



UTILITY RATE REPORT

FY 2026

Prepared by the Department of Finance and the Department of Utilities

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1. EXECUTIVE SUMMARY

The mission statement for the City of Charlottesville Department of Utilities (Utilities) is:

To provide the Charlottesville community with safe, reliable, and sustainable utility services by dedicated and knowledgeable staff.

Utilities operates and maintains the water, wastewater, stormwater, and natural gas systems. In addition, Utilities manages the Capital Improvement Program for the various utility systems. Utilities supports the following outcome areas of the City's Strategic Plan Framework:

- Organizational Excellence- Charlottesville's well-trained and dedicated staff deliver excellent services for the community.
- Climate Action - Charlottesville is a leader in improving community health and resilience through climate action and environmental stewardship.

The goals for Utilities are to:

- Provide reliable and high-quality infrastructure.
- Implement strategic management efforts.
- Recruit and cultivate quality employees.
- Promote community engagement.

The Gas, Water, Wastewater, and Stormwater budgets are funded by utility rates and charges and include funding for administration, operations, and maintenance of the four systems as well as funding for infrastructure improvements, technology advances, and debt service payments.

The billing and collection functions of the City's utilities are completed by the Finance Department's Utility Billing Office, apart from the stormwater utility, which is performed by the Treasurer's Office. The utility budgets are separate from the General Fund and are not supported by taxes. These budgets and the respective rates and charges are considered and adopted by the City Council in June of each year.

CUSTOMER SERVICE

A new and improved online bill payment service was launched in October 2021. Responding to feedback from the Customer Satisfaction Survey, Utilities now offers customers paperless billing, pay-by-text, and enhanced automatic payment options. These expanded bill payment services provide features for customers that deliver convenient, secure, and environmentally friendly means to pay utility bills, and remain informed of account activity. Managed by Invoice Cloud, the new portal acts as the customer's account hub, giving them the ability to view and manage their utility account 24/7/365. More than 15,535 customers have already signed up for paperless billing and 7,118 have registered for Autopay, making the move to a simplified, secure, and resource conscious way to pay their utility bills. One account on paperless billing saves almost \$7.82 per year, equaling approximately \$121,480 yearly.

The link for paying online can be found at:

[https://www.invoicecloud.com/portal/\(S\(zajah33fv34bhayxqqp5jc13\)\)/2/Site.aspx?g=eab95003-e204-40d6-91d4-6b9e2a326f1e](https://www.invoicecloud.com/portal/(S(zajah33fv34bhayxqqp5jc13))/2/Site.aspx?g=eab95003-e204-40d6-91d4-6b9e2a326f1e).

ASSISTANCE PROGRAMS

Utilities provides assistance programs to help utility customers experiencing hardship in making timely or full payments of their utility bill (water, wastewater, and gas). In FY'26, the maximum annual amount for water and wastewater assistance per customer is increasing from \$300 (\$150 for each utility) to \$500 (\$250 for each utility). This increase reflects the percentage increase in water and wastewater rates since the inception of the programs in FY'12. In addition, Utilities staff is closely monitoring the Low-Income Home Energy Assistance Program (LIHEAP), a federal program that provides assistance to eligible households with their home heating and cooling bills. This program is administered through the Social Services Department and provides assistance to natural gas customers.

WATER QUALITY

In 2021, the Environmental Protection Agency released revisions to the Lead and Copper Rule, requiring all water providers to identify and create an inventory of all water service lines within their distribution system. The goal of the inventory was to identify and replace lead service lines that may still be in existence. The Department of Utilities began working on this project in January of 2022 using previous studies, City Code research, and water quality testing to complete the Lead Service Line Inventory. In 2023, to further enhance its efforts, the Department of Utilities implemented a statistical methodology derived from Michigan's Department of Environment, Great Lakes, and Energy, known as the EGLE method, to identify locations where lead water lines could be present. The locations identified by the EGLE method were field verified and no lead service lines were found. The Department of Utilities will continue to collect data to improve our inventory. If you wish to participate or find out more about our program, including the online dashboard and interactive map, please visit www.charlottesville.gov/waterquality.

In April 2024, the EPA announced the final National Primary Drinking Water Regulation for six per- and polyfluoroalkyl substances (PFAS). According to the EPA, scientific studies have shown that exposure to PFAS in the environment may be linked to harmful effects on humans and animals. The Rivanna Water & Sewer Authority (RWSA) has been monitoring PFAS levels since 2014 and has been a participant in the EPA's Unregulated Contaminant Monitoring Rule water sampling program since 2023. Apart from one instance in May of 2023 at the North Rivanna Water Treatment Plant, all the samples which have been collected have not shown levels of PFAS exceeding the new compliance regulation. Protecting and providing safe and reliable drinking water to the customers of Charlottesville Utilities and the Albemarle County Service Authority is of the utmost importance. As a part of the community's water supply plan, RWSA built and have been using Granular Activated Carbon (GAC) filters as a part of the water treatment process at the water treatment plants since 2018. GAC filters are recognized as a leading technology to remove PFAS compounds from drinking water. For more information about PFAS: <https://www.rivanna.org/wp-content/uploads/2024/04/What-You-Need-To-Know-About-PFAS-04102024.pdf>.

INFRASTRUCTURE

The Department of Utilities has implemented an aggressive Capital Improvement Program (CIP) to address aging infrastructure. Prior to 2008, very little replacement or rehabilitation had been completed to address the issues relating to the utility systems, except for the natural gas utility. As the City continued to grow in population and development continued to increase, it was recognized that not only did the utility infrastructure need increased capacity, but the systems also needed to be improved to ensure that public health would not be compromised and to alleviate property damage. Although the four (4) utility systems have vastly different components and functionalities, they are all treated similarly in the respect that the Department of Utilities acts aggressively through the CIP to continue to improve the operability of the utilities. Without this aggressive approach, the systems could easily and quickly fall into disrepair, similar to the situation experienced prior to 2008, which is not in the best interest of the City of Charlottesville and its customers.

EMISSIONS REDUCTION

In July 2019, the Charlottesville City Council adopted two community-wide greenhouse gas (GHG) emissions reduction goals, committing the City to achieve a 45% reduction in GHG emissions by 2030 and carbon neutrality by 2050. The Study was completed in December 2024, with the results presented to the Charlottesville City Council in March 2025. The final report includes the methodology, assumptions, and decarbonization analysis for Charlottesville Gas to meet its proportional emissions reduction targets. The study confirms that Charlottesville Gas is already on track to nearly meet the short-term 2030 carbon reduction target of 45% for City-only natural gas-related emissions using a combination of its existing initiatives and efforts, which include energy efficiency measures and certified carbon offsets. To meet long-term goals, the study explores how the utility can promote more efficient gas usage, procure lower carbon fuel supplies, and continue to enhance its system to reduce methane emissions.

In April 2023, Charlottesville Utilities was awarded a \$7.1 million grant from the Pipeline and Hazardous Materials Safety Administration's (PHMSA) Natural Gas Distribution Infrastructure Safety and Modernization (NGDISM) grant program. The NGDISM program is part of the broader Bipartisan Infrastructure Law, which will provide nearly \$1 billion in federal funding over the next five years to support public gas systems' efforts to repair, rehabilitate, and replace aging pipes and reduce methane emissions. This grant facilitates the completion of Utilities' system-wide upgrade project by expediting the replacement of the last remaining section of legacy pipes. The last mile of 10" cast iron main line will be replaced with 4" high-density polyethylene (HDPE) plastic pipe, first generation polyethylene and other legacy pipe will be replaced with 2" HDPE, and 20 gas meters will be removed from the interior of several buildings. The project will help to eliminate all components in Charlottesville's natural gas system that have a higher probability of leaks. Surveying for the project began in December 2023, with the engineering design of the pipe replacement occurring in 2024 and 2025. PHMSA has issued a Finding of No Significant Impact (FONSI) regarding the environmental impact of the replacement project. Community outreach efforts to inform businesses, residents, and the wide community as to the scope and timing of the project is to take place, and project bidding is scheduled for early 2026. Construction for the project is anticipated to begin in late Spring of 2026.

ENERGY EFFICIENCY

The Department of Utilities is excited to launch three new incentives to help improve home energy efficiency. Utilities now offers six home envelope resources that complement each other to help community members improve the energy efficiency of their home, lower utility bills, and increase home comfort.

- **Attic Insulation Self-Assessment:** According to **Energy Star®**, 90% of U.S. homes are under-insulated. The Attic Insulation Self-Assessment was developed by Utilities' staff and is a great resource to help customers better understand their attic's insulation needs. Each assessment includes a free personalized evaluation for attic insulation that provides guidance to help maximize the attic's energy efficiency potential. The self-assessment is 100% free to use, and can be accessed via smartphone, tablet, or computer.
- **\$500 Attic Insulation Rebate:** Maximize the most cost-effective way to improve your home's energy efficiency with upgraded attic insulation. For a limited time, gas customers can receive a \$500 rebate towards upgrading their home's attic insulation and take advantage of an available federal tax credit to claim 30% of the cost of the insulation with a maximum of \$1,200 credited. Combining these incentives could significantly lower the cost of your insulation upgrade.
- **\$150 Attic Air Sealing Rebate:** For a limited time, gas customers can receive a \$150 rebate to cover the cost of measures that plug holes and seal cracks in their attic. This process improves home comfort, enhances air quality, and boosts energy efficiency by keeping conditioned air inside the house. And if you're installing upgraded attic insulation, attic air sealing should be done at the same time to maximize the effectiveness of both measures.
- **\$125 Smart Thermostat Rebate:** Gas customers can now receive a \$125 rebate towards a smart thermostat to enhance the energy efficiency of their home. Smart thermostats use Wi-Fi to allow you to control a home's indoor air temperature remotely from a smartphone or tablet. Providing convenience, control, and insight, a smart thermostat helps deliver optimal performance of an HVAC system. Plus, Utilities still offers a **\$100 Programmable Thermostat Rebate** for customers interested in that option.
- **Home Weatherization Program:** The Charlottesville Gas Energy Efficiency Program (CGEEP) is Utilities' no-cost home weatherization program for qualified gas customers. Newly expanded income-qualification levels have broadened the reach of this program to even more members of the community, and increased outreach for CGEEP will roll out in the coming months.

More information on programs and incentives from Utilities can be found at www.charlottesville.gov/utilityincentives.

The following section of the FY'26 Utility Rate Report provides a summary of the staff recommendations for each utility. Additional detailed information for each utility is provided in subsequent chapters.

1.1 WATER AND SEWER

1.1.1 FY'26 Water and Sewer Rates

Based on the projected revenue requirements to operate and maintain each utility, the water and sewer rates for FY'26 (beginning July 1, 2025) are as follows:

Exhibit 1: Water and Sewer Rates for FY'26

Rates (per 1,000 cf)	Current	Proposed	\$ Change	% Change
WATER				
Summer	\$88.83	\$100.52	\$11.69	13.17%
Winter	\$68.33	\$77.33	\$9.00	13.17%
SEWER	\$92.55	\$95.29	\$2.74	2.96%

1.1.2 Updating Monthly Service Charge

The Monthly Service Charge for water and sewer funds a portion of the fixed and infrastructure costs associated with being a customer of the water utility. The charge is proportionate to the size of a water meter. The size of a water meter regulates the amount of water that can pass through the meter thus provides a proportionate measure of the different impact of customers. For example, one 1-inch meter uses as much water as two and a half 5/8-inch meters.

The revenue requirements for the water utility have increased, including fixed costs and infrastructure. The Monthly Service Charges for FY'26 will increase about 33%. Most customers will see a \$2.50 increase in their Monthly Service Charge for water and \$2.50 increase for sewer.

Exhibit 2: Monthly Service Charge for FY'26 for Water

Water Meter Size (inches)	Current	Proposed	\$ Change	% Change
5/8	\$7.50	\$10.00	\$2.50	33.33%
1	\$18.75	\$25.00	\$6.25	33.33%
1 1/2	\$37.50	\$50.00	\$12.50	33.33%
2	\$60.00	\$80.00	\$20.00	33.33%
3	\$120.00	\$160.00	\$40.00	33.33%
4	\$187.50	\$250.00	\$62.50	33.33%
6	\$375.00	\$500.00	\$125.00	33.33%
14	\$2,456.25	\$3,275.00	\$818.75	33.33%

Exhibit 3: Monthly Service Charge for FY'26 for Sewer

Water Meter Size (inches)	Current	Proposed	\$ Change	% Change
5/8	\$7.50	\$10.00	\$2.50	33.33%
1	\$18.75	\$25.00	\$6.25	33.33%
1 1/2	\$37.50	\$50.00	\$12.50	33.33%
2	\$60.00	\$80.00	\$20.00	33.33%
3	\$120.00	\$160.00	\$40.00	33.33%
4	\$187.50	\$250.00	\$62.50	33.33%
6	\$375.00	\$500.00	\$125.00	33.33%
14	\$2,456.25	\$3,275.00	\$818.75	33.33%

1.2 NATURAL GAS

Gas rates are projected to increase for all natural gas customers in FY'26. No change is being proposed for the monthly customer charge. The gas rates for all customer classes for FY'26 are as follows:

Exhibit 4: Gas Rates for FY'26

Customer Class	Current	Proposed	\$ Change	% Change
FIRM				
Customer Charge (Minimum)	\$10.00	\$10.00	\$0.00	0%
First 3,000 Cu Ft, Per MCF	\$9.7813	\$12.4070	\$2.63	26.84%
Next 3,000 Cu Ft, Per MCF	\$9.1798	\$11.7596	\$2.58	28.10%
Next 144,000 Cu Ft, Per MCF	\$8.5784	\$11.1121	\$2.53	29.54%
Over 150,000 Cu Ft, Per MCF	\$7.9769	\$10.4647	\$2.49	31.19%
INTERRUPTIBLE				
Customer Charge (Minimum)	\$60.00	\$60.00	\$0.00	0%
First 600 MCF, Per MCF	\$7.3466	\$9.6895	\$2.34	31.89%
Over 600 MCF, Per MCF	\$6.6850	\$8.9886	\$2.30	34.46%
Annual Minimum Usage (MCF)	1,200	1,200	0	0%
AIR CONDITIONING				
All Gas Used, Per DTH	\$7.3471	\$9.8398	\$2.49	33.93%
GAS LIGHT				
Charge, Per Month	\$17.51	\$17.51	\$0.00	0%
TRANSPORTATION				
Small Volume Customer Monthly Service Charge Rate, Per DTH	\$150.00	\$150.00	\$0.00	0%
	\$3.2827	\$3.4713	\$0.19	5.74%

1.3 STORMWATER

The Stormwater Utility fee was adopted in March 2013 at a rate of \$1.20/500 square feet of impervious surface per month. The fee has remained flat for the period FY'14-FY'25. No increase is proposed in FY'26. The Stormwater Utility fee is re-evaluated annually in conjunction with the budget development process.

