2019 WATER QUALITY REPORT

Bull Run Mountain and Evergreen 6153050

A Message from the Director of Environmental Services and Water Reclamation

Dear Valued Customer,

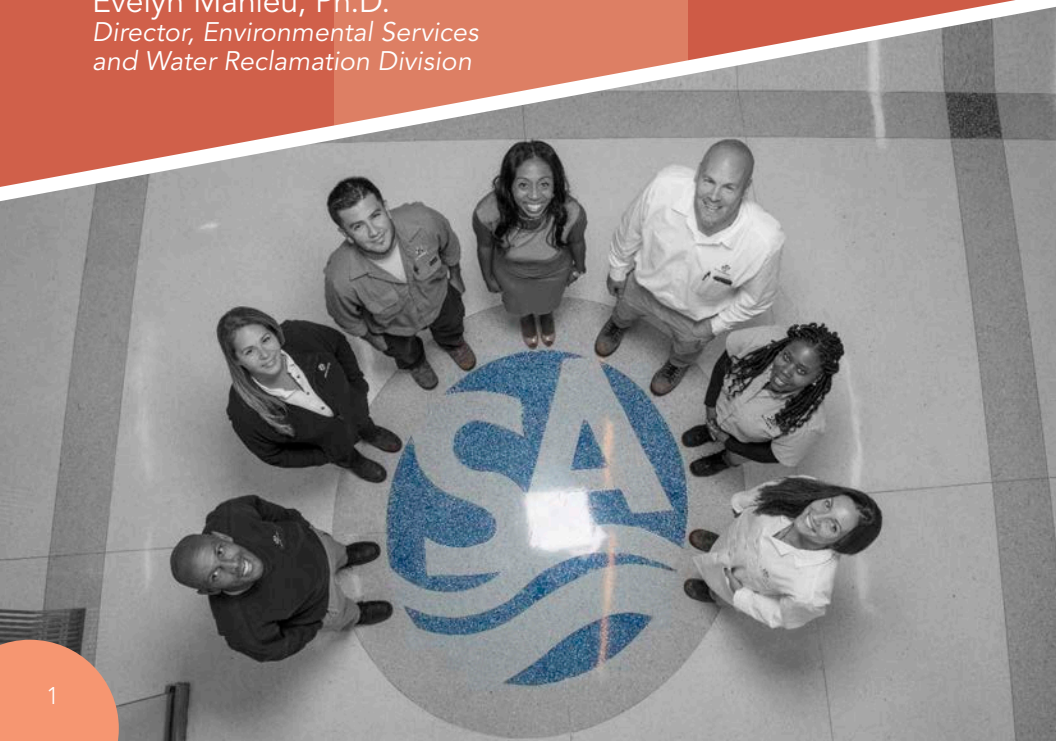
The Prince William County Service Authority (PWCSA) is pleased to present our annual Water Quality Report. The report provides the results of water quality testing performed during calendar year 2018 or the most recent regulatory period. This report is a requirement of the National Primary Drinking Water Regulations and the Virginia Waterworks Regulations. The quality of the water PWCSA provided to you met all federal and state water quality requirements.

We are committed to providing high quality water and reliable service to you and all our customers throughout Prince William County.

