The Virginia Beach Department of Public Utilities is part of the City of Virginia Beach municipal government. The City Council meets on the first, second, and fourth Tuesdays of each month. Meetings are held on the second floor of City Hall at the Municipal Center and are open to the public. Agendas for upcoming meetings may be requested at the City Clerk’s office at (757) 385-4303 or found at VBgov.com.

WATER QUALITY: Contact the U.S. Environmental Protection Agency’s Safe Drinking Water Hotline at (800) 426-4791 (www.epa.gov/safewater).

PUBLIC INFORMATION OFFICE: Contact Edwin Garcia-Cardona at (757) 385-4171 (egarcia@vbgov.com). Contact Katie Rider at (757) 385-4171 (krider@vbgov.com).

Where Can I Get More Information?

- The Virginia Beach Department of Public Utilities Laboratory at (757) 385-1400 (sdawson@vbgov.com), or the Virginia Department of Health Office of Drinking Water at (757) 683-2000 (www.vdh.state.va.us/drinkingwater).
- The U.S. Environmental Protection Agency’s Safe Drinking Water Hotline at (800) 426-4791 (www.epa.gov/safewater).

Local Drinking Water Quality: Contact Susan Sadowski of the Virginia Beach Department of Public Utilities Laboratory at (757) 385-1400 (sdawson@vbgov.com), or the Virginia Department of Health Office of Drinking Water at (757) 683-2000 (www.vdh.state.va.us/drinkingwater).

Where Does My Water Come From?

- 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 Project helps fulfill that mission by providing water to Virginia Beach citizens through a 76-mile-long pipeline and well into the future. The Lake Gaston Water Supply Project provides a sustainable water resource reaching far beyond our faucets and into the heart of our flourishing community. Having a reliable water supply supports the growth of new homes and businesses in Virginia Beach. Before the Lake Gaston project, developments like Town Center and the Virginia Beach Convention Center may not have been possible. As for the future, we can rest assured knowing the Lake Gaston project will continue to sustain us for years to come.

Virginia Beach Public Utilities is committed to delivering 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 in 2007.

Water from Lake Gaston is blended with Norfolk’s water and treated at Norfolk’s Moores Bridges Water Treatment Plant. Lake Gaston and most of Norfolk’s water sources are surface water. Norfolk’s primary water supply comes from Lake Prince and Western Branch Reservoir in Suffolk, and Lake Burnt Mills in Isle of Wight. During extended dry periods, these lakes may be supplemented with water from four deep wells located around the lakes, or with water from the Blackwater and Nottoway rivers. Lakes within Norfolk and Virginia Beach also supplement Norfolk’s water supply. These include Lake Wright, Lake Whitehurst, Little Creek Reservoir, Lake Smith, Lake Lawson, and Stumpy Lake.

To learn more about your utility, visit www.vbgov.com/dpu or call (757) 385-4171 (water@vbgov.com)

Clean Water Begins at the Source

Celebrating a Decade on Tap
A MILESTONE REMEMBERED: THE LAKE GASTON PIPELINE

It’s hard to believe, but it has been ten years since the Lake Gaston Water Supply Project and its 76-mile pipeline first began quenching Virginia Beach’s thirst. What started as an ambitious dream some 25 years ago has proved to be one of the biggest success stories in Virginia Beach’s history. Today, the pipeline supplies enough water to meet our needs now and well into the future.

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From the reservoirs, water is pumped to the treatment plant. There, the water undergoes a coagulation process causing small particles to clump together and sink to the bottom of a settling basin. Next, the water is filtered to further remove bacteria, algae, and other impurities. Finally, the water is disinfected to kill any remaining bacteria. The Moores Bridges Water Treatment Plant provides state of the art treatment technology and ensures water quality through continual monitoring and testing.

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2008 ANNUAL WATER QUALITY REPORT FOR 2007 DATA
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. Furthermore, fertilizers, herbicides, pesticides, metals, and salts wash off streets and lawns into the water supply. Neighboring communities, farms, and industries all contribute to these impurities. Left untreated, this water could make you sick. At the very least, untreated water would have an unpleasant taste, odor, or appearance. Treating and testing the water ensures that it is clean, safe, and pleasant to drink.