Exhibit 5: Stormwater Utility Fee Rate FY'26

Rate (per 500 ft ² of impervious area)	Current	Proposed	\$ Change	% Change
STORMWATER	\$1.20	\$1.20	\$0.00	0.00%

1.4 IMPACT ON CUSTOMER

The table below illustrates the impact on a City residential customer using 400 cubic feet (cf) of water and wastewater, owning a property with approximately 2,440 square feet of impervious surface, and using 4,600 cf of gas per month. This information is based on utility rates and charges for July 1, 2025.

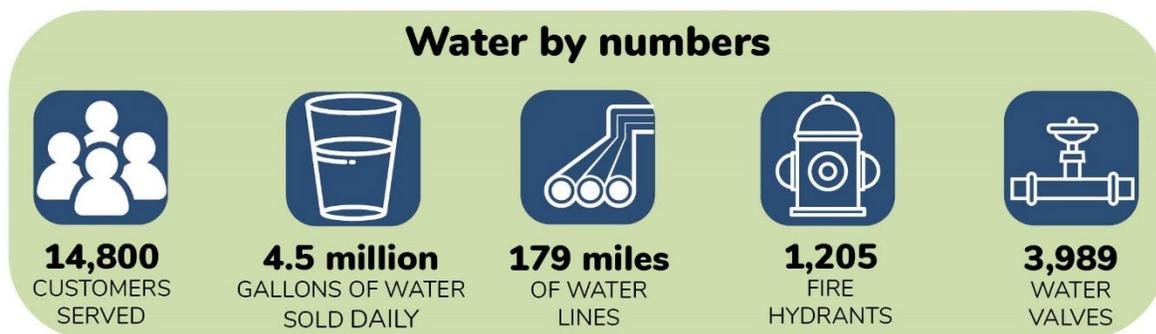
Exhibit 6: Impact of FY'26 Rates and Charges on an Average Customer

Utility	Current Monthly Bill	Proposed Monthly Bill	\$ Change	% Change
Water	\$38.25	\$44.80	\$6.55	17.12%
Wastewater	\$44.52	\$48.12	\$3.60	8.09%
Gas	\$63.35	\$66.04	\$2.69	4.25%
Stormwater	\$5.86	\$5.86	\$0.00	0.0%
TOTAL	\$151.98	\$164.82	\$12.84	8.45%

2. WATER

2.1 OVERVIEW

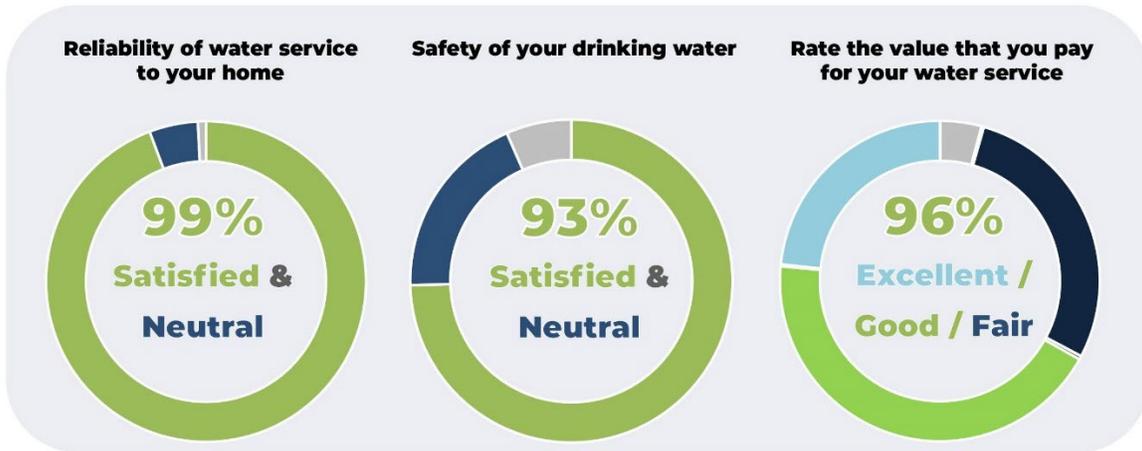
The City distributes potable water within its municipal boundaries and to the University of Virginia. The City has approximately 14,800 water customers using 1.65 billion gallons of water annually or 4.5 million gallons daily. The City’s water distribution system has 179 miles of pipes (enough to stretch from Charlottesville to Virginia Beach) ranging in size from 2” to 18” in diameter. The system also includes 1,205 fire hydrants and 3,989 water valves.



The City’s water distribution system operates off three different pressure zones- the South Rivanna Pressure Zone, also known as the Urban Zone, the Lambeth Pressure Zone, and the Alderman Pressure Zone. These three zones have varying pressures based upon topography, incoming pressure available, and volume of flow needed in the areas. The hydraulic grade lines (HGL) of the three zones vary- South Rivanna operates at 652’, Lambeth operates at 750.5’, and Alderman operates at 751’.

2.1.1 Customer Satisfaction Survey

In February 2025, the Department of Utilities conducted an online customer satisfaction survey to gain feedback about our services. Over 180 responses reflect high levels of satisfaction with the reliability, value, and safety of the services we provide. Among respondents, 99% are satisfied and neutral about the reliability of water service, with 96% of respondents rating the value of their water service as fair and above (good and excellent). Additionally, 93% of respondents are satisfied and neutral regarding the safety of their drinking water.



2.2 WATER QUALITY AND SAFETY

Protecting public health is a core function for the Department of Utilities. Since the early 1900's the City has diligently planned, developed, and operated a complex system that provides affordable, clean, safe, and great-tasting water. The City works closely with the Albemarle County Service Authority (ACSA), the Rivanna Water and Sewer Authority (RWSA), the Virginia Department of Health (VDH), and the Virginia Department of Environmental Quality (DEQ) to ensure superior water quality.

2.2.1 Water Treatment

RWSA collects, stores, and treats the water. The City then buys the treated water and distributes the water through the distribution system. Although drinking water supplies in the United States are among the safest in the world, RWSA employs various technologies and methods of water treatment to prevent contamination and to remove disease causing agents. Common steps used in water treatment that can be found within the RWSA's process include:

Coagulation and Flocculation

Coagulation and flocculation are often the first steps in water treatment. Chemicals with a positive charge are added to the water. The positive charge of these chemicals neutralizes the negative charge of dirt and other dissolved particles in the water. When this occurs, the particles bind with the chemicals and form larger particles, called floc.

Sedimentation

During the sedimentation process, floc settles to the bottom of the water supply, due to its weight. This settling process is called sedimentation.

Filtration

Once the floc has settled to the bottom of the water supply, the clear water on top will pass through filters of varying compositions (sand, gravel, and charcoal) and pore sizes, to remove dissolved particles, such as dust, parasites, bacteria, viruses, and chemicals. As smaller, suspended particles are removed, cloudiness diminishes, and clear water emerges.

Granular Activated Carbon (GAC)

GAC is a method of treatment that removes man-made and naturally occurring contaminants that can impact taste and odor in the finished water. This treatment also removes organic chemicals or disinfection byproducts that are regulated by the Environmental Protection Agency.

Disinfection

As protection against any bacteria, viruses, and other microbes that might remain, disinfectant is added before the water is released into the distribution system and into your home or business.

RWSA carefully monitors the amount of disinfectant added to maintain quality water at the farthest reaches of the system.

2.3 WATER QUALITY TESTING

The City takes water quality testing very seriously. Much has been discussed about lead in the United States, and since the 1970’s, Charlottesville has taken a proactive stance by testing at risk homes, using corrosion inhibitors added to the water to coat the pipes, and having only lead-free pipes installed to carry drinking water. In 2024, the RWSA collected and tested thousands of hourly, daily, weekly, monthly, quarterly, and annual samples to ensure the quality of our water. Sample sources include the rivers and reservoir from which the water treatment plants draw water, the water treatment plants themselves, and numerous locations in the City’s distribution system. Contaminants that the City routinely tests for include:

- Turbidity
- Total Coliform and E. Coli Bacteria
- Combined Radium and Alpha and Beta Particles
- Barium
- Fluoride
- Lead
- Copper
- Nitrate
- Trihalomethanes and Haloacetic Acids
- Perfluoroalkoxy alkane
- Chlorine

For more information about the City’s water quality, please visit www.charlottesville.gov/waterquality.

2.4 WATER SERVICE LINE INVENTORY

In 2021, the Environmental Protection Agency (EPA) released the much-anticipated revisions to the Lead and Copper Rule. In accordance with this ruling, the EPA has required all water providers to identify and create an inventory of all water service lines within their distribution system. The goal of this program was to identify and replace lead service lines that may still be in existence. Since 2023, the Charlottesville Department of Utilities followed a statistical methodology derived from Michigan’s

Department of Environment, Great Lakes and Energy, known as the EGLE method, that identified locations where lead water lines could be present. We are happy to report that based on historical records, field verification, and a robust infrastructure replacement program, the Department of Utilities has found no evidence of lead water service lines in the private or public distribution system.

The Department of Utilities will continue to collect data to improve our inventory. If you wish to participate or find out more about our program, including the online dashboard and interactive map, please visit www.charlottesville.gov/waterquality.

2.5 BACKFLOW/CROSS CONTAMINATION PROTECTION

Cross-contamination presents a serious hazard to our water supply. The situation in which water flows in a direction that is opposite from the intended flow is called backflow. This can potentially put the drinking water supply in danger by allowing the undesirable reversal of flow, such that non-potable water moves into the potable water system. The location at which this backflow occurs, where a customer's water line and the main supply line are joined, is called a point of cross-connection.

As part of the City's strategy, certain businesses, such as medical facilities, laboratories, food processing plants, chemical plants, high-rise buildings, or other facilities where a potential for backflow or cross-connection hazard may exist, are required to install, and maintain cross-connection or backflow prevention devices. All new buildings are scrutinized during the design and permitting process to ensure the proper installation of backflow devices. Additionally, the Department of Utilities currently maintains inspection records for nearly 1,100 backflow devices to provide the highest quality water to City residents. The Cross-Connection Plan is reviewed annually and updated if necessary to reflect changes to the Virginia Waterworks Regulations.

2.6 WATER CONSERVATION

The City of Charlottesville is focused on the management of the water distribution systems to reduce water loss, and partners with City customers to conserve water. Highlights of the Water Conservation Program (WCP) include the distribution of over 12,141 free indoor water conservation kits since 2008 (111 kits were distributed in 2024), the development and dissemination of guidance on how to find and fix leaks, EPA WaterSense program educational materials, and other indoor and outdoor water conservation information. Additionally, a low-flow toilet rebate program (recently updated and expanded) has supported the replacement of over 7,524 high consumption toilets since 2003. In addition, the rain barrel rebate program has issued 904 rebates since 2009, and two rain barrel workshops were held in 2024.

The WCP continues to conduct extensive public outreach. Typically, this includes educational activities at schools, educating the community during annual campaigns, and distributing water-saving information and promotional items at community events. Program information is supported on the WCP website where water conservation related information, resources, news, and events can be found. In 2024, over 5,960 page views were received across all WCP related pages (an 82% increase in views from 2023). In the summer of 2024, the City and the Albemarle County Service Authority worked together to communicate the information about a voluntary drought watch. This watch was in place during much of

the summer to help avoid potential mandatory restrictions. The drought watch campaign included TV and radio interviews, as well as digital outreach with support from a local meteorologist.

The WCP participated in several in-person events including Kid*Vention, Earth Day events, a career event at Charlottesville High School, Grand Illumination, and Rivanna RiverFest (over 1,000 attended), and held several virtual outreach opportunities for the Fix a Leak and Imagine a Day without Water (IADWW) Campaigns. The Fix a Leak campaign, held in the spring, had the community complete a home scavenger hunt encouraging people to find and fix water leaks. The IADWW art contest, held in the fall, asked students K – 12th grade to illustrate an action to save water in an artistic format. The City's water conservation message was also communicated via the internet through online ads, mobile apps, and social media (over 182 social media posts reaching over 60,000 people in 2024), newsletters, print, radio, streaming, and television. Through all the WCP outreach in 2024, the program generated over 1,124,332 online impressions, over 7,351 engagements, and over 2,117 cable TV ads.

The WCP partners with community organizations including UVA Sustainability, Rivanna Conservation Alliance, the Local Energy Alliance Program (LEAP), Charlottesville City Schools (CCS), Community Climate Collaborative, ACSA, and RWSA. In addition, the program has continued to be an active participant in the American Water Works Association (AWWA), the Alliance for Water Efficiency (AWE), and the EPA's WaterSense program. In 2024, the City of Charlottesville was recognized for water conservation efforts supporting the WaterSense program, receiving the 2024 Sustained Excellence Award; this is the highest honor given out by the WaterSense program and makes the tenth year in a row the program has received the WaterSense award.

In FY'24, the City continued its focus on internal performance and efficiency through the City's Energy and Water Management Program (EWMP). The WCP supports the water side of these efforts by managing the water usage of facilities managed by the City, educating staff and users of the facilities on how to be more efficient and reduce water usage, and supporting water efficiency improvements. Learn more about the City's energy and water performance, water use targets, and program initiatives in the [Energy and Water Performance Reports \(LINK\)](#).

In FY'24, some unique educational opportunities included putting water saving reminders on all school bathroom mirrors, working with the 4th graders at Greenbrier Elementary School to develop energy and water saving messages, distributing 333 Climate Action Kits to the CCS 5th grade class with directions on how to check a toilet for water leaks, and the development of educational activities for grades K-6 that are incorporated into CCS's science curriculum pacing guide. Lastly, in FY'24, the EWMP participated with the University of Virginia Internship Placement Program and the City's Community Youth Internship Program (CAYIP) with interns dedicated to supporting the EWMP and WCP initiatives.

