 2022	No	Water additive that controls microbes
DETECTED ORGANIC CONTAMINANTS TABLE							
SUBSTANCE TESTED AND DETECTED	MCL	MCLG	AMOUNT DETECTED (Results)	RANGE OF DETECTION	SAMPLE DATE	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Total Trihalomethanes (ppb)	80 ppb	N/A	46 ppb	31 to 67 ppb	JAN-DEC 2022	No	Byproducts of drinking water chlorination
LEAD AND COPPER MONITORING RESULTS							
SUBSTANCE TESTED AND DETECTED	MCL	MCLG	AMOUNT DETECTED (Results)	RANGE OF DETECTION	SAMPLE DATE	VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	15 ppb	0	0 ppb	0	AUGUST 2022	No	Corrosion of household plumbing
Copper (ppm)	1.3 ppm	1.3	.01 ppm	.01 to .02	AUGUST 2022	No	Corrosion of household plumbing

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. Berry College Waterworks 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 two 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 <a href="https://www.epa.gov/safewater/lead">www.epa.gov/safewater/lead</a>.



# IMPORTANT INFORMATION ABOUT THE QUALITY OF YOUR DRINKING WATER

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration's regulations establish limits for contamination in bottled water that must provide the same protection for public health.

## **SOURCE OF WATER**

Berry College's source of water is the Possum Trot Reservoir. The reservoir is a 52-acre man-made lake created in 1931. It is a surface water source located on Lavender Mountain near the Mountain Campus of Berry College. Since the reservoir is located in the center of the wildlife management area, it is not subject to pollution from industrial or agricultural development. Possum Trot Reservoir is an excellent source of water and will be able to supply the college for many years to come.

EPA Safe Drinking Water Hotline 1-800-426-4791