

WATER QUALITY REPORT

20
22



Bull Run Mountain
& Evergreen
System (6153050)

A MESSAGE FROM THE GENERAL MANAGER

Dear Customer,

It is impossible to reflect on the past year without acknowledging the impact that the COVID-19 Pandemic has had on our community and the challenges we have all faced. Even during these unprecedented times, you can remain confident in the quality of the water you receive as a Prince William County Service Authority customer.

As you will see in this year's Water Quality Report, the Service Authority once again met all federal and state water quality requirements for calendar year 2021, the most recent regulatory period. This high standard is in keeping with our mission to be a nationally acclaimed leader in providing clean water and excellent customer service through sustainable, innovative business practices, community partnerships and environmental stewardship.

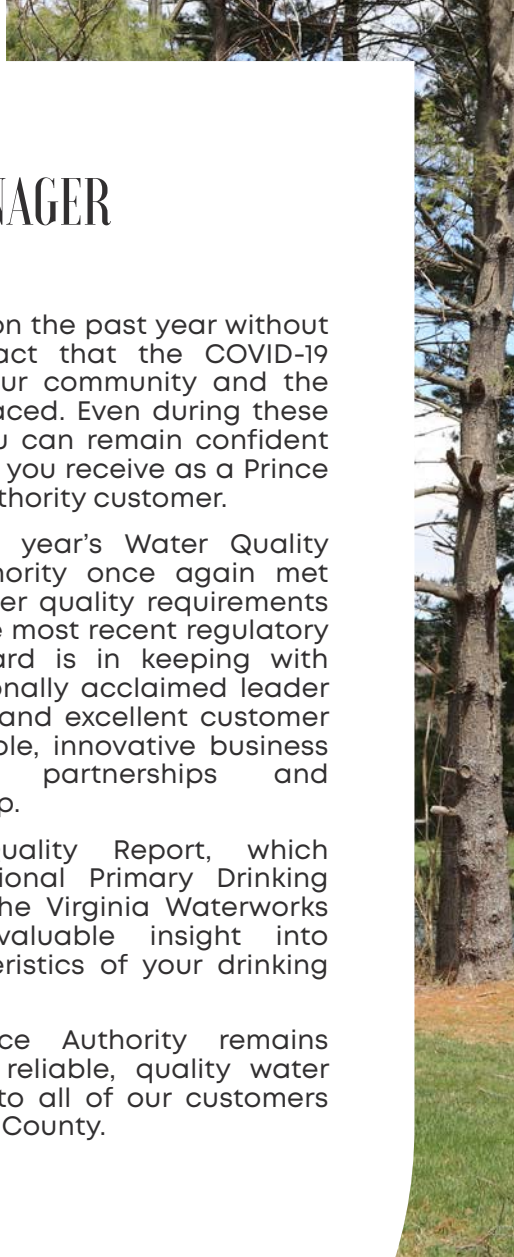
This annual Water Quality Report, which is required by the National Primary Drinking Water Regulations and the Virginia Waterworks Regulations, provides valuable insight into the source and characteristics of your drinking water.

Be assured, the Service Authority remains committed to providing reliable, quality water and exceptional service to all of our customers throughout Prince William County.

Sincerely,

A handwritten signature in black ink, appearing to read "Cal Farr", written in a cursive style.

Calvin D. Farr, Jr.
General Manager/CEO





THE SOURCE OF YOUR DRINKING WATER

Your drinking water is withdrawn from six groundwater wells located throughout the Bull Run Mountain and Evergreen Water System. The well system provides an average of 92,000 gallons of water per day for customers living on Bull Run Mountain and in Evergreen. The Service Authority has operated the groundwater well system since 1990.

SOURCE WATER ASSESSMENT SUMMARY

Drilled groundwater wells, such as those in the Bull Run Mountain and Evergreen Water System, can be susceptible to contamination if sources of contamination exist within the recharge area of the well, and if geology and well construction could allow that contamination to enter the source.

The Virginia Department of Health conducted a Source Water Assessment of the Bull Run Mountain and Evergreen wells that identified sources of contamination that could potentially impact the drinking water, such as septic systems and drainage from certain land use activities. However, the wells are constructed to a standard that guards the water against contamination from activities above ground. As mentioned elsewhere in this report, Service Authority's water continues to meet all federal and state requirements.

The Service Authority is committed to protecting its drinking water sources. If you observe illegal dumping of waste, motor oil and other potential contaminants, report it immediately to our Regulatory Affairs Office (contact information below). Please keep the safety of your water supply in mind when applying fertilizers, herbicides and pesticides to your lawn or when disposing of chemicals. For more information about the sources of your water or a copy of the Source Water Assessment, contact the Regulatory Affairs Office at (703) 331-4162 or water_quality@pwcsa.org.