2.7 TOILET AND RAIN BARREL REBATE PROGRAMS

The Water Conservation Program's longest running rebate program is the WaterSense Toilet Rebate Program, which offered \$100 rebates for replacing old (pre-1994) toilets with new WaterSense labeled toilets. Because this program is over 20 years old, it was reevaluated to ensure it still meets the community's needs and examined ways to increase access to resources including looking into the possibility of a direct installation program. With the assistance of the WaterNow Alliance, a clear recommendation and implementation plan for an updated program was completed. In October 2024,

the City officially expanded and updated their toilet rebate program by providing \$150 per rebate (previously \$100 per rebate). Toilets that used 1.6 gallons per flush (gpf) or more were now eligible, where as previously, only 3+ gpf were eligible. WaterSense labeled toilets use significantly less water and function as well as standard toilets, resulting in water (and dollar) savings every year. Residential customers may replace up to three toilets at a given residence. Commercial property owners may replace up to two toilets and receive up to \$100 per replacement. Owners of multi-unit apartment complexes can replace two toilets per unit. A special program targeted at toilet retrofits for large multifamily properties was started in 2011. Since then, over 17 apartment buildings have received rebates to replace their high consumption toilets. Additionally, 71 Low Flow WaterSense labeled toilet rebates were issued in FY'24. The total number of toilet rebates issued to date is 7,491, saving the City a cumulative 69.9 million gallons of water. Rebates were marketed using social media, e-newsletter, and paid advertising. The following chart shows the participation in the toilet rebate program for the past 18 years.

Exhibit 7: Participation in Toilet Rebate Program since 2007

Fiscal Year	# of Customers	# of Rebates	\$ Rebated	Average Rebate/Customer
2024	51	71	\$7,025	\$138
2023	51	68	\$6,790	\$133
2022	73	97	\$9,525	\$130
2021	116	156	\$15,428	\$133
2020	136	177	\$17,696	\$130
2019	178	247	\$24,092	\$135
2018	165	263	\$25,023	\$152
2017	185	246	\$24,153	\$131
2016	186	223	\$22,218	\$119
2015	189	460	\$40,555	\$215
2014	219	305	\$29,544	\$135
2013	358	573	\$54,113	\$151
2012	258	544	\$54,186	\$210
2011	363	599	\$61,865	\$170
2010	386	367	\$36,401	\$94
2009	219	310	\$31,086	\$142
2008	180	302	\$30,372	\$169
2007	194	232	\$23,845	\$123

The Rain Barrel Rebate Program started in 2009 and is aimed at encouraging City homeowners to use harvested rainwater for outside uses like washing cars, watering plants, and irrigating landscapes. The program provides up to two \$30 rebates for rain barrels purchased per service address. The City has provided 904 rebates since the program started in FY'09 including 15 rebates in 2024 (12 rebates in FY'24). The City, along with community partners, held two rain barrel workshops in the spring and fall of 2024 which was fully subscribed with 15 participants in each workshop. Rebates were marketed using social media and paid advertising.

2.8 WATER ASSISTANCE PROGRAM

The Water Assistance Program (WAP) was started in FY'12 by the Charlottesville City Council to assist City water customers experiencing hardship in making timely or full payments of their water utility bill. The WAP is intended only for residential customers, whether owners or renters of property. It is not intended for landlords or commercial property accounts and is administered in a fashion similar to the established Gas Assistance Program. The maximum allotment per household since the beginning of the program in FY'12 is \$150 per year. In FY'26, the maximum allotment per household per year is increasing by \$100 to \$250 per year. This increase reflects the increase in water rates since the inception of the WAP.

In FY'24, 35 customers benefited from the WAP receiving a total of \$4,682. The FY'26 water budget does not include any money for WAP since there are funds (\$17,440) available from previous fiscal years. In recent years, there has been additional state and federal money available which has limited the need for participation in the WAP. Comparable assistance is available through the Wastewater Assistance Program (WWAP).

2.9 WATER INFRASTRUCTURE ASSET MANAGEMENT

The City's water distribution system contains 179 miles of water main ranging in size from 2-inch to 18-inch in diameter. About 11.4 miles of that pipe is three inches or less in diameter. The majority of the 11.4 miles of water main are galvanized steel, several decades old, and serve multiple customers. Not only can the water mains be severely corroded, but they can often result in low pressure and significantly reduce the quality of service to customers. The system also includes 1,205 fire hydrants and 3,989 water valves.

2.9.1 Water Distribution System

In 2010, the Department of Utilities determined that the water distribution system needed major attention and remediation for deficiencies. These deficiencies included: water main breaks, low water pressure, poor water quality, insufficient fire flow, and fire hydrant placement not within standards.

After a comprehensive analysis of the system was completed, the development of the priority list was created (which contained 45 projects in 2010). These projects would replace or rehabilitate existing water mains and install new water mains to create loops within the system to eliminate the deficiencies.

To determine project prioritization, criteria were used, and a ranking number system developed and applied to all projects. The criteria were categorized into the following groups:

1. Physical Consideration criteria assess the integrity of the pipes which comprise the water system.
2. System Consideration criteria address water quality, pressure, and fire limitations within the water system.
3. Environmental/Historic Consideration criteria address natural conditions which may be impacted by a construction project.
4. Public Impact criteria assess the potential disruption to City residents.
5. Planning criteria assess the potential to incorporate construction projects into areas to be developed within the City.
6. Area Construction criteria evaluate the potential to incorporate proposed construction projects into areas to be developed within the City.
7. Cost/Benefit Ratio assesses the cost required to achieve the overall benefit for the improvement.

Each of the criteria was evaluated as to its importance versus the other criteria. A weighting value was given to each criterion. The weighting values ranged from 10 being the most important to 1 which was least important. The following is a summary of the weighting values and associated criteria:

<u>Weighted Value</u>	<u>Criteria</u>
10	Water Quality Issues, Low Fire Flow
8	Water Main Breaks
7	Water Age
6	Paving, Sewer Main Replacement, Cost/Benefit Ratio
5	Low Pressure
4	Traffic, Location
2	Wetlands, Natural Landmarks, Development Area
1	Service Line Repairs

To achieve success, the Department created a contract with over 200 individual bid items representing water system components to address the initial list of projects. Examples of these bid items include various sizes of pipe, fittings, valves, meters, services, fire hydrants, and site restoration.

In 2011, the Annual Water System Contract was awarded, and construction began. Contractors were required to provide two crews which would work simultaneously on the projects. Contractors were provided the list of projects, but no specific designs as to the extent of the projects. The annual contract was awarded with the potential for two single-year renewals. Since this initial contract, there have been four contracts awarded over 14 years with achievements and lessons learned every year and from every project.

This Priority List is updated every other year and over the past 14 years the Department has seen 128 completed projects totaling over 121,618 linear feet (LF) (23 miles) of water mains replaced. This equates to 12.6% of the entire water system being replaced under this contract. To complete these projects, the Department has spent \$32,672,984 to date with an average of \$2,333,778 being spent in a contract year. It is the intent of the Department to average approximately two miles of main replacement per year which equates to an average of approximately \$269 per linear foot of pipe installed.

In the current contract year, at \$269/LF, at the expected footage of pipe installed, which is two miles, the construction budget for this project would be \$2,840,640. However, past contracts have varied between \$1,542,768 and \$2,817,456 per contract year. This value can change depending on the size and location of projects, weather, and unknowns that are encountered during construction.

There are five other projects that will be completed by the Department in upcoming fiscal years. They are as follows:

Rugby Road Water Meter Replacement/ Gentry Lane Water Main Phase 3 Installation

Currently there are two water mains (one 12-inch and one 6-inch that reduces to a 4-inch) in Rugby Road from University Avenue to Route 250. The third phase of the project will move all existing water services from the smaller water main to the larger water main. This will allow for the smaller water main

to be abandoned reducing the maintenance needed in Rugby Road. This phase of the project is intended to be constructed at date still to be determined. This final phase of the three-phase project had an estimated construction cost of \$1,500,000. However, this cost estimate was performed several years ago and will need to be revisited once an updated project schedule is set.

High Street Water Main Replacement

To improve utilities ahead of a large paving and streetscape project, Utilities will implement a project to replace approximately 5,400-feet of 6-inch diameter water main with 12-inch diameter piping. This will greatly reduce maintenance while providing capacity for future development along the High Street corridor. The Department of Utilities is currently coordinating with the Department of Public Works and the Rivanna Water and Sewer Authority on the design. This project is being designed with a construction timeline for late summer/ early fall of 2025. The project will be phased with phase one taking place between Long Street and Meade Avenue. The second phase will be between Meade Avenue and Locust Avenue, and will connect to the third phase, which is included in the High Street Streetscape. The fourth and final phase will be between 9th St NE and 2nd St NW. The total project, excluding the High Street Streetscape portion, has an estimated cost of \$4,350,000 for construction.

Locust Avenue Water Main Replacement

Locust Avenue from East High Street to Locust Lane is served by approximately 1.2 miles of 6-inch water main installed in 1924. The water main has experienced many breaks over the years. In addition, suspended from the bridge which spans Route 250 are two 6-inch water mains. One of the water mains has been abandoned since its support has failed. The project has been divided into two phases. The first phase consists of installing an 8-inch water main from East High Street to the Route 250 Bridge. The Department advertised phase one of the project for construction and opened bids in April 2025. The lowest responsible bid was for \$1,508,489. Phase one has an anticipated start of summer of 2025 with a duration of six months.

Phase two consists of installing an 8-inch water main from the Route 250 Bridge to Locust Lane and replacing the two 6-inch water mains under the bridge with new supports. The estimated construction cost of Phase two is \$4,000,000 with an anticipated start in the summer of 2026.

West Main Street Water Main Replacement

Currently, a 1930's era 10-inch cast iron water main serves the area of West Main Street from Ridge McIntire Road to Elliewood Avenue. Due to age, the need for increased capacity, and the line being a major distribution main for the water system, the Department decided that a replacement project was necessary. The new main will be 12-inch ductile iron and will provide increased capacity and reliability to the West Main corridor and surrounding areas. The work is being coordinated with the gas main replacement along this same corridor, which is discussed in further detail in the Natural Gas section of the Rate Report. The current estimated construction cost for the line is \$4,888,000, with a timeline for construction to begin in the summer of 2026.

Rutledge Avenue Water Main Installation

Throughout the City, there are several areas that have old, 2-inch galvanized steel water mains that were installed out of the right-of-way to serve houses. Typically, these lines run in the backyards of private properties and often do not have recorded easements dedicated to the City. To compound the access and maintenance issues, typically these 2-inch water mains are severely corroded internally, which can cause pressure and volume issues for the customer. The Rutledge Avenue water main is an example of this situation. Department of Utilities personnel have installed a new ductile iron water main in the City right-of-way and are working with the property owners to install new services on the privately-owned property to reconnect to the newly installed water meter, which is now at the front of the property. The total cost of the installation of the new main and services was \$181,674. The Department will advertise for bids for plumbing and excavation services once all property owners have agreed to the houses being reconnected. An award for the work is scheduled to be issued in late summer of 2025 and has a projected cost of \$345,000.

While the Department has several large projects and programs underway that address water mains, the water services are still a focus for replacement. Most of the City's water services (the pipes from the mains to the water meters) are galvanized steel and were installed during residential construction. Many are now severely corroded with a tendency to fail at the worst times – nights, weekends, and inclement weather events. The City is continuing its water service replacement program as part of the upgrading and replacement of water mains. To date, approximately 12.3 miles (65,118 linear feet) of water service lines have been replaced.

2.9.2 Water In-House Maintenance

To keep providing the safe and reliable service the Department of Utilities prides itself on, in-house staff takes a proactive approach to maintaining the water system to minimize emergencies and outages to our customers. Department of Utilities maintenance crews completed a variety of work orders to achieve this proactive method. However, emergencies do still occur. Some examples of the Department's efforts in FY'24 are below:

- Replacement of existing water mains on seven streets
- A total of 95 water system repairs (valves, hydrants, etc.)
- Response to discolored water investigations - 31
- Response to water leaks - 87
- Response to meter investigations - 38
- Replacement or repair of water services - 93

2.9.3 Lambeth Field Pump Station

The Department owns and operates one pump station- the Lambeth Field Pump Station (LFPS). The LFPS is located adjacent to Rugby Road and provides water to a closed-loop high pressure zone. The pump station is designed to provide a firm capacity of 3.38 million gallons per day (MGD) and is currently outfitted with two 0.65 MGD low-capacity pumps and one 2.2 MGD high-capacity pump. The pump station also has a natural gas back-up high-capacity pump that can handle the 3.38 MGD firm capacity. The natural gas pump was installed since the City operates the natural gas utility and natural gas was readily available to the pump station. The zone that the LFPS services is known as the Lambeth Pressure Zone and consists of the northern halves of the Venable and Barracks/ Rugby Neighborhoods.

This pressure zone serves approximately 800 connections and provides fire protection to the area. In 2009, the City recognized that this pressure zone was inadequate and unreliable, especially when a power outage occurred at the LFPS. When electrical power was lost, City crews would operate isolation valves between the Lambeth Pressure Zone and the South Rivanna Pressure Zone to allow water to bleed into the Lambeth Zone. This not only caused discolored water issues, but it also put the zone at high-risk due to low pressures and low fire flows.

The Department made the decision to evaluate the Lambeth Pump Station to address the known deficiencies. Upon review, there were several upgrades that needed to occur to provide safe drinking water and fire flows to the pressure zone. In addition to the mechanics of the pump station, the building also needed upgrades to provide structural integrity and longevity.

In 2011, after approval from the Virginia Department of Health (VDH), the Department issued an IFB for construction services. The contract was awarded, and the following improvements were made:

- Supervisory Control and Data Acquisition (SCADA) and pressure transducers installed allowing the Department to track trends, water flows, and pressure drops.
- An Autodialer was installed to alert the Department of any issues, including pressure drops or power failures.
- Building improvements including installing security fencing and lighting, installing interior lighting and repainting, and door, window, and roof replacement; and
- Installation of Variable Frequency Drive (VFD) motor-driven centrifugal pumps to control flows for energy and cost savings at times of decreased demand.

The upgrade was completed in 2012 and the total construction cost was \$442,000.

In 2021 the Department evaluated the SCADA System and decided, along with needed exterior improvements, replacement of the programmable logic controller (PLC) was required. A project was designed that included the following:

- Replacement of the PLC and rewiring to control the natural-gas powered pump
- A concrete pad in front of the exterior electrical panels
- An aluminum canopy over the electrical panels and concrete pad
- Drainage structures and piping

The project was advertised, and construction has been completed for a contract price of \$305,000.