Sincerely,

Evelyn Mahieu

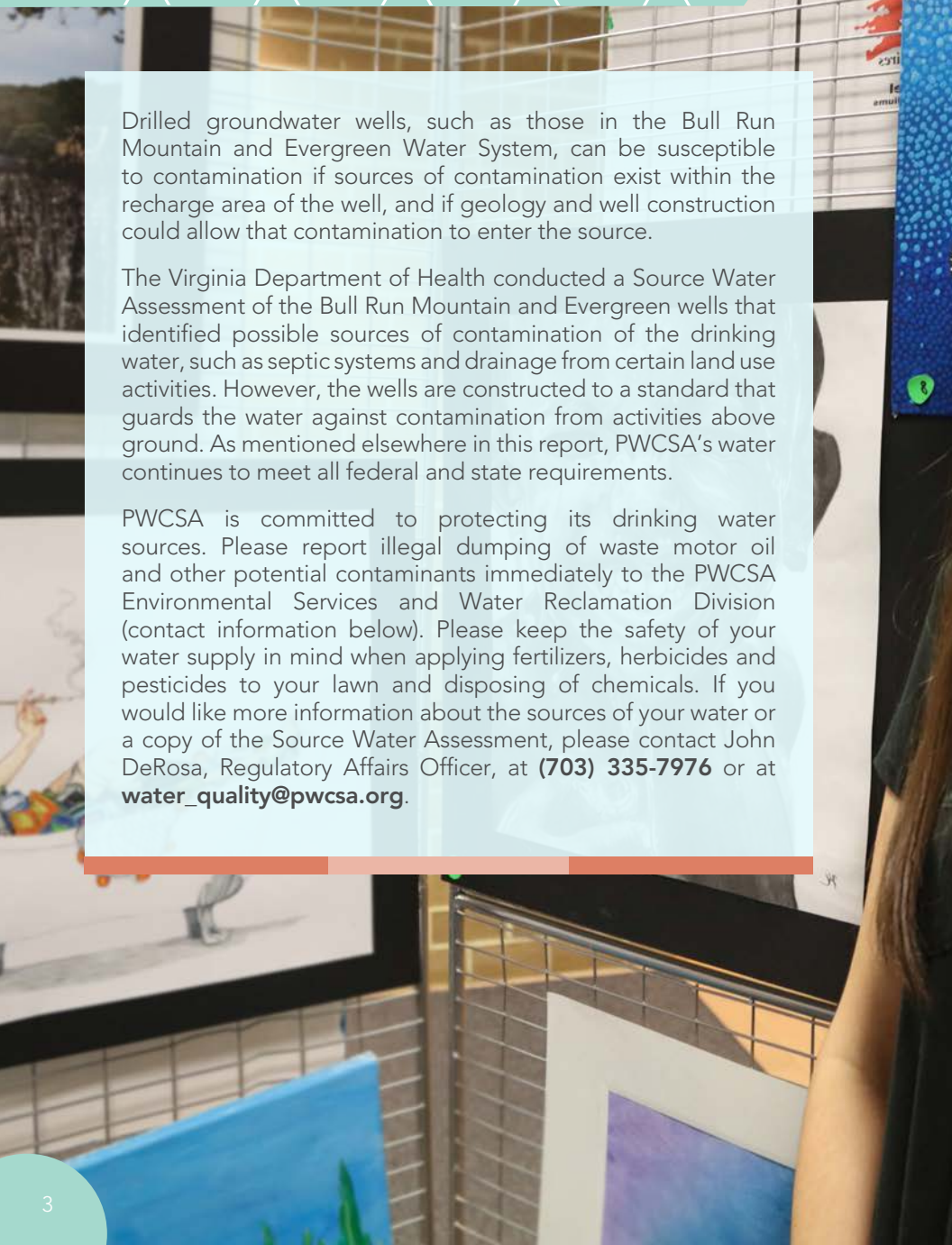
Evelyn Mahieu, Ph.D.
Director, Environmental Services and Water Reclamation Division



THE SOURCE OF YOUR DRINKING WATER

Your water is drawn from six groundwater wells located throughout the Bull Run Mountain and Evergreen Water System. The well system provides an average of 100,000 gallons of water per day for customers living on Bull Run Mountain and at 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 possible sources of contamination of 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 and 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 John DeRosa, Regulatory Affairs Officer, at **(703) 335-7976** or 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 **1-800-426-4791**.

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 potable 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 1-800-426-4791 or at **www.epa.gov/safewater/lead**.

SOURCE WATER

The sources of tap water include rivers, lakes, streams, ponds, reservoirs, s
the ground, it dissolves naturally occurring minerals and, in some cases, ra
of animal or human activity.

CONTAMINANTS THAT MAY BE PRE

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 that limit the amount of certain contaminants in water provided by public water systems.

Please note that drinking water (both tap water and bottled water) may contain small amounts of some contaminants. The presence of these contaminants does not necessarily indicate a health risk.

springs and wells. As water travels over the surface of the land or through
dioactive material, and can pick up substances resulting from the presence

SENT IN SOURCE WATER INCLUDE:

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.

More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at **1-800-426-4791**.

SUBSTANCE (UNITS)	YEAR SAMPLED	MCLG	MCL	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2017	2	2	0.35	ND - 0.36	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Metals testing is conducted every three years in accordance with the Virginia Waterworks Regulations.							
Nitrate (ppm)	2018	10	10	0.48	ND-0.54	No	Fertilizer runoff; leaching of septic tanks or sewage; erosion of natural deposits.
Nitrite (ppm)	2018	1	1	ND	ND-0.03	No	Fertilizer runoff; leaching of septic tanks or sewage; erosion of natural deposits.

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.
Radiological substances such as Alpha Emitters and Beta Photon are monitored 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)	2017	1.3	1.3	0.33	0	No	Corrosion of household plumbing.
Lead (ppb)	2017	0	15	ND	0	No	Corrosion of household plumbing.