The background is a close-up of blue water with white foam from a wave. A thin white line runs horizontally across the top, with a white dot on the left, a yellow dot in the middle, a blue dot to the right of the yellow, and a grey dot further right. Below this line is a large white shield-like shape with a curved bottom, containing the text.

SPECIAL PRECAUTIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as people with cancer undergoing chemotherapy, individuals who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, senior citizens and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers. Environmental Protection Agency (EPA) guidelines about reducing the risk of infection by microbial contaminants can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.



LEAD IN DRINKING WATER

Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and premise plumbing, which is all plumbing located within the property line with a direct connection to the drinking water supply system. The Service Authority is responsible for providing high-quality drinking water but cannot control the variety of materials used in premise plumbing components.

When water has been sitting in pipes for several hours, you can minimize the potential for lead exposure by flushing your tap with cold water 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 EPA Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER

The sources of tap water include rivers, lakes, streams, ponds, reservoirs, and groundwater. As water moves through the ground, it dissolves naturally occurring minerals and, in some cases, man-made chemicals. Water can also be contaminated by the presence of animal or human activity.

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.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations for public water systems. Please note that drinking water may contain small amounts of some contaminants that do not indicate a health risk. More information about contaminants and potential health effects is available at www.epa.gov/safewater (800) 426-4791.



airs, springs and wells. As water travels over the surface of the land or in some cases, radioactive material, and can pick up substances resulting

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

ns that limit the amounts of certain contaminants in water provided by public some contaminants. The presence of these contaminants does not necessarily health effects can be obtained by calling the EPA Safe Drinking Water Hotline at



Regulated Substances: BRME (6153600)

SUBSTANCE (UNITS)	YEAR SAMPLED	MCLG*	MCL	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2020	2	2	0.31	ND-0.31	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.

Metals testing is conducted every 3 years in accordance with the Virginia Waterworks Regulations.

Nitrate [as Nitrogen] (ppm)	2021	10	10	0.95	ND-0.95	No	Runoff of fertilizers; leaching of septic tanks or sewage; erosion of natural deposits.
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Substance (Units)	YEAR SAMPLED	MCLG	MCL	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	Typical Source
Combined Radium (pCi/L)	2014	0	5	0.565	ND - 0.565	NO	Erosion of natural deposits.

Testing for radiological substances, such as Alpha Emitters and Beta Photon Emitters, is conducted every 9 years in accordance with the Virginia Waterworks Regulations.

SUBSTANCE (UNITS)	YEAR SAMPLED	MCLG	AL	90TH PERCENTILE RESULT	SITES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.71	0	No	Corrosion of household plumbing.
Lead (ppb)	2020	0	15	2.4	0	No	Corrosion of household plumbing.

Lead and copper testing is conducted every 3 years in accordance with the Virginia Waterworks Regulations.

Unregulated Substances: BRME (6153050)

SUBSTANCE (UNITS)	YEAR SAMPLED	MCLG	MCL	AVERAGE	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Sodium (ppm)	2020	N/A	NA	8.40	ND-37.5	No	Runoff of road deicing chemicals; erosion of natural deposits.

Microbiological Testing: No E. coli was detected in the water system during calendar year 2021..

* All abbreviations defined in the Glossary on Page 10.

GLOSSARY

90th Percentile Result

Result from a set of lead and copper samples that is used to determine if the water system will be required to implement additional actions. Action is only required should the 90th Percentile sample be higher than the Action Level listed for either copper or lead.

Action Level (AL)

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements by the water supplier.

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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

ND

Not detected at testing limit.

Picocuries Per Liter (pCi/L)

Measurement of radioactivity.

Parts Per Billion (ppb)

One part substance per billion parts of water (or micrograms per liter).

Parts Per Million (ppm)

One part substance per million parts of water (or milligrams per liter).

WATER TREATMENT PROCESS

Service Authority helps control pipe corrosion by adding sodium hydroxide to the wells in your water system in order to increase pH levels in the water supply. This helps reduce the potential for metals to leach from pipes into the water distribution system and home plumbing.



YOUR WATER

LEARN MORE ABOUT

For more information about your drinking water, please contact the Service Authority's Regulatory Affairs Office at (703) 331-4162 or at water_quality@pwcsa.org.

The Service Authority's Board of Directors meets on the second Thursday of each month in the Board Room of the Raymond Spittle Building, 4 County Complex Court in Woodbridge, Virginia. The date, time and agenda for each upcoming Board Meeting is available at www.pwcsa.org. For more information, please call (703) 335-7900.

Este informe contiene información muy importante sobre su agua potable. Para ver este reporte en español, visite el sitio web en www.pwcsa.org/water-quality/calidad-de-agua.

BULL RUN MOUNTAIN & EVERGREEN WATER SYSTEM



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