2.9.4 Water Loss Management

Replacing water distribution mains and service lines is an important component in water loss prevention and conservation. Aging pipes are a primary cause of lost water in a system. Since FY'09, the City has been replacing aged water lines and service lines, which reduces leaks and supports improving infrastructure.

The City has also performed system-wide leak detection surveys. With over 238 miles of water lines (mains and services), five leaks were detected and repaired during the 2023 testing, resulting in an

estimated loss of 184,320 gallons per day through various methods. The yearly leak detection survey was performed again in 2024 with six leaks being found with an estimated total loss of 125,280 gallons per day. The City aims to respond and repair leaks expeditiously to minimize water loss and service impacts. The next survey is scheduled for fall 2025 and will be consistent with past years covering 100% of the distribution system.

In 2022, a proposed amendment was submitted to modify the language and requirements to the Virginia Water Protection Permit. A key requirement of this proposed amendment is a completion of a water loss audit on an annual basis, using the most up-to-date water audit software from the American Water Works Association (AWWA). Results of the audit will be reported at a minimum frequency of once every three years. **Note: This proposed amendment is currently under review by the Governor’s office, however it is anticipated to be ratified at some point in the future.*

In 2024, the Rivanna Water & Sewer Authority (RWSA), the Albemarle County Service Authority (ACSA), and the City of Charlottesville Department of Utilities worked together to create a regional water audit. It was determined that as the wholesale water treatment provider, RWSA would undertake the role and responsibility for submitting the regional audit to the Virginia Department of Environmental Quality (VDEQ).

Over several months, representatives from all three Utilities built the first regional water audit in preparation for eventual submittal to the state agency. The audit calculated the value of the non-revenue water (NRW) by splitting it into three categories: apparent losses, real losses, and unbilled authorized consumption.

Exhibit 8: Results of First Regional Water Audit

Type of Water Loss	Million Gallons (MG)/Yr	Revenue Lost
Apparent Losses	172.7	\$998,612
Real Losses	181.1	\$147,342
Unbilled Authorized Consumption	20	\$16,284
TOTAL NON-REVENUE WATER	373.7	\$1,162,238

The results demonstrated that water loss has been mitigated through effective infrastructure management, maintenance, and testing. Collectively, the water audit showed a 10% loss rate, which is below the national average of 14%. The regional audit was given a score of 78 out of 100, placing it in the Tier IV category (out of 5 total). Per AWWA, the recommendations for improvement do not warrant drastic change to data collection or infrastructure management, but rather a continued refinement that should be based on an economic return or justification. These recommended steps for improvement to a Tier IV system include:

1. Refine data collection practices
2. Refine, enhance, or expand ongoing programs based upon economic justification
3. Continue to plan and budget for continued comprehensive improvements for metering, billing, or infrastructure management
4. Establish mid-range (five-year horizon) apparent and real loss reduction goals

Water is a precious and finite resource. Continuing our water loss mitigation will benefit the utility by conserving its water and diminishing its need for future acquisitions of additional water supply.

Reducing water loss offers a utility the ability to increase their water efficiency, improve their financial status, and assist with long-term sustainability. With established benchmarks for improvement, the City, along with RWSA and ACSA, are well positioned moving forward to continue reductions in water loss through community outreach, infrastructure improvement, and adoption of the newest water loss technologies.

The current capital projects in the City’s five-year capital plan are listed below. The costs include construction and professional services. The City updates its capital plan annually.

Exhibit 9: City Five-Year Capital Improvement Plan for Water

Project	Five-Year Total
Water Line Replacement (Annual Service Contract)	\$12,000,000
Large Waterline Replacements Projects	\$17,000,000
TOTAL	\$29,000,000

2.10 RIVANNA WATER AND SEWER AUTHORITY (RWSA)

The RWSA provides wholesale water supply, as well as drinking water for Charlottesville Utilities and the Albemarle County Service Authority (ACSA). The City’s share of RWSA’s budget for water totals \$11,504,700 for FY’26 including operations costs and debt service for infrastructure. This is a proposed increase to the City of 13.8% (\$1,391,600) over the approved FY’25 budget. Operating expenses include personnel costs (staff salaries and benefits), general services costs (professional fees, utilities, insurance, permits, and data and voice communications), and operation and maintenance costs (chemicals, building repairs, equipment maintenance, technology, and communications). Debt service provides funding to construct and renew major infrastructure including water treatment plants, pumping stations, piping systems and reservoir dams. For more information regarding RWSA’s adopted budget: <https://www.rivanna.org/financials-and-procurement/>

2.10.1 Infrastructure

RWSA’s Capital Improvement Plan (CIP) for water for FY’26-FY’30 has been prepared as a strategic and financially responsible plan to complete major infrastructure construction projects. The projects included in the CIP are necessary to achieve the RWSA’s core mission of providing safe, high-quality drinking water for Charlottesville Utilities and ACSA. The CIP is a five-year planning document which provides an estimated budget and schedule for projects as they advance through the design and construction process.

The infrastructure requirements of the CIP are developed through RWSA’s Asset Management and Master Planning programs to address capacity demands, regulatory mandates and rehabilitation needs. Each year, these projects are reviewed and prioritized by the RWSA management team and brought forth for review by the Board of Directors.

Information regarding RWSA’s 5-year Capital Improvement Plan can be found on RWSA’s website: <https://www.rivanna.org/financials-and-procurement/>

2.10.2 Actual Water Flows

The City portion of Urban Area operation rates and charges are based on water usage or flows. The estimated flows for the City will increase by 2% for the FY'26 budget.

Exhibit 10: RWSA Water Usage Allocation

	Current	Projected	% Change
City	48%	49%	2%
ACSA	52%	51%	-2%

2.10.3 City Share of RWSA Water Costs

The RWSA FY'26 budget increases the budget by \$342,200 in operating expenses and an increase of \$1,049,400 in debt service charges for a total budget increase of approximately \$1,391,600, or 13.8% above the FY'25 budget. RWSA's costs to the City for water are:

- \$3.642 per 1,000 gallons for operating expenses.
- \$463,676 per month for debt service charges.

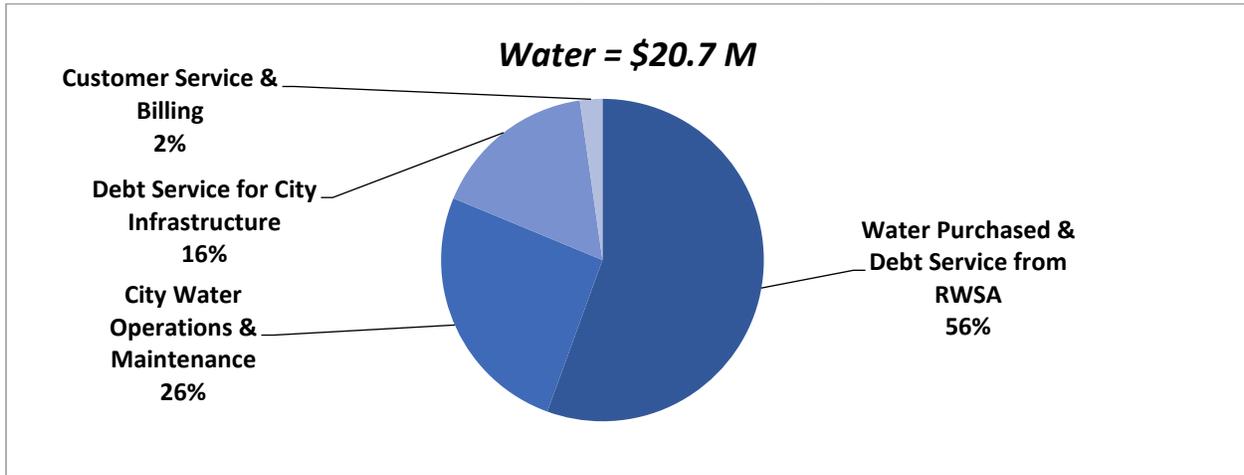
2.11 REVENUE REQUIREMENTS

This section of the report outlines the current and projected costs of operating and maintaining the City's water system which constitute the revenue requirements (i.e., the amount of revenue required to be collected from customers).

2.11.1 FY'26 Revenue Requirements

The FY'26 revenue requirements for the water utility totals \$20,711,105. The following exhibit shows the major categories of expenses, the largest being the purchase of water and debt service from RWSA (56% of the FY'26 budget).

Exhibit 11: Water Utility FY'26 Revenue Requirements



The revenue requirements for the water utility are approximately 11% higher than the current year. Debt service includes payments on existing bonds and new bonds to be issued by the City to finance the utility’s capital improvement plan.

Exhibit 12: Comparison of Water Revenue Requirements FY'25 to FY'26

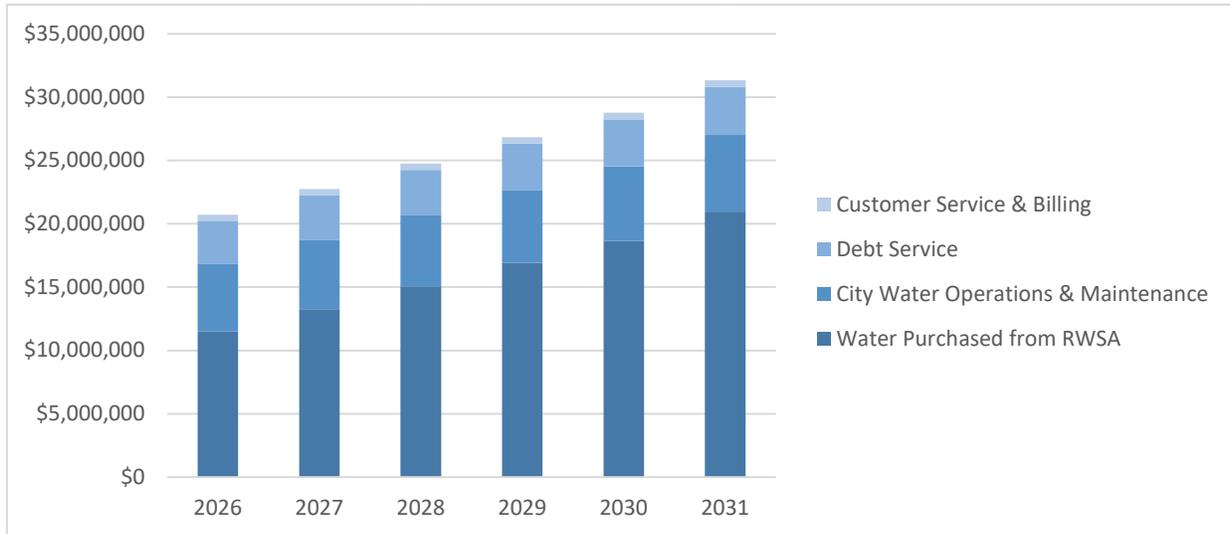
Revenue Requirements	Current	Proposed	\$ Change	% Change
Water Purchased & Debt Service from RWSA	\$10,113,100	\$11,504,700	\$1,391,600	13.8%
City Water Operations & Maintenance	\$4,968,865	\$5,323,851	\$354,986	7.1%
Debt Service for City Infrastructure	\$3,169,627	\$3,416,514	\$246,887	7.8%
Customer Service & Billing	\$446,340	\$466,040	\$19,700	4.4%
TOTAL	\$18,697,932	\$20,711,105	\$2,013,173	10.8%

2.11.2 Projected Water Revenue Requirements

To project operating expenses for FY'27-FY'31, the FY'26 water revenue requirements are escalated using historic averages except for the cost to purchase water from RWSA which is based on projected rate increases. In addition to operating expenses, annualized capital costs are included. The City issues bonds to fund water capital projects to mitigate the financial burden on existing customers and improve equity by spreading the costs of long-term assets over all customers who will use and benefit from the assets. The City is currently paying debt service for bonds previously issued and plans to issue bonds to fund its water CIP.

The revenue requirements for FY'27 through FY'31 are shown in the following exhibit. The average annual increase is 8.6%.

Exhibit 13: Projected Water Revenue Requirements FY'27-FY'31



2.12 CUSTOMERS AND USAGE

The City currently provides water service to just over 14,500 customers. The exhibit below provides a breakdown of current water customers by water meter size. Residential customers (5/8" water meters) comprise most of the City's water customers (94.4%).

Exhibit 14: Current Water Customers by Meter Size

Water Meter Size (inches)	# of Customers	% of Customers
5/8	13,710	94.4%
1	276	1.9%
1.5	256	1.8%
2	222	1.5%
3	41	0.3%
4	15	0.1%
6	1	0.01%
14	1	0.01%
TOTAL	14,522	

The exhibit below provides a projection of water usage for the upcoming fiscal year in cubic feet.

Exhibit 15: Projected FY'26 Water Usage

Usage	Cubic Feet
Projected Total	201,000,000

The City’s water service area corresponds with the municipal boundary and thus is fixed. The City has been adding water customers the last several years as a result of redevelopment and infill development. It is difficult to project the number of future water customers and water usage; thus, no growth is factored into the planning period.

2.13 MONTHLY SERVICE CHARGE

The Monthly Service Charge for water funds a portion of the fixed and infrastructure costs associated with being a customer of the water utility. The charge is proportionate to the size of a water meter. The size of a water meter regulates the amount of water that can pass through the meter thus provides a proportionate measure of the different impact of customers. For example, one 1-inch meter uses as much water as two and a half 5/8-inch meters.

The revenue requirements for the water utility have increased, including fixed costs and infrastructure. The Monthly Service Charges for FY’26 will increase about 33%. Most customers will see a \$2.50 increase in their Monthly Service Charge for water.

Exhibit 16: Monthly Service Charge for FY’26 for Water

Water Meter Size (inches)	Current Monthly Service Charge	Proposed Monthly Service Charge	\$ Change	% Change
5/8	\$7.50	\$10.00	\$2.50	33.33%
1	\$18.75	\$25.00	\$6.25	33.33%
1.5	\$37.50	\$50.00	\$12.50	33.33%
2	\$60.00	\$80.00	\$20.00	33.33%
3	\$120.00	\$160.00	\$40.00	33.33%
4	\$187.50	\$250.00	\$62.50	33.33%
6	\$375.00	\$500.00	\$125.00	33.33%
14	\$2,456.25	\$3,275.00	\$818.75	33.33%

2.14 WATER FACILITY FEES

Water Facility Fees were developed and established for the City in 2008. Facility fees are one-time charges levied to offset existing or planned future capital costs necessary to meet the service needs of City water customers. These fees are assessed when new water service is requested where none has previously been provided, or an increase in capacity where service already exists, water facility fees are charged for this new increased demand for system capacity.

