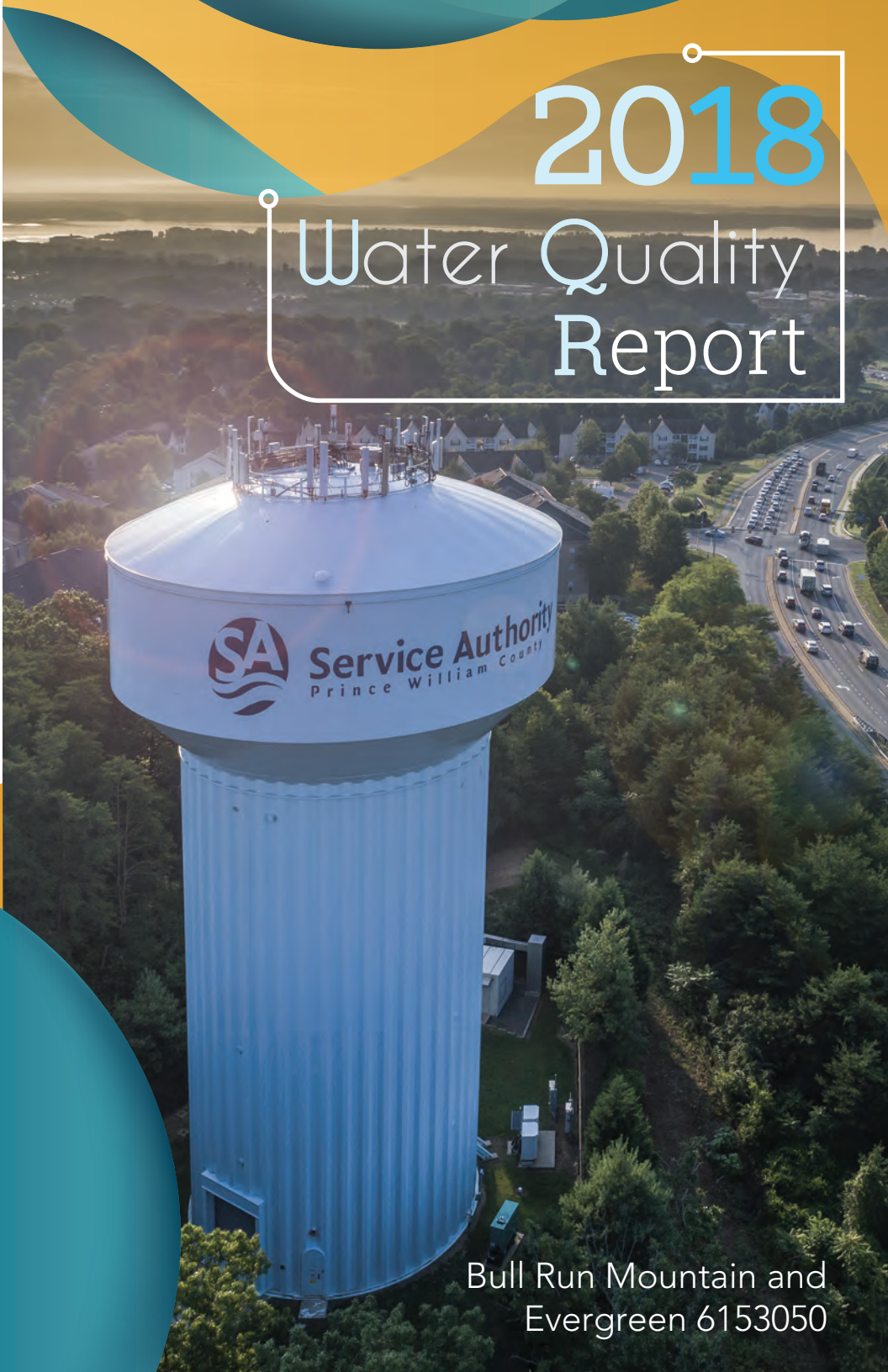
2018 Water Quality Report



Bull Run Mountain and
Evergreen 6153050

A Message from the Director of Environmental Services and Water Reclamation

Dear Valued Customer,

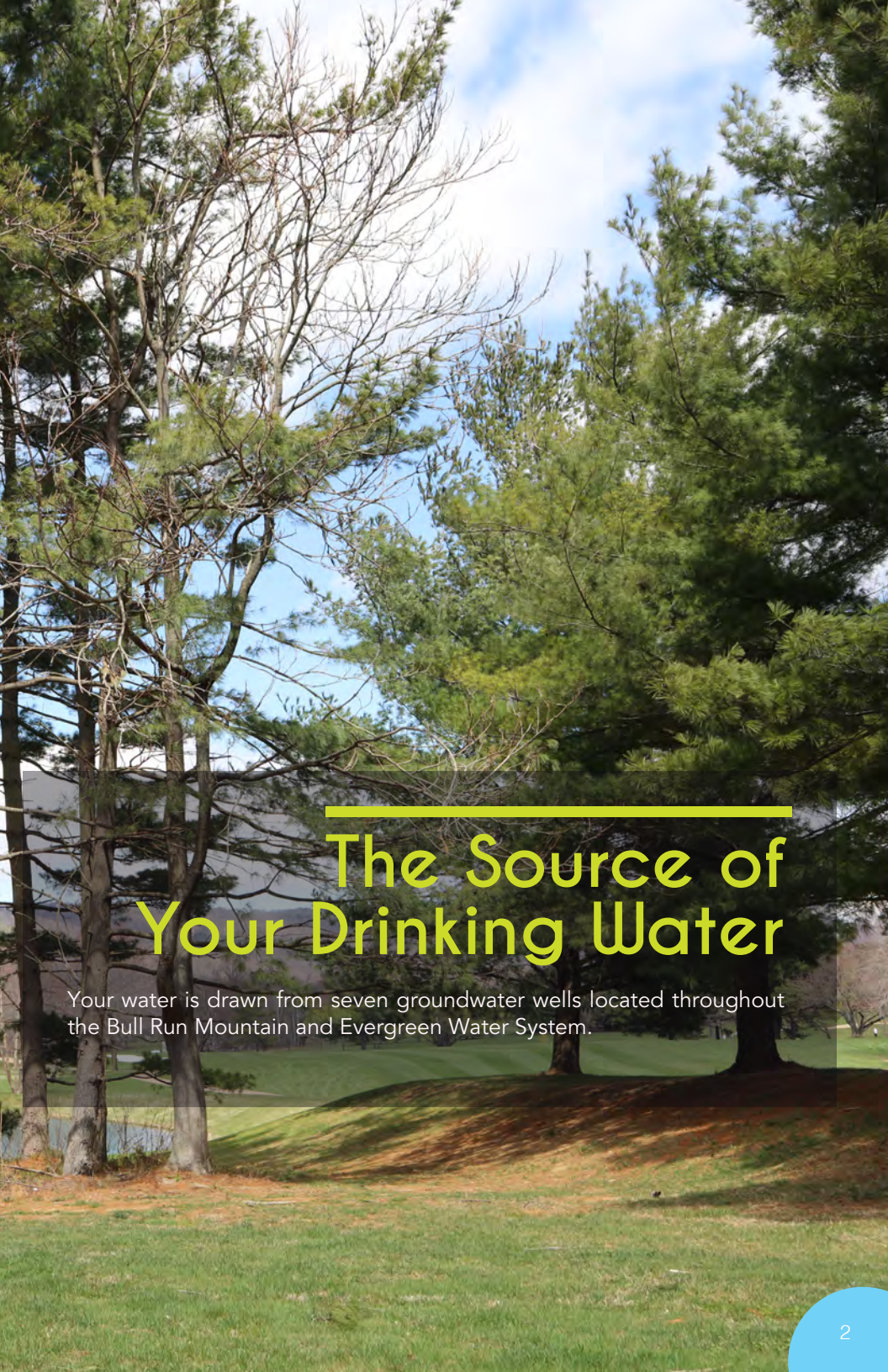
The Prince William County Service Authority (PWCSA) is pleased to present our annual Water Quality Report. The report provides the results of water quality testing performed during calendar year 2017 or the most recent regulatory period. This report is a requirement of the National Primary Drinking Water 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 seven groundwater wells located throughout the Bull Run Mountain and Evergreen Water System.

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**.

WATER TREATMENT PROCESS

PWCSA helps control pipe corrosion by adding sodium hydroxide in order to increase pH levels in the water supply. This promotes pipe longevity while reducing the potential leaching of metals in the distribution system and home plumbing.

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 healthcare providers. Environmental Protection Agency (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**.

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 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.

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

The sources of tap 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 animal or human activity.

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.

