**What were the results from last year’s testing?**

<table>
<thead>
<tr>
<th>CONTAMINANTS DETECTED</th>
<th>MCLG</th>
<th>MCL</th>
<th>CITY-WIDE RESULTS</th>
<th>FOR SAMPLES &gt; X</th>
<th>RANGE OF DETECTIONS</th>
<th>VIOLATION?</th>
<th>TYPICAL SOURCE OF CONTAMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fecal Coliform Bacteria</td>
<td>10 ppm</td>
<td>2 ppm</td>
<td>0</td>
<td>0</td>
<td>Human and animal fecal solid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbidity (Maximum single value)</td>
<td>0.2 NTU</td>
<td>0.1 NTU</td>
<td>0 ppm</td>
<td>0 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turbidity (Geometric mean of samples below 0.1 NTU)</td>
<td>95%</td>
<td>100%</td>
<td>0 ppm</td>
<td>0 ppm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What are these contaminants and their potential health risks?**

**TURBIDITY** is a measure of the clarity of the water and has no health effects. However, turbidity can interfere with disinfectants and may provide a medium for microorganisms to multiply. The presence of turbidity may indicate the presence of disease-causing organisms.

**TOTAL COLIFORM AND E. COLI BACTERIA.** Coliform bacteria that are naturally present in the environment and are used as an indicator of other, potentially harmful, bacteria may be present. E. coli in particular may indicate the presence of human or animal waste. Microbes in these waters can cause short-term effects such as diarrhea, cramps, headaches, or other symptoms. They may pose a special healthy risk for infants, young children, and people with severely compromised immune systems.

**COPPER** is a metal that is naturally-occurring in the rock and soil. Some people who drink water containing copper in excess of the MCL over many years may develop bone disease with pain and tenderness of the bones.

**Lead** is a metal that is naturally-occurring in the rock and soil. Some people who drink water containing lead in excess of the MCL over many years may develop bone disease with pain and tenderness of the bones.

**Fluoride** is a natural mineral found in some drinking water supplies. It is added to water supplies as a way to prevent tooth decay. Fluoride is recommended by the American Dental Association and the American Medical Association. Although the occasional ingestion of water containing high levels of fluoride is not harmful, long-term excessive exposure can cause dental fluorosis.

**Cryptosporidium** is a tiny parasite that is transmitted in drinking water. Ingestion of Cryptosporidium can cause abdominal infection in healthy people. However, some people (e.g., those with an immunocompromised condition or those with pre-existing digestive problems) are at greater risk of complications from infection with Cryptosporidium.

**Radioactivity** is the presence of radioactive substances in water. Radioactive substances emit radiation and can cause harm to living organisms. Some radioactive substances are naturally occurring, while others are formed during the processing of natural deposits or from industrial waste. The most commonly used radioactive substance in drinking water is **Tritium ( Tritium)**

**What is Water Hardness?**

If substantial amounts of either calcium or magnesium (both nontoxic minerals) are present in drinking water, the water is said to be hard. The hardness of finished water in the City water system averages 26.0 mg/L, which is equivalent to 1.51 grains per gallon. This is mainly calcium. The water may be described as soft to slightly hard.

**Fluoride**

Fluoridated water is highly supported by the Virginia Department of Health, the American Medical Association, American Dental Association, Centers for Disease Control (CDC), and the majority of health professionals in the U.S. Please visit www.cdc.gov/fluoridation if you would like further information on the health impacts of fluoridated water.

**Revised Water Treatment Process Coming Soon**

RWSA was granted an extension by the VDH to the new, stricter requirements of the Stage 2 Disinfection By Products (DBPs)/Trihalomethanes (HTM) and Haloacetic Acids (HAA5) regulations while improvements can be completed at the RWSA WTPs to incorporate an advanced treatment process that employs granular activated carbon (GAC). RWSA will complete these upgrades at all of their plants by 2018. Until then, RWSA is adding powered activated carbon (PAC) at each WTP as one means of helping to meet the new water quality standards and to provide the best water possible. In addition to lowering the levels of disinfection by-products, the use of GAC should improve the taste and odor of your water. **What if I am on a controlled or monitored?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno- compromised persons such as persons with cancer undergoing chemotherapy, persons 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. US EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from EPA’s Safe Drinking Water Hotline (800-426-4791) or visit their website www.epa.gov/safewater.
RWSA operates two water treatment plants (WTP) that provide water to the City of Charlottesville. The plants are the South Rivanna WTP and the Observatory WTP. Each plant employs both chemical and physical treatment processes before releasing water into the distribution system. Sodium hypochlorite is used at both South Rivanna and Observatory for disinfection.

Fluoride is added at all treatment plants to promote good dental health. The water treatment plant that provides water to your tap may vary from day to day depending on the daily production of water at each plant, the level of storage in the system and your location.

The North Rivanna WTP draws water from the North Fork Rivanna River and serves customers located in Northern Albemarle County. The South Rivanna WTP draws water from the South Fork Rivanna Reservoir.

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What standards does my water have to meet?

The information in this report has been collected and reported in accordance with the drinking water standards established by the USEPA and the VDH. In the year 2017, RWSA collected and tested hundreds of hourly, daily, weekly, monthly, quarterly, and annual samples to ensure the quality of your water. Sample sources included the rivers and reservoirs from which the WTPs draw water, the WTPs themselves, and numerous locations in the City's distribution system.

The sources of drinking water may 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, as well as substances resulting from the presence of animals or human activity. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or visit their website (www.epa.gov/safewater).

Where does my water come from?

The Observatory WTP draws water from both the Ragged Mountain and Sugar Hollow Reservoirs.

Under a program developed by VDH, a source water assessment for the Albemarle/ Charlottesville Urban Area was completed by the VDH on March 25 and September 4, 2002. This assessment determined that the raw water sources named above may be susceptible to contamination. All surface water sources are exposed to a wide array of contaminants at varying concentrations and changing hydrologic, hydraulic, and atmospheric conditions that promote migration of contaminants from land use activities of concern within the assessment area. More specific information may be obtained by contacting the water system representative listed at the end of this insert.

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How do I get more information?

For the Spanish-speaking members of our community: Este informe contiene información muy importante. Tradúzcalo o hable con un amigo que lo entienda bien.

www.charlottesville.org/waterconservation. Report 2018

The Water Connection Kit

$100 WaterSense Toilet Rebate

Free Water Conservation Kits

How you can make a difference in your community

Thank you for conserving water.