There are no changes being proposed to the Water Facility Fee for FY’26.

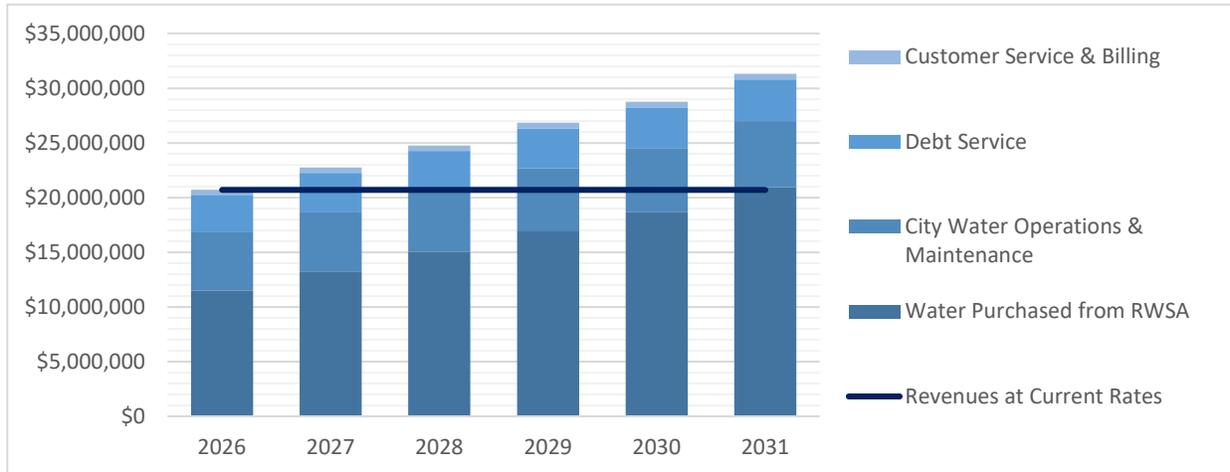
2.15 WATER RATES

2.15.1 Total Revenue Projections at Current Rates

The projected cost (revenue requirements) of the system is combined with the projected water customers and usage to determine an appropriate financial plan and set water rates for the planning period.

The adequacy of revenues from current rates is evaluated to determine if existing rates are enough to recover the revenue requirements. As shown in the next exhibit, current water rates are not enough to meet the projected revenue requirements.

Exhibit 17: Water Revenue Requirements and Revenue at Current Rates



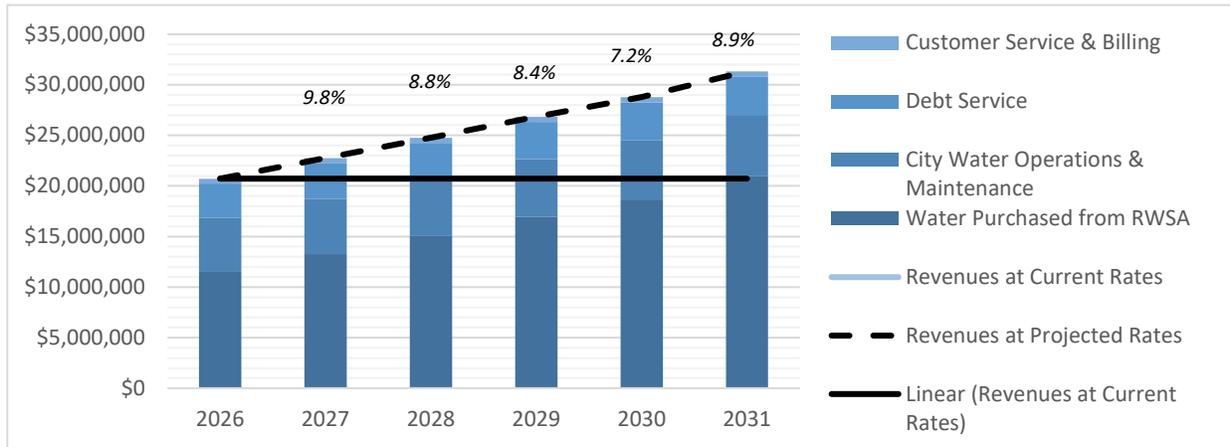
2.15.2 Revenue Projections at Current and Projected Rates

To maintain the financial health of the City’s Water Fund over the planning period, revenue needs to be increased. In addition to covering the revenue requirements, revenue must also be enough to satisfy the City’s long-term financial policies.

To address these shortfalls, rates will need to be adjusted on a multi-year basis. Note: water rates are evaluated and adopted on an annual basis. A multi-year approach helps manage rate increases over the planning period and allows for proper planning and adjustment by customers and the City.

The exhibit below compares the revenue requirements (with percent change from the previous year) with total revenue projections at current rates as well as total revenue projected at new rates for FY’26 and the years of the planning period for water.

Exhibit 18: Water Revenue Requirements, Revenue at Current Rates and Revenue at Projected Rates



2.15.3 Water Rate Design

There are no recommendations to change the City’s current seasonal water rate design.

2.15.4 Water Rates FY’26

Water rates are recommended to increase by 13.17% for FY’26.

Exhibit 19: Water Rates FY’26

per 1,000 cubic feet	Current	Proposed	\$ Change	% Change
Summer	\$88.83	\$100.52	\$11.69	13.17%
Winter	\$68.33	\$77.33	\$9.00	13.17%

2.15.5 Projected Water Rates FY’26-FY’31

Based on the projected revenue requirements for FY’27-FY’31 and customer usage, the projected water rates for this planning period are shown below.

Exhibit 20: Projected Water Rates FY’26-FY’31

	Current	-----PROJECTED-----					
		2026	2027	2028	2029	2030	2031
Summer	\$88.83	\$100.52	\$110.40	\$120.16	\$130.29	\$139.68	\$152.08
Winter	\$68.33	\$77.33	\$84.92	\$92.43	\$100.22	\$107.45	\$116.98
Summer \$ Change		\$11.69	\$9.87	\$9.77	\$10.12	\$9.40	\$12.39
Summer % Change		13.2%	9.8%	8.8%	8.4%	7.2%	8.9%
Winter \$ Change		\$9.00	\$7.60	\$7.51	\$7.79	\$7.23	\$9.53
Winter % Change		13.2%	9.8%	8.8%	8.4%	7.2%	8.9%

2.16 CUSTOMER IMPACTS

The table below illustrates the average monthly water bill for customers based on water meter size with the recommended water rate increases and Monthly Service Charge.

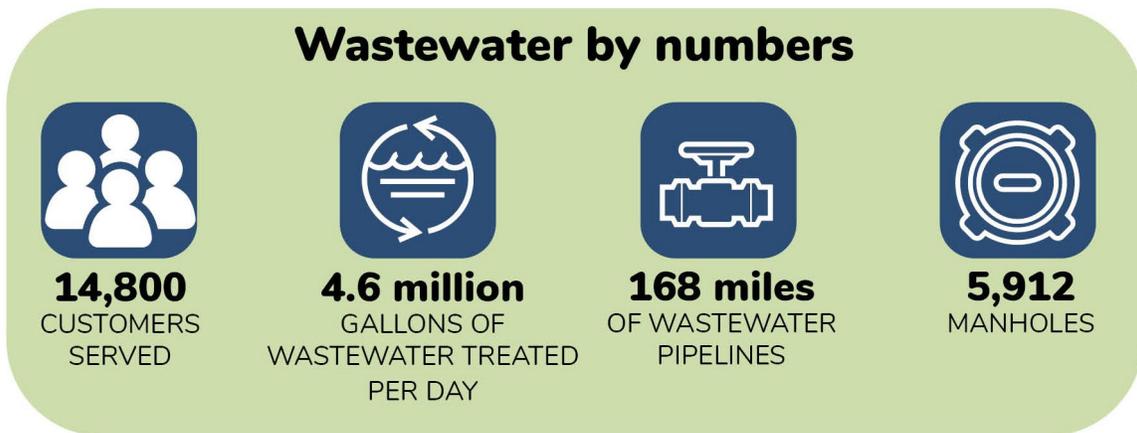
Exhibit 21: Customer Impacts at FY'26 Water Rates and Charges

Water Meter Size	Median Water Usage/Month (cf)	Current Ave. Monthly Bill	Proposed Ave. Monthly Bill	\$ Increase	% Increase
5/8	400	\$38.25	\$44.80	\$6.55	17.12%
1	1,760	\$154.04	\$178.11	\$24.06	15.62%
1.5	3,410	\$299.63	\$346.64	\$47.01	15.69%
2	5,680	\$496.63	\$574.11	\$77.48	15.60%
3	11,750	\$1,023.24	\$1,182.16	\$158.91	15.53%
4	43,720	\$3,548.33	\$4,053.29	\$504.96	14.23%

3. SEWER

3.1 OVERVIEW

The City operates and maintains the sanitary sewer collection system within its boundaries which consists of about 168 miles of pipe and 5,912 manholes. The collection system was constructed over a period of many decades using several different types of materials – terra cotta (clay), PVC, ductile iron, and concrete. The pipes vary in age from about 15 to 100 years old and range in size from 6-inch to 30-inch in diameter. Manholes are either brick or pre-cast concrete. The flows from the City’s system (1.69 billion gallons per year or 4.6 million gallons per day) combine with flows from the Albemarle County Service Authority and empty into RWSA interceptors. These combined flows are carried to RWSA’s Moores Creek Advanced Water Resource Recovery Facility.



3.1.1 Customer Satisfaction Survey - 2025

Results of the 2025 Utilities Customer Satisfaction Survey show high levels of satisfaction with the reliability and value of our wastewater services. Of those surveyed, 100% are satisfied and neutral about the reliability of wastewater service, and 96% of respondents rate the value of their wastewater service as fair and above (good and excellent).



3.2 FATS, OILS, AND GREASE (FOG)

The City of Charlottesville prohibits the discharge of fats, oils, and grease (FOG) down the drain. In excessive amounts, these contaminants will cause or contribute to a blockage in the sanitary sewer collection system. FOG accumulates in sewer pipes, and over time, can build up and restrict the flow in the pipe, causing untreated wastewater to back up into businesses or homes, or cause manholes to overflow in the street (commonly referred to as sanitary sewer overflow or SSO). This SSO can potentially enter a storm drain and contaminate local waters. In an effort to prevent these events, the City of Charlottesville maintains an active FOG program that routinely inspects and advises best management practices to over 300 city restaurants on an annual basis on how to properly dispose of FOG.

3.3 WASTEWATER ASSISTANCE PROGRAM

The Wastewater Assistance Program (WWAP) was created by the Charlottesville City Council in FY'12 to assist customers who had difficulty paying their bills due to extreme circumstances. This program is administered by the Utility Billing Office in a similar fashion as the established Gas Assistance Program. The maximum allotment per household since the beginning of the program in FY'12 is \$150 per year. In FY'26, the maximum allotment per household per year is increasing by \$100 to \$250 per year. This increase reflects the increase in wastewater rates since the inception of the WWAP.

Thirty-five customers received assistance in FY'24, totaling \$4,682. The FY'26 wastewater budget does not include any money for WWAP, since there are adequate funds (\$24,687) from prior fiscal years. Comparable assistance is available through the Water Assistance Program (WAP).

3.4 WASTEWATER INFRASTRUCTURE ASSET MANAGEMENT

The City has several challenges within the sewer collection system, such as sewer lines that are undersized, points in the system that restrict flow, and sewer lines that run near and under structures. Also, most of the existing system was installed prior to 1970. In 2008, the Department of Utilities began planning and budgeting for a substantial long-term sewer system evaluation and rehabilitation program. The need for such a program arose to address the system as it continued to age and deteriorate. This deterioration allows for infiltration and inflow (I/I) to enter the sewer system. The terms "inflow" and "infiltration" apply to excess water that enters the sanitary sewer system. Inflow is surface water that flows into the system from various sources, such as defects in manhole covers and improperly connected roof drains. Infiltration is groundwater that seeps into the system through pipe cracks, broken joints, and deteriorated manholes. I/I can cause sanitary sewer overflows (SSOs) and increased costs resulting from unnecessary wastewater treatment. In addition, root intrusion can cause blockages, partial to full collapses of pipe, and increased emergency repair situations. Before 2008, there was only operational maintenance performed to keep the system "working" and very little work completed towards system-wide improvement.

3.4.1 Sanitary Sewer Rehabilitation

In 2009, the City awarded a multi-year, multi-million-dollar contract utilizing a "find-and-fix" approach for sewer repair and rehabilitation. The rehabilitation program identifies needed repairs to restore the integrity of the sewer system which are necessary to reduce the amount of inflow and infiltration into the sewer system. The work encompasses the rehabilitation of sewer manholes and sewer lines, as well as completion of particularly difficult or time-consuming sewer replacement projects. In addition, crews

have been performing CCTV (closed-circuit televising) and smoke testing throughout the City system. Any deficient pipes or structures are immediately added to the list for rehabilitation/replacement under the same contract.

“Find-and-fix” rehabilitation projects are unique projects. The exact work is not known at the time of bidding, so all potential work items must be included in the bid form (bid form includes over 200 bid items). The contractor performs the evaluation work prior to construction, primarily TV inspections, submits the evaluation to the Engineer for review, and the Engineer then decides on the final rehabilitation work needed within seven days. The work is fast-paced and allows for emergency situations to be addressed within 48 hours. The City estimates savings exceeding \$5 million following this find-and-fix approach as well as taking half the time to complete a project compared to the traditional design-bid-build process.

To date, under this contract, the Department has completed:

- 640,333 linear feet (LF) (121.3 miles) of CCTV
- 334,546 LF (63.4 miles) of CIPP, 6” to 21” in diameter
- 23,726 LF (4.5 miles) of pipe replacement, 6” to 18” in diameter
- 268 point repairs
- 6,360 vertical feet (VF) (1.2 miles) of manhole rehabilitation
- 225 manhole replacements
- 754 frame and covers replaced

To complete this amount of work, the Department has issued five term contracts over 15 years and spent a total of \$28,222,021 on construction. The footage of pipe rehabilitation or replacements completed to date under this program totals 289,807 LF, or 54.89 miles, which equates to 32.6% of the City’s total system.