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

REGULATED SUBSTANCES 2017: BRME 6153050

SUBSTANCE (UNITS)	YEAR SAMPLED	MCLG	MCL	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2017	2	2	0.35	ND - 0.35	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Metals testing such as Barium are monitored every 3 years in accordance with the Virginia Waterworks Regulations.							
Nitrate (ppm)	2017	10	10	0.56	ND-0.56	No	Fertilizer runoff; leaching of septic tanks or sewage; erosion of natural deposits.
Nitrite (ppm)	2017	1	1	0.03	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.
Lead and copper samples were collected in 2017.							

MICROBIOLOGICAL TESTING: PWCSA is pleased to report that no E. coli was detected in the water system during the 2017 calendar year.

TABLE DEFINITIONS

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).

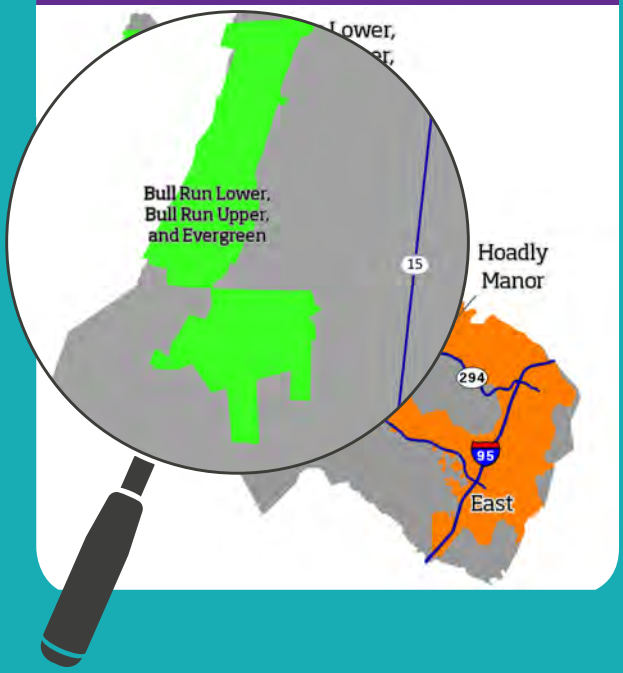
90th Percentile Detection: Result from a set of lead and copper samples that is used to determine if the water system will be required to implement additional actions. Action is only required should the 90th Percentile sample be higher than the Action Level listed for either copper or lead.

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, situated in the County Government Complex. Public hearings are advertised in newspapers of local circulation. 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



LEARN MORE ABOUT YOUR WATER

Service Authority
Exceptional Water Service

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