Disinfection is an essential part of the water treatment process, preventing the occurrence and spread of many water-borne diseases. Norfolk’s Moors Bridges Water Treatment Plant treats our source water, testing it for over 230 substances. Further testing is performed daily throughout Virginia Beach’s water distribution system. On average, over 400 water quality samples are collected and analyzed monthly, providing continual monitoring for the highest water quality possible.

### POSSIBLE CONTAMINANTS IN UNTREATED WATER:

- **Microbial contaminants**, such as viruses and bacteria which come from animal and human waste, pet or wildlife carriers, agricultural livestock operations, septic tanks, and sewage treatment plants. Examples of such organisms are Cryptosporidium and Giardia which can ingest these microscopic organisms can cause diarrhea, fever, and other gastrointestinal symptoms. The best defense against these organisms is an effective water treatment process.
- **Inorganic contaminants**, such as salts and metals, which 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.

### REGULATED SUBSTANCES TABLE

<table>
<thead>
<tr>
<th>Substance</th>
<th>Likely Source</th>
<th>Range</th>
<th>Highest Level Detected</th>
<th>Lowest Level Detected</th>
<th>MCL</th>
<th>MCLG</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>Erosion of natural deposits</td>
<td>0.016</td>
<td>0.025</td>
<td>0.016</td>
<td>0.025</td>
<td>mg/L</td>
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<td>Natural deposits</td>
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<td>0.004</td>
<td>0.010</td>
<td>ppb</td>
<td></td>
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<tr>
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<td>Natural deposits</td>
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<td>0.004</td>
<td>0.004</td>
<td>0.004</td>
<td>ppb</td>
<td></td>
</tr>
<tr>
<td>Benzene</td>
<td>Fuels</td>
<td>0.001</td>
<td>0.004</td>
<td>0.002</td>
<td>0.004</td>
<td>ppb</td>
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</tr>
<tr>
<td>Lead</td>
<td>Service lines and home plumbing</td>
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<td>0.3</td>
<td>0.2</td>
<td>0.2</td>
<td>ppb</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>Corrosion of household plumbing systems</td>
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<td>0.5</td>
<td>0.3</td>
<td>0.3</td>
<td>ppb</td>
<td></td>
</tr>
<tr>
<td>Chlorine</td>
<td>Drinking water disinfectant</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>ppm</td>
<td></td>
</tr>
</tbody>
</table>

### UNREGULATED SUBSTANCES TABLE

<table>
<thead>
<tr>
<th>Substance</th>
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<th>Range</th>
<th>Highest Level Detected</th>
<th>Lowest Level Detected</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
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<td>Sulfate</td>
<td>Natural deposits</td>
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<td>0.1</td>
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<tr>
<td>Sodium</td>
<td>Natural deposits</td>
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<td>0.1</td>
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</tr>
<tr>
<td>Fluoride</td>
<td>Natural deposits</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Chloride</td>
<td>Drinking water disinfectant</td>
<td>0.2</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

### Why Treat Water?

**TO ENSURE THE WATER IS CLEAN, SAFE, AND PLEASANT TO DRINK.**

A MESSAGE AHEAD YOU 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 associated with service lines and homes, including the lead service line or the homes’ internal cross-connection components. Lead is a toxic substance and the Environmental Protection Agency (EPA) has established a Lead and Copper Rule to minimize exposure to lead in drinking water. The rule requires utilities to take actions to control lead in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants. Maximum Contaminant Level Goal or MCLG

Regulated contaminant levels are either the maximum contaminant level (MCL) or the maximum contaminant level goal (MCLG). The MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set to protect public health. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. If a contaminant cannot be detected, the MCLG is used to provide additional protection.

EPA/CDC (Centers for Disease Control and Prevention) guidelines on reducing the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

### Source Water Assessment

**YOUR WATER IS TESTED BEFORE AND AFTER TREATMENT TO ENSURE IT MEETS FEDERAL AND STATE STANDARDS.**

A source water assessment of our system has been conducted by the Hampton Roads 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. Hampton Roads is served by a combination of surface water and groundwater. Norfolk’s Moors Bridges Water Treatment Plant tests and treats the water to meet federal drinking water standards.

The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of approaches to reducing the number of activities of concern over the five years. The report is available by contacting Jim Vanderheyden at (757) 385-4171 or jvanderi@vbgov.com.