As stated above, approximately 32.6% of the sanitary sewer system has been rehabilitated or replaced through the rehabilitation/replacement program, and the Department is continuously working towards comprehensive rehabilitation of the entire system of 24 total basins.

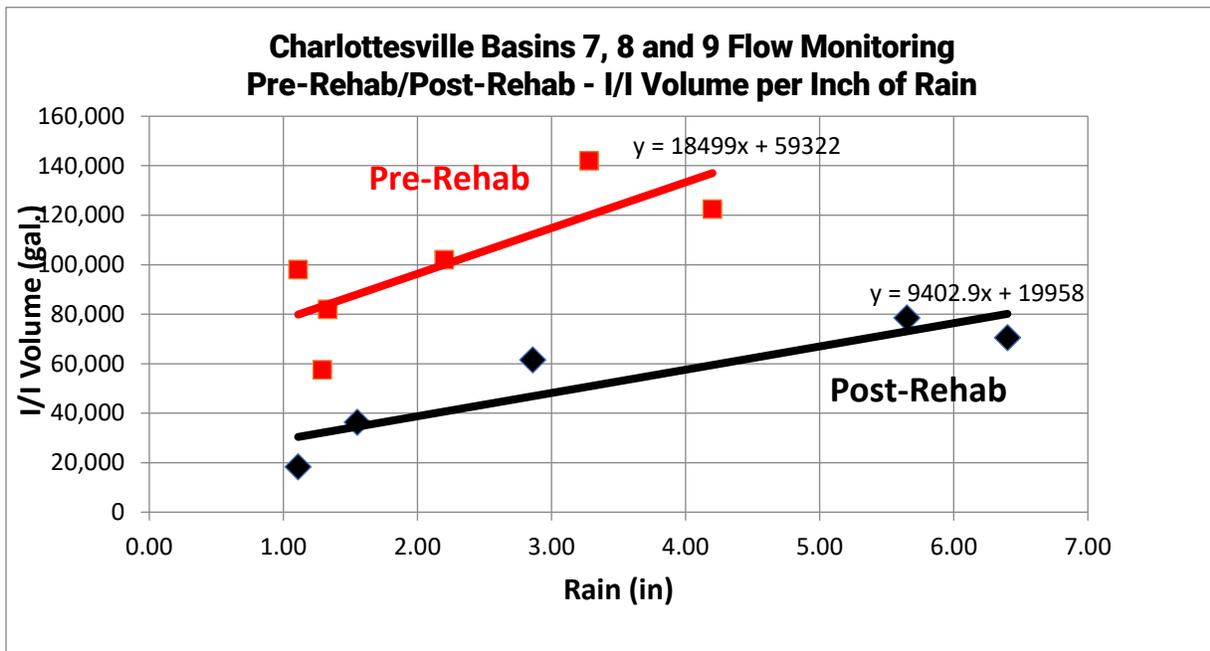
The rehabilitation program will continue into FY’26 utilizing available proceeds from the previous bond issues to fund the needs in the upcoming fiscal year. Historically, on a yearly contract timeline, this budget has allowed an average of:

- 50,000 LF of CCTV
- 21,000 LF of CIPP
- 1,900 LF of pipe replacement
- 22 point repairs
- 19 manhole replacements
- 500 VF of manhole rehabilitation
- 63 frame and cover replacements

The Initial work was centered on the Schenks Branch area (City Basins 7, 8, and 9), which was identified

as a high priority in previous studies. The following exhibit is a table that demonstrates the success that the program has had with removing I/I around the Schenks Branch area. The associated graph in the exhibit shows the reduction in post-rehab flow levels of I/I per inch of rain as being close to half of the pre-rehab flows. Due to this success, work has since continued into other areas of the City where similar results have been observed.

Exhibit 22: Basins 7, 8, and 9 Flow Monitoring Results



3.4.2 Wastewater In-House Maintenance

Similar to the other utilities, operations crews in the Department of Utilities take a proactive approach to maintain the wastewater system to minimize emergencies and disruption of service to our customers, protect properties from damage, as well as to protect the environment and public health from contamination caused by sanitary sewer overflows. A few examples of the efforts by Utilities’ crews in FY’24 are list below:

- Sewer main flushing and cleaning for a total of 161,839 linear feet
- Closed- circuit television (CCTV) of sewer main- 107,838 linear feet
- Response to 15 sewer backup calls
- Sanitary sewer main repairs- 26

3.4.3 14th/ 15th Street Collector Sewer

The 14th/ 15th Collector Sewer collects flows from 17th Street NW starting at the CSX railroad to McIntire Road in front of the Albemarle County Building, and from the north side of West Main Street to Preston

Avenue. This sewer collector main connects to RWSA’s Schenks Branch Interceptor in front of the Albemarle County Office Building. The sewer shed for this collector is 16,667,942 ft², or 0.598 mi² (383 acres). This sewer will be replaced in conjunction with the upper portion of the Schenks Branch Interceptor, which is approximately 1,200 LF of 30-inch ductile iron pipe. The 14th/15th Street Collector project is approximately 5,100 LF of ductile iron pipe ranging in size from 12-inch to 24-inch. A preliminary cost estimate for design, engineering, and construction services was completed and the project total was \$4,300,000. However, this cost estimate is several years old and will be updated once the final route is decided.

In preparation for the possibility of the 14th/15th Street Collector being very costly, the Department has been preparing by slowly building the balance in the CIP while continuing to rehabilitate the smaller diameter system through the City. It is anticipated that the cost of replacing the Collector will continue to increase until the project is at 100% design and ready for bid. In addition to the construction costs being unpredictable, the project will go through an urban landscape, since it will follow the Schenks Branch culvert up to 14th Street NW. This alignment parallels Hardy and Page Streets and will require easements since the majority (70%) of the project is on private property.

The current capital projects in the City’s five-year capital plan are listed below.

Exhibit 23: City Five-Year Capital Improvement Plan for Wastewater

Project	Five-Year Total
Rehabilitation/Replacement Program	\$10,000,000
14 th / 15 th Collector Sewer	\$4,300,000
TOTAL	\$14,300,000

3.5 RIVANNA WATER AND SEWER AUTHORITY (RWSA)

RWSA provides wastewater treatment services for Charlottesville Utilities and ACSA. The City’s total RWSA costs include operating expenses and debt service costs, are \$11,393,100, an increase of 11% (\$1,128,800) over the current year’s budget. Operating expenses include personnel costs (staff salaries and benefits), general services costs (professional fees, utilities, insurance, permits, and data and voice communications), and operation and maintenance costs (chemicals, building repairs, equipment maintenance, technology, and communications). Debt service charges provide funding to construct and renew major infrastructure including wastewater treatment plants, pumping stations, and piping systems. For more information regarding RWSA’s adopted budget: <https://www.rivanna.org/financials-and-procurement/>

3.5.1 Infrastructure

RWSA’s Capital Improvement Plan (CIP) for wastewater for FY’26-FY’30 has been prepared as a strategic and financially responsible plan to complete major infrastructure construction projects. The projects included in the CIP are necessary to achieve the RWSA’s core mission of providing wastewater treatment services for Charlottesville Utilities and ACSA. The CIP is a five–year planning document which provides

an estimated budget and schedule for projects as they advance through the design and construction process.

The infrastructure requirements of the CIP are developed through RWSA's Asset Management and Master Planning programs to address capacity demands, regulatory mandates and rehabilitation needs. Each year, these projects are reviewed and prioritized by the RWSA management team and brought forth for review by the Board of Directors.

Information regarding RWSA's 5-year Capital Improvement Plan can be found on RWSA's website: <https://www.rivanna.org/financials-and-procurement/>

3.5.2 Actual Wastewater Flows

The City portion of Urban Area operation rates and charges are based on wastewater treatment (flows). The estimated flows for the City will decrease for FY'26.

Exhibit 24: RWSA Sewer Production Allocation

	Current	Projected	% Change
City	47%	46%	-1%
ACSA	53%	54%	1%

3.5.3 City Share of RWSA Wastewater Costs

The FY'26 budget increases the budget by \$627,500 in operating expenses and an increase of \$501,300 in debt service charges for a total budget increase of approximately \$1,128,800, or 11% above the FY'25 budget. RWSA's costs to the City for wastewater are:

- \$3.720 per 1,000 gallons for operating expenses.
- \$466,000 per month for debt service charges.

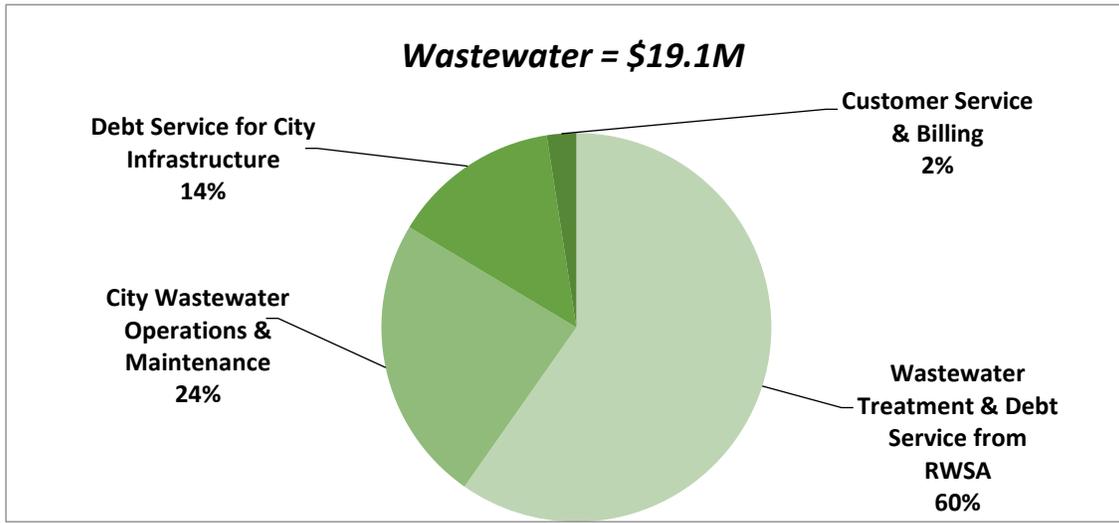
3.6 REVENUE REQUIREMENTS

This section of the report outlines the current and projected costs of operating and maintaining the City's sewer system which constitute the revenue requirements (i.e., the amount of revenue required to be collected from customers).

3.6.1 FY'26 Revenue Requirements

The FY'26 revenue requirements for the sewer utility totals \$19,072,787, as shown in the following exhibit, with the largest component being the purchase of wastewater treatment from RWSA (60% of the budget).

Exhibit 25: Sewer Utility FY'26 Revenue Requirements



The revenue requirements for wastewater are 7.9% higher than the current year.

Exhibit 26: Comparison of Sewer Revenue Requirements FY'25 to FY'26

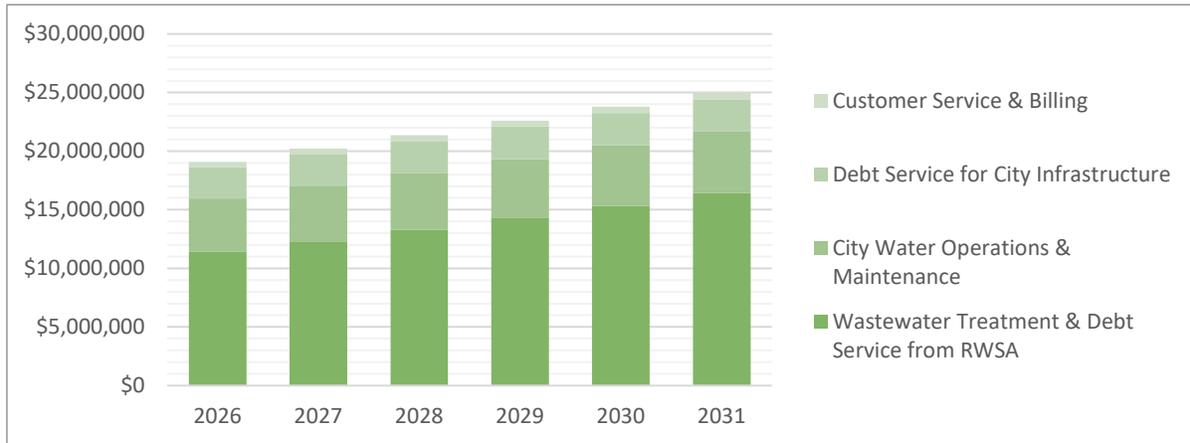
Revenue Requirements	Current	Proposed	\$ Change	% Change
Wastewater Treatment & Debt Service from RWSA	\$10,264,300	\$11,393,100	\$1,128,800	11.0%
City Wastewater Operations & Maintenance	\$4,178,394	\$4,555,369	\$376,975	9.0%
Debt Service for City Infrastructure	\$2,786,765	\$2,658,278	(\$128,487)	-4.6%
Customer Service & Billing	\$446,340	\$466,040	\$19,700	4.4%
TOTAL	\$17,675,799	\$19,072,787	\$1,396,988	7.9%

3.6.2 Projected Revenue Requirements

To project operating expenses for FY'27-FY'31, the FY'26 wastewater revenue requirements are escalated using historic averages except for the cost to purchase wastewater treatment from RWSA which is based on projected rate increases. In addition to operating expenses, annualized capital costs are included. The City issues bonds to fund wastewater capital projects to mitigate the financial burden on existing customers and improve equity by spreading the costs of long-term assets over all customers who will use and benefit from the assets. The City is currently paying debt service for bonds previously issued and plans to issue bonds to fund its wastewater CIP.

The revenue requirements for FY'26 through FY'31 are shown in the following exhibit. The average annual increase is 5.5%.

Exhibit 27: Projected Sewer Revenue Requirements FY'26-FY'31



3.7 CUSTOMERS AND USAGE

The City currently provides sewer service to 14,389 customers. The exhibit below provides a breakdown of current sewer customers by water meter size. Residential customers (5/8 water meters) comprise most of the City’s sewer customers (94.5%).

