Clearly Defined
The Virginia Beach Annual Water Quality Report is our report card to you.
Virginia Beach Public Utilities is committed to delivering safe, high-quality drinking water to your tap all day, every day. We are pleased to present you with this annual water quality report which contains information about your water and summarizes test results performed from January 1 through December 31, 2019. In this report, learn where your water comes from, how it is treated and tested, and how Virginia Beach water compares to federal and state standards.

Where Does My Water Come From?
Virginia Beach water comes from surface water treated at Norfolk’s Moores Bridges Water Treatment Plant.
The mission of the Virginia Beach Department of Public Utilities is to provide a safe and sufficient water supply that will enhance and sustain our vibrant community. The Lake Gaston Water Supply Pipeline helps fulfill that mission by providing water to Virginia Beach citizens through a 76-mile-long pipeline leading from Lake Gaston in Brunswick County to Lake Prince, a reservoir located in Suffolk but owned and operated by Norfolk. From the reservoirs, water is pumped to the treatment plant, where it undergoes an extensive filtering and disinfection process to remove any particles, bacteria, and other impurities. The Moores Bridges Water Treatment Plant uses state-of-the-art treatment technology and ensures water quality through continual monitoring and testing.

Why Treat Water?
To ensure the water is clean, safe, and pleasant to drink.
The sources of drinking water (both tap water and bottled water) include lakes, ponds, reservoirs, rivers, springs, streams, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring organic and inorganic substances. Water also picks up contaminants from animals and human activity. Disinfection is an essential part of the water treatment process, preventing the occurrence and spread of many water-borne diseases.

PUBLIC PARTICIPATION OPPORTUNITIES
The Virginia Beach Department of Public Utilities is part of the City of Virginia Beach municipal government.
The City Council meets on the first and third Tuesdays of each month except in July and December, when the meetings occur on the first and second Tuesdays. Agendas for upcoming meetings may be requested from the City Clerk’s office at (757) 385-4303 or found online at www.VBgov.com.

Backflow/Cross-Connection Prevention:
Belinda Wilson, P.E., Virginia Beach Public Utilities
Phone: (757) 382-4171
Email: bbwilson@vbgov.com
Your Water Account:
Virginia Beach Department of Public Utilities
Phone: (757) 385-4631 or 1-866-697-3481
Website: www.VBgov.com/DPU
Possible contaminants in untreated water:

- **Microbial contaminants**, such as viruses and bacteria, may come from sewage and sewage from wildlife, pets, agricultural livestock operations, septic tanks, and mining. Bacteria and viruses that get into water supplies can make people sick, especially children, elderly people, and people undergoing chemotherapy, organ transplant recipients, or those with HIV/AIDS or other immune system disorders. Some bacteria and viruses can cause diarrhea, fever, and other gastrointestinal symptoms.

- **Inorganic contaminants**, such as salts and metals, can be naturally occurring or result from storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

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

- **Organic chemical contaminants**, including synthetic organic chemicals, are byproducts of industrial processes and petroleum production and can also come from gas stations, chemical spills, landfills, and sewer systems.

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

The water treatment process removes these impurities and ensures the water is safe to drink.

**Is the Water Safe for Everyone?**

Virginia Beach water meets all Environmental Protection Agency drinking water standards. To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) has developed regulations setting the allowable amount of certain contaminants in water that are provided by public water systems.

The Food and Drug Administration (FDA) has established similar regulations for bottled water. All drinking water, including bottled water, may contain contaminants. Immunocompromised persons such as those caring for them, should seek advice from their health care provider about drinking water. The EPA/CDC (Centers for Disease Control and Prevention) guidelines on reducing the risk of infection by Cryptosporidium parvum and other pathogens are available from the Safe Drinking Water Hotline (1-800-426-4791) or their website at www.epa.gov/safewater.

A message about 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 is primarily from materials and components of water service lines and associated plumbing, not from materials in your home. Local treatment chemicals at the water treatment plant can reduce lead in 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 2 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 (1-800-426-4791) or at www.epa.gov/safewater/lead.

**Source Water Assessment**

Your water is tested before and after it is treated to ensure it meets federal and state standards. A source water assessment of our system has been conducted by the Hampton Roads/VA Water Planning District Commission. This was done to determine the susceptibility to contamination of the surface water from which our drinking water originates. In Hampton Roads, all surface water sources were determined to be of high susceptibility to contamination using criteria developed by the state. Areas that rely on surface water commonly receive this rating. However, Norfolk’s Mill Creek Bridges Water Treatment Plant and treats the water to meet federal drinking water standards. The assessment report consists of maps showing the source water assessment results, a list of the source water use activities of concern, and documentation of any known contamination. The report is available by contacting Don Piron at (757) 387-4171 or dpiron@vbgov.com.

**Water Quality Data Table Definitions**

**Action Level or AL** - The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that public water systems must follow.

**Maximum Contaminant Level or MCL** - The highest level of a contaminant that is allowed in drinking water. A MCL is set as close to the MCLG (see definition below) as is feasible, considering treatment technology available and other factors. The MCLG is a level of a drinking water contaminant below which there is no known or expected risk to health. MCLGs allow for a margin of safety set by EPA.

**Residual Disinfectant Level Goal or MRDLG** - The level of a disinfectant in drinking water below which there is no known or expected risk to health. MRDLGs allow for a margin of safety set by EPA.

**Residual Disinfectant Level Goal or MRDL** - The level of a drinking water disinfectant below which there is no known or expected risk to health. This level does not reflect the benefits of the use of disinfectants to control microbial contaminants.

**NR** - Not applicable.

**ND** - Not detected in the water sample.

**NTU** - Nephelometric Turbidity Unit or NTU

**ppb** - Parts per billion

**ppm** - Parts per million

**μg/L** - Micrograms per liter

**mg/L** - Milligrams per liter

**g/L** - Grams per liter

**ppb (parts per billion)** - Concentration in parts per billion (ppb); this is equivalent to a single penny in $10,000,000.

**ppm (parts per million)** - Concentration in parts per million (ppm); this is equivalent to a single penny in $10,000.

**mg/L** - Milligrams per liter

**g/L** - Grams per liter

**μg/L** - Micrograms per liter

**ppb** - Parts per billion