Microbiological Testing: Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens like E. coli may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. During September 2018, our routine monitoring found coliforms in two of the three required samples. Therefore, we were required to assess the waterworks to identify potential problems and determine, if possible, why total coliform bacteria have been found in our waterworks. We conducted an assessment of the water system but could not identify the cause of contamination. However, no E. coli was found during our assessment, and the subsequent samples showed no presence of total coliform. PWCSA is committed to producing high quality water for our customers, and is therefore evaluating treatment options to ensure that your water continues to meet our high standards.

- **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).
- **90th Percentile Detection:** 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.

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

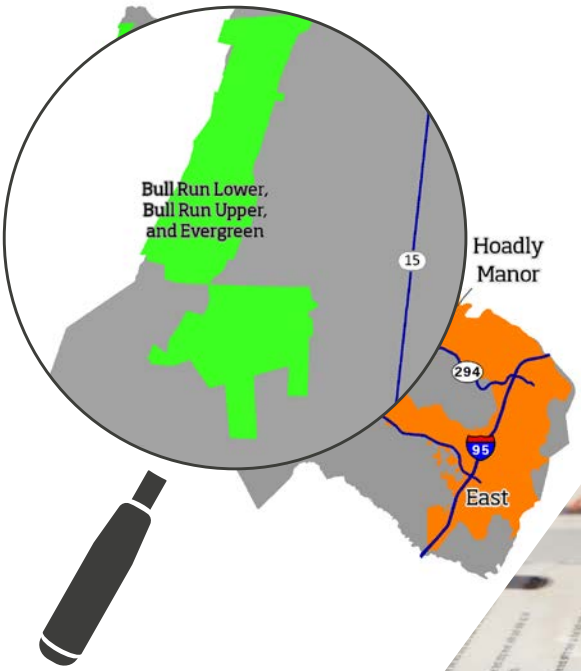
For more information about your drinking water, please contact John DeRosa, Regulatory Affairs Officer, at **(703) 335-7976** or at **water_quality@pwcsa.org**.

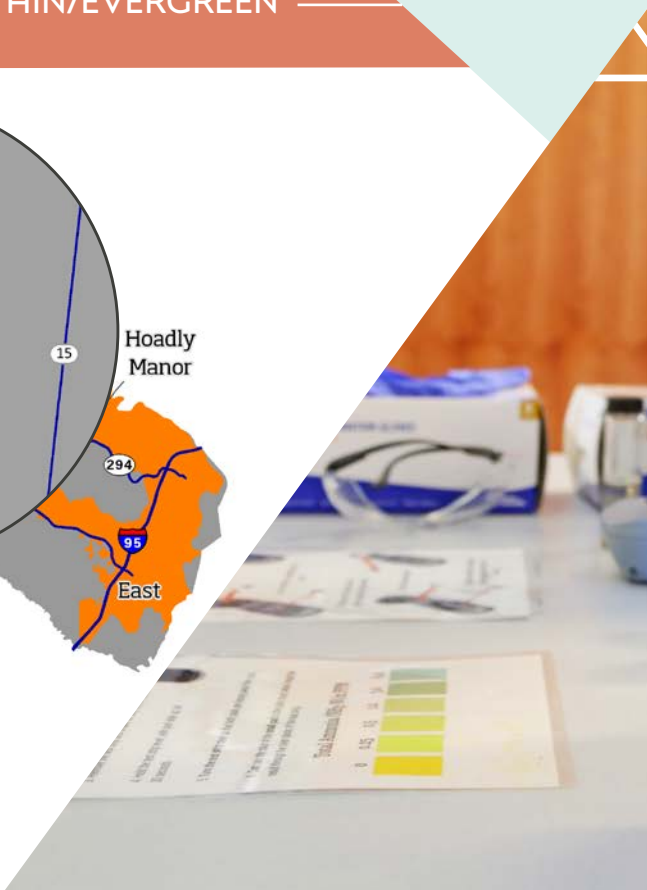
Regular monthly meetings of the PWCSA Board of Directors are held on the second Thursday of each month at 7:30 p.m. in the Board Room at PWCSA headquarters, 4 County Complex Court, Woodbridge, Virginia, 22192. Public hearings are advertised in local newspapers. For more information, please call **(703) 335-7900**.

Este informe contiene información muy importante sobre su agua potable. Para ver este reporte en español, visite el sitio web:

www.pwcsa.org/water-quality/calidad-de-agua.

BULL RUN MOUNTAIN/EVERGREEN WATER SYSTEM



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Service Authority
Exceptional Water Service