Exhibit 28: Current Sewer Customers by Meter Size

Water Meter Size (inches)	# of Customers	% of Customers
5/8	13,593	94.5%
1	270	1.9%
1.5	250	1.7%
2	218	1.5%
3	41	0.3%
4	15	0.1%
6	1	0.01%
14	1	0.01%
TOTAL	14,389	

The exhibit below provides a projection of sewage treatment for the upcoming fiscal year in cubic feet.

Exhibit 29: Projected FY'26 Sewage Production

Usage	Cubic Feet
Projected Total	174,000,000

The City’s sewer service area corresponds with the municipal boundary and thus is fixed. The City has been adding sewer customers the last several years as a result of redevelopment and infill development.

It is difficult to project the number of future sewer customers and sewage production; thus, no growth is factored into the planning period.

3.8 MONTHLY SERVICE CHARGE

Like water, the City assesses a Monthly Service Charge for sewer to recoup the fixed costs of providing utility services such as customer service, billing, meter services, and infrastructure. Also, as with the water monthly service charge, the sewer monthly service charge is proportionate to water meter size.

The revenue requirements for the water utility have increased, including fixed costs and infrastructure. The Monthly Service Charges for FY'26 will increase about 33%. Most customers will see a \$2.50 increase in their Monthly Service Charge for sewer.

Exhibit 30: Monthly Service Charge for FY'26 for Sewer

Water Meter Size (inches)	Current Monthly Service Charge	Proposed Monthly Service Charge	\$ Change	% Change
5/8	\$7.50	\$10.00	\$2.50	33.33%
1	\$18.75	\$25.00	\$6.25	33.33%
1.5	\$37.50	\$50.00	\$12.50	33.33%
2	\$60.00	\$80.00	\$20.00	33.33%
3	\$120.00	\$160.00	\$40.00	33.33%
4	\$187.50	\$250.00	\$62.50	33.33%
6	\$375.00	\$500.00	\$125.00	33.33%
14	\$2,456.25	\$3,275.00	\$818.75	33.33%

3.9 SEWER FACILITY FEES

Sewer Facility Fees were developed and established for the City in 2008. Facility fees are one-time charges levied to offset existing or planned future capital costs necessary to meet the service needs of City sewer customers. These fees are assessed when new sewer service is requested where none has previously been provided, or an increase in capacity where service already exists, sewer facility fees are charged for this new increased demand for system capacity.

There are no changes to the Sewer Facility Fee for FY'26.

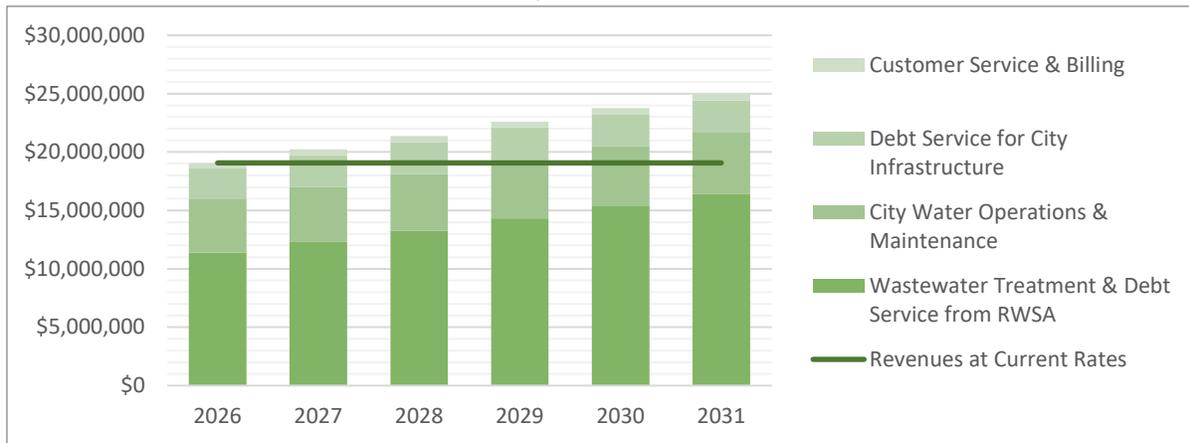
3.10 SEWER RATES

3.10.1 Revenue Projections at Current Rates

The projected costs (revenue requirements) of the system are combined with the projected sewer customers and usage to determine an appropriate financial plan and set sewer rates for the planning period.

The adequacy of revenues from current rates is evaluated to determine if existing rates are enough to recover the revenue requirements. As shown in the following exhibit, current sewer rates are not enough to meet the projected revenue requirements.

Exhibit 31: Sewer Revenue Requirements and Revenue at Current Rates



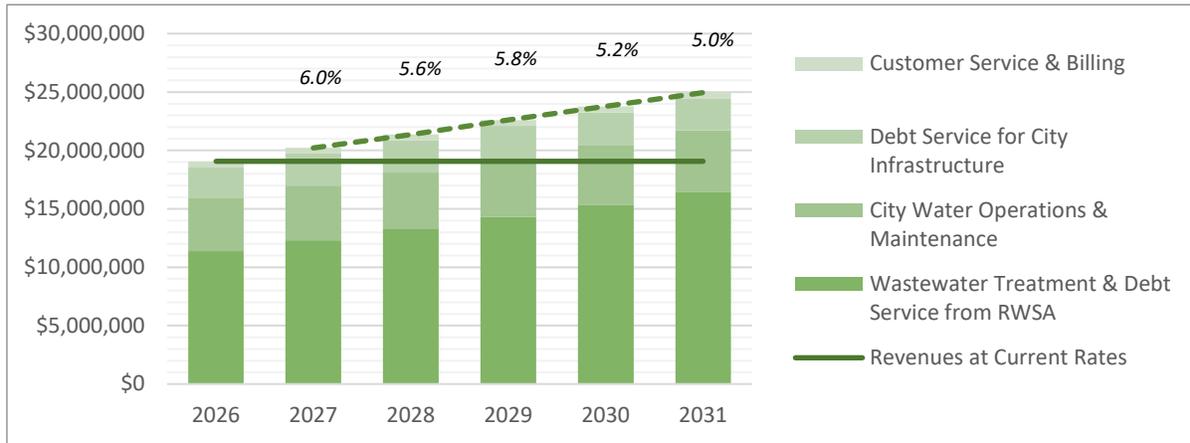
3.10.2 Revenue Projections at Current and Projected Rates

In order to maintain the financial health of the City’s Sewer Fund over the planning period, revenue needs to be increased. In addition to covering the revenue requirements, revenue must also be enough to satisfy the City’s long-term financial policies.

To address these shortfalls, rates will need to be adjusted on a multi-year basis. Note: sewer rates are evaluated and adopted on an annual basis. A multi-year approach helps manage rate increases over the planning period and allows for proper planning and adjustment by customers and the City.

The following exhibit compares the revenue requirements (with percent change from the previous year) with total revenue projections at current rates as well as total revenue projections at new rates for FY’26 and the years of the planning period for sewer.

Exhibit 32: Sewer Revenue Requirements, Revenue at Current Rates and at Projected Rates



SEWER RATE DESIGN

3.10.3 Sewer Rate Design

There are no recommendations to change the City’s current sewer rate design.

3.10.4 Sewer Rates FY’26

Sewer rates for FY’26 will increase by 3.0%

Exhibit 33: Sewer Rates FY’26

per 1,000 cubic feet	Current	Proposed	\$ Change	% Change
Sewer	\$92.55	\$95.29	\$2.74	3.0%

3.10.5 Projected Sewer Rates FY’27-FY’31

Based on the projected revenue requirements for FY’27-FY’31 and customer usage, the projected sewer rates for this planning period are shown below.

Exhibit 34: Projected Sewer Rates FY’27 – FY’31

	Current	2026	2027	2028	2029	2030	2031
	\$92.55	\$95.29	\$101.03	\$106.73	\$112.97	\$118.83	\$124.74
\$ Change		\$2.74	\$5.74	\$5.70	\$6.24	\$5.86	\$5.92
% Change		3.0%	6.0%	5.6%	5.8%	5.2%	5.0%

3.11 CUSTOMER IMPACTS

The table below illustrates the average monthly sewer bill for customers based on water meter size with the FY'26 sewer rate increases and monthly service charge.

Exhibit 35: Customer Impacts at FY'26 Sewer Rates and Charges

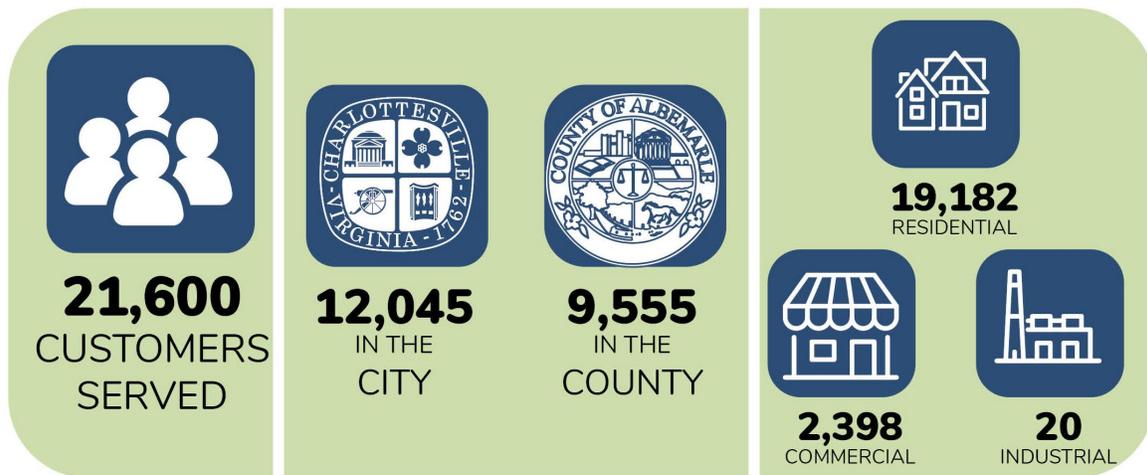
Water Meter Size	Median Sewer/Month (cf)	Current Ave. Monthly Bill	Proposed Ave. Monthly Bill	\$ Increase	% Increase
5/8	400	\$44.52	\$48.12	\$3.60	8.08%
1	1,760	\$181.64	\$192.71	\$11.07	6.10%
1 1/2	3,410	\$353.10	\$374.94	\$21.84	6.19%
2	5,680	\$585.68	\$621.25	\$35.57	6.07%
3	11,750	\$1,207.46	\$1,279.66	\$72.20	5.98%
4	43,720	\$4,233.79	\$4,416.10	\$182.31	4.31%

4. NATURAL GAS

4.1 OVERVIEW

The City of Charlottesville's natural gas utility is one of three municipally owned gas utilities in the Commonwealth of Virginia and has been providing service to the residents of Charlottesville and Albemarle County for about 150 years. The gas utility operates on a self-supporting basis and is not designed to generate a profit. However, due to various factors, such as winter weather and an increase in the number of customers, the utility can generate a profit or loss in any given year. Rates are set annually at a breakeven point and only cover the utility's operating budget, and the costs associated with the purchase of natural gas from the City's provider. The Charlottesville gas utility currently provides service to Charlottesville, and to various portions of Albemarle County. Within the City of Charlottesville, 81.4% of the utility customers are provided natural gas service. The system consists of approximately 340 miles of main and over 305 miles of service lines. The system currently serves 21,600 customers (12,045 of which are in the City and 9,555 in Albemarle County).

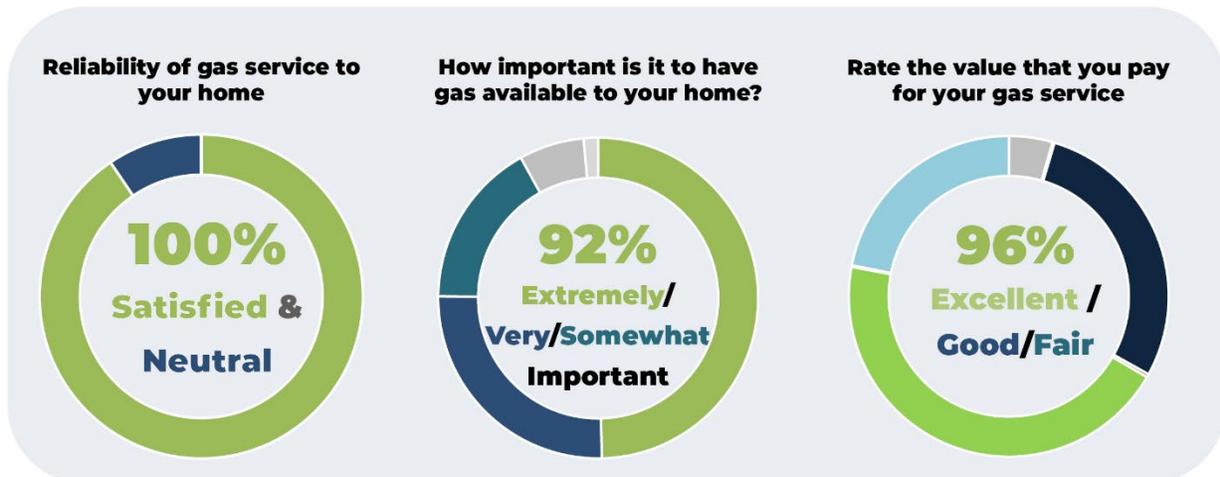
4.1.1 Our Customers



Three levels of service are provided to meet the needs of various customers: Firm, Interruptible, and Small Volume Transportation. Most consumers are firm customers, with a priority for gas use at all times. Currently, there are nine customers who are provided interruptible service. These customers are not assured of continuous service. They must also maintain an alternate fuel system and be prepared to switch to that alternate fuel within one hour of notification. This customer class is vital to the system because it allows the City to stay within the volume requirements set by the City's provider, and still meet the gas needs of firm customers in peak demand periods. Interruptible customers pay a lower rate than firm customers because they have no service assurance in peak demand periods. Therefore, they do not share in the cost of providing peak period supply. Transportation customers are customers who purchase their own gas from independent suppliers and transport it through the City's distribution system to their location. All transportation services are on an interruptible basis. The City currently has only one Small Volume Transportation customer.

4.1.2 Customer Satisfaction Survey – 2025

Our most recent Utilities Customer Satisfaction Survey revealed high levels of satisfaction with the reliability and value of our gas service, as well as a strong desire to maintain access to gas service. One hundred percent of respondents are satisfied or neutral with the reliability of gas service, and 96% of respondents rated the value of their gas service as fair, good, or excellent. Additionally, 92% of respondents stated that the availability of natural gas to their home or business is important, with a majority stating its availability is extremely important.



4.2 SAFETY

Natural gas is a common energy source in our community, and we prioritize gas safety awareness among the public. Our Public Gas Safety Awareness Plan complies with, and exceeds, federally mandated regulations that follow the guidance of the American Petroleum Institute (API) Recommended Practice (RP) 1162. Since 2006, there has been a 142% increase in our customers' ability to recognize the smell of natural gas and an 81% reduction in gas line damage caused by third-party excavation. These significant gains in gas safety awareness are directly attributed to our robust safety program, which includes the following:

"Dig with Care" Program – Although most commercial excavators are aware of the "call VA811 before digging" law, the number of third-party excavation damage to our gas lines is on the rise. Part of the problem lies with excavators not following the dig with care guidelines. "No Reasonable Care" gas line damage jumped from 28% in 2012 to 50% in 2013. To address the situation, we launched the Education Program "Dig with Care" featuring the following elements:

- **Marty's Minute** – A series of radio spots with the contractor Marty. Our well-intended fictitious character shares his wisdom from years of experience in construction and the importance of digging with care. These spots have been aired during the early morning drive hours on a local country radio station.
- **Outreach and Training of Professional Excavators** – These events include VA811 Day with visits to new construction sites, and excavation safety training with the State Corporation Commission (SCC). These outreach events promote and reinforce safe digging practices and are an excellent

opportunity to interact directly with local excavators, contractors, plumbers, and building inspectors.

- **Outreach through Nuevas Raices** – Nuevas Raices is a Spanish language newspaper that serves Spanish speakers in Central Virginia. To help ensure our outreach efforts are as inclusive as possible, we run a monthly print advertisement in this newspaper that features the VA811 safety message in Spanish. A high percentage of construction workers in our area are Spanish speakers and communicating to them in the language they are most comfortable ensures we are effectively reaching an important target audience.

Since the "Dig with Care" program was launched, we have experienced a 63% reduction in gas line damage caused by third-party excavators (from 2.83/1000 Miss Utility tickets in 2013 to 1.04/1000 Miss Utility tickets in 2024).

Additional efforts to increase gas safety awareness include a strong presence on various media platforms, consistent participation in community events, outreach at local schools and camps, promotion of national safety campaigns, targeted mailings to professional excavators and plumbers, and enhanced training with emergency officials.

TV Spot – Two sing-along safety commercials, featuring Flicker the Flame, began airing in 2012. The first spot focuses on the smell of gas and what to do if a leak is suspected, and the second spot highlights the importance of contacting 811 before digging. These spots air on local network channels (NBC, CBS, CW, FOX, MeTV and ABC), on the Weather and DIY channels on cable TV, and before film screenings at Stonefield Regal Movie Theater. The latest Public Awareness survey results show that respondents aged 26 or younger have a lower recall of our safety campaigns and were less likely to agree that Charlottesville Gas is adequately educating residents. In response to this result, we refreshed both the gas safety awareness and VA811 TV spots in the fall of 2021 with updated and more engaging animation.

Commercials on Streaming Services – Subscription-based streaming providers have recently seen tremendous growth. Results of the TransUnion survey reveal the average consumer spends three to four hours a day on streaming services, with a total of 55% of all consumers choosing streaming services over cable TV. To maximize our media investment, we have redirected some of our advertisement funds from live TV to streaming ads on Comcast digital platforms.

Community Outreach Programs – We participate in a variety of high attendance community events throughout the year. These events include a safety awareness presence at Blue Ridge Homebuilders Association functions, sponsorship of the UVA Soccer season, Charlottesville's Grand Illumination, UVA Baseball season sponsorship, Kid*Vention, the Energy-Saving Trees Program, and Flicker @ Your Classroom and Camp programs.

Utilities Electronic Newsletter – In December of 2021, we began sending a monthly electronic newsletter using Constant Contact to Utilities customers who receive paperless billing. This newsletter provides customer-focused messages that highlight Utilities services, initiatives, updates, and program opportunities – including our annual gas safety awareness quiz, and information on safe digging practices and VA811 National Safe Digging Month.

National Safe Digging Month – This national safety campaign occurs every April, coinciding with the beginning of the outdoor project season, and serves as a great reminder of the requirement to contact 811 before digging. We send information tailored to residential customers explaining the steps of

contacting 811 and the importance of safe digging practices at home, not just commercial worksites. This information is sent to customers who receive paperless billing via the monthly Utilities E-Newsletter, and we also promote a month-long social media campaign highlighting safe digging and the 811 process.

Community Conversations on NBC29 – Utilities consistently appears on a live, in-studio, community news segment on NBC29. These segments provide an excellent opportunity to discuss details of important topics, including VA811 National Safe Digging Month, 8/11 National Safe Digging Day, and other Utilities' programs that intersect with safe digging awareness, such as the Energy-Saving Trees Program.

Cross-bore Mailing – An informational postcard on cross-bores is periodically mailed to local plumbers to increase awareness of the proper procedure for clearing sewer blockages caused by a utility line that has accidentally bored through a sewer line. The postcard includes an infographic of a cross-bore and provides instructions on how to handle a cross-bore situation properly.

Enhanced Training of Emergency Officials – In recent years we have expanded outreach with increased training of all local emergency officials. We provide a combination of presentations and hands-on experiences with the Charlottesville Police Department, Charlottesville Fire Department, Albemarle County Fire and Rescue, Albemarle County Police, UVA Police, and troopers from the Charlottesville office of the Virginia State Police. Recorded trainings are also available to those unable to attend in-person presentations.

Outsource Utility Location – In 2014, the City outsourced the utility locating process, resulting in increased utility marking accuracy and reduced damages.

Targeting Commercial Customers – To ensure commercial information is seen by a more significant number of people, we created a postcard, so businesses can display the information in a visible area for more staff to read.

Local Builders Association Outreach – We continue to maintain a safety awareness presence with the Blue Ridge Home Builders Association (BRHBA). Members of this association include local and national builders and contractors and serves as an excellent opportunity to reinforce VA811 safe digging practices.

4.3 REGULATORY COMPLIANCE

Operator Qualification Program - Charlottesville Gas is required by the Pipeline & Hazardous Materials Safety Administration (PHMSA) to maintain an Operator Qualification Plan that adheres to federal regulations. These regulations require Charlottesville Gas employees to demonstrate their competence regarding a variety of covered tasks performed within the Charlottesville Gas distribution system. The typical Charlottesville Gas employee must satisfactorily pass over 40 Operator Qualification (OQ) tests. Charlottesville Gas is required, by code, to retain these training and test records for a minimum of five years. In July 2023, the State Corporation Commission (SCC), on behalf of PHMSA, audited the Charlottesville Gas Operator Qualification Plan and testing records. The Commission found no probable violations or recommendations regarding the Plan or the associated OQ records. The Charlottesville gas utility takes pride in staffing a trained and informed workforce, and the State Corporation Commission's inspection validates the City's efforts.

Distribution Integrity Management Program (DIMP) - PHMSA requires Charlottesville Gas to monitor and mitigate potential leak threats to the natural gas system through a Distribution Integrity Management Program (DIMP). Examples of possible threats include excavator damages, corrosion, and material defects. Included in the City's DIMP Plan are procedures that have been put in place to reduce the potential for leaks in the gas system. Not only must this plan be in place, but operators must also demonstrate that the procedures are being implemented and that the risks to the gas system are being reduced.

As part of the Program, Utilities has worked with the City's IT Department to develop an application to track and survey risks and threats to the natural gas system. Using tablets and the Utility GIS Viewer, Gas employees can track and document the location, cause, severity, and response time associated with each leak. In March of 2025, the State Corporation Commission, on behalf of PHMSA, performed a thorough audit of the City's Distribution Integrity Management Program. The Commission found no pipeline safety violations regarding the documentation or implementation of the City's Distribution Integrity Management Program.

4.4 DECARBONIZATION STUDY

In July 2019, the Charlottesville City Council adopted two community-wide greenhouse gas (GHG) emissions reduction goals, committing the City to achieve a 45% reduction in GHG emissions by 2030 and carbon neutrality by 2050.

As part of these efforts, and in its role as the owner and operator of a natural gas utility, the Department of Utilities initiated and funded the Charlottesville Natural Gas Decarbonization Study in the fall of 2022. The Department of Utilities engaged with the consulting firm Black & Veatch to explore the opportunities to decarbonize the existing gas system and assess the associated cost, impact on customer gas rates, and emissions impacts of decarbonization initiatives. Additionally, the study examined Charlottesville Gas' existing energy-efficiency programs and looked to identify any operational improvements for consideration to further reduce its emissions footprint.

The Study was completed in December 2024, with the results presented to the Charlottesville City Council in March 2025. The final report includes the methodology, assumptions, and decarbonization analysis for Charlottesville Gas to meet its proportional emissions reduction targets. The study confirms that Charlottesville Gas is already on track to nearly meet the short-term 2030 carbon reduction target of 45% for City-only natural gas-related emissions using a combination of its existing initiatives and efforts, which include energy efficiency measures and certified carbon offsets. To meet long-term goals, the study explores how the utility can promote more efficient gas usage, procure lower carbon fuel supplies, and continue to enhance its system to reduce methane emissions.

4.5 ENERGY-EFFICIENCY PROGRAMS

In recent years, the Department of Utilities has invested in and expanded its energy efficiency programs. We highlight to residents the benefits these programs provide, actively promote their availability, and constantly work to ensure they aid our efforts to reduce energy consumption. The Department is excited to launch three new incentives in 2025 to help improve home energy efficiency. Utilities now offers six

home envelope resources that complement each other to help community members improve the energy efficiency of their home, lower utility bills, and increase home comfort.

- **Attic Insulation Self-Assessment:** According to Energy Star®, 90% of U.S. homes are under-insulated. The Attic Insulation Self-Assessment was developed by Utilities' staff and is a great resource to help customers better understand their attic's insulation needs. Each assessment includes a free personalized evaluation for attic insulation that provides guidance to help maximize the attic's energy efficiency potential. The self-assessment is 100% free to use, and can be accessed via smartphone, tablet, or computer.
- **\$500 Attic Insulation Rebate:** Gas customers can maximize the most cost-effective way to improve their home's energy efficiency with upgraded attic insulation. For a limited time, gas customers can receive a \$500 rebate towards upgrading their home's attic insulation and take advantage of an available federal tax credit to claim 30% of the cost of the insulation with a maximum of \$1,200 credited. Combining these incentives could significantly lower the cost of the insulation upgrade.
- **\$150 Attic Air Sealing Rebate:** For a limited time, gas customers can receive a \$150 rebate to cover the cost of measures that plug holes and seal cracks in their attic. This process improves home comfort, enhances air quality, and boosts energy efficiency by keeping conditioned air inside the house. While installing upgraded attic insulation, attic air sealing should be done at the same time to maximize the effectiveness of both measures.
- **\$125 Smart Thermostat Rebate:** Gas customers can now receive a \$125 rebate towards a smart thermostat to enhance the energy efficiency of their home. Smart thermostats use Wi-Fi to allow control of a home's indoor air temperature remotely from a smartphone or tablet. Providing convenience, control, and insight, a smart thermostat helps deliver optimal performance of an HVAC system.
- **\$100 Programmable Thermostat Rebate:** A programmable thermostat rebate is available to customers interested in this option, allowing them to program the indoor temperature of their home to adjust when they are at work, asleep, or on vacation.
- **Home Weatherization Program:** The Charlottesville Gas Energy Efficiency Program (CGEEP) is Utilities' no-cost home weatherization program for qualified gas customers. The following section provides specifics about CGEEP, including figures on participants, the impact of weatherization improvements provided by the program, and Utilities' investment.

4.5.1 No-Cost Home Weatherization for Income-Qualified Households

In July 2019, the Department of Utilities started a partnership with the Local Energy Alliance Program (LEAP) to offer income-qualified gas customers a program designed to help increase the overall energy efficiency of their homes. The Charlottesville Gas Energy Efficiency Program (CGEEP) provides qualified households with free home weatherization improvements and funds the replacement of inefficient natural gas appliances.

Since its launch, 217 gas customers have benefited from the program. Of the total CGEEP recipients, 72% were Charlottesville homeowners, and 55% had at least one family member aged 60 years or older living in the same household. In addition to single-family home customers, we extended our weatherization program to the energy efficiency improvement project performed at Westhaven Apartments.

The energy-savings in these homes can vary significantly depending on the original condition of the dwelling (from 3% to 51% reduction in gas consumption). On average, we noticed a 20% reduction in gas consumption during the winter months.

In the spring of 2025, income qualification criteria expanded once again, enabling more customers to take advantage of the program. We accept applicants with household earnings of 80% or below Area Median Income (AMI) and if the account holder is 60 or older earnings of 120% or below State Median Income (SMI) are accepted.

To date, the Charlottesville Department of Utilities has invested \$282,000 in the CGEEP program.

4.5.2 Energy-Saving Trees Program

In spring 2022, Utilities began partnering with the Arbor Day Foundation and its Energy-Saving Trees Program. This program gives away free trees to Utilities' customers in Charlottesville to strategically plant on their property, providing energy- and cost-saving benefits to their household and the broader community. Strategically planted trees provide cooling shade from the sun in warm months, and act as a barrier to cold winds during the winter months. In the fall of 2024, Utilities increased the frequency of the Energy-Saving Trees Program to occur twice a year, once in the spring and once in the fall. As of March 2025, 840 trees have been given away for planting.

In 2023, Charlottesville Utilities' efforts with the Energy-Saving Trees Program won the City-County Communications & Marketing Association's (3CMA) Award of Excellence for Special Events/Recurring Event. 3CMA is a national organization with members from across the country, whose mission is to support innovation in communication and outreach efforts of local governments.

4.5.3 Energy Efficiency Outreach

Increasing awareness of energy efficiency programs provides an opportunity for improvement within Charlottesville Gas's existing customer base. In the latest Gas Mitigation Survey conducted by Charlottesville Gas, approximately 70% of respondents reported being "not at all familiar" with attic insulation. Additionally, around 57% were unfamiliar with the programmable thermostat program, and about 50% did not know about the free income weatherization programs.

