

WATER QUALITY REPORT

/2021



○ Bull Run Mountain & Evergreen System (6153050)

A MESSAGE FROM THE GENERAL MANAGER

Dear Valued Customer,

I am pleased to inform you that the Prince William County Service Authority's (PWCSA) water quality testing results for calendar year 2020, or the most recent regulatory period, met all federal and state regulations.

Our annual Water Quality Report, which is required by the National Primary Drinking Water Regulations and the Virginia Waterworks Regulations, gives you an opportunity to take a "deeper dive" into the sources and characteristics of your tap water.

You can have confidence in the drinking water we provide to our customers throughout Prince William County.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Dickey', written in a cursive style.

Dean E. Dickey
General Manager



THE SOURCE OF YOUR DRINKING WATER

Your water is withdrawn from six groundwater wells located throughout the Bull Run Mountain and Evergreen Water System.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, PWCSA's water continues to meet all federal and state requirements.

PWCSA is committed to protecting its drinking water sources. Please report illegal dumping of waste motor oil and other potential contaminants immediately to the PWCSA Environmental Services & Water Reclamation Division (contact information below). Please keep the safety of your water supply in mind when applying fertilizers, herbicides and pesticides to your lawn and disposing of chemicals. If you would like more information about the sources of your water or a copy of the Source Water Assessment, please contact the Regulatory Affairs Office at (703) 331-4162 or by email at water_quality@pwcsa.org.



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, people 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 guidelines on appropriate means to lessen 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

If present, 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. PWCSA 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 online 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. When water runs off the land or through the ground, it dissolves naturally occurring minerals and inorganic up substances resulting from 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.



ers, springs and wells. As water travels over the surface of
s and, in some cases, radioactive material, and can pick
y.

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.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems.

Please note that drinking water may contain small amounts of some contaminants. The presence of these contaminants does not necessarily indicate a health risk.

More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES: BRME (6153050)

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)	2020	10	10	0.97	ND-0.97	No	Runoff of fertilizers; leaching of septic tanks or sewage; erosion of natural deposits.
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.

Microbiological Testing: No E. coli was detected in the water system during calendar year 2020.

UNREGULATED SUBSTANCES: BRME (6153050)

SUBSTANCE (UNITS)	MCLG	MCL	AVERAGE	MINIMUM	MAXIMUM	VIOLATION	TYPICAL SOURCE
Sodium (ppm)	N/A	N/A	8.40	ND	37.5	No	Runoff of road deicing chemicals; erosion of natural deposits.

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

PWCSA 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.



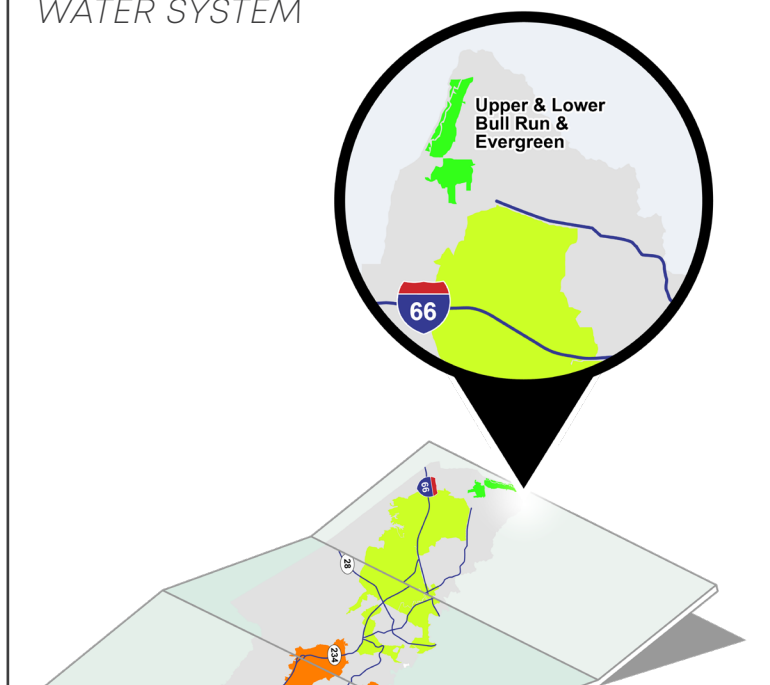
LEARN MORE ABOUT YOUR WATER

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

PWCSA's Board of Directors meets on the second Thursday of each month in the Boardroom of the Raymond Spittle Building at 4 County Complex Court in Woodbridge, Virginia. The date, time and agenda of each upcoming Board Meeting is available on the homepage of PWCSA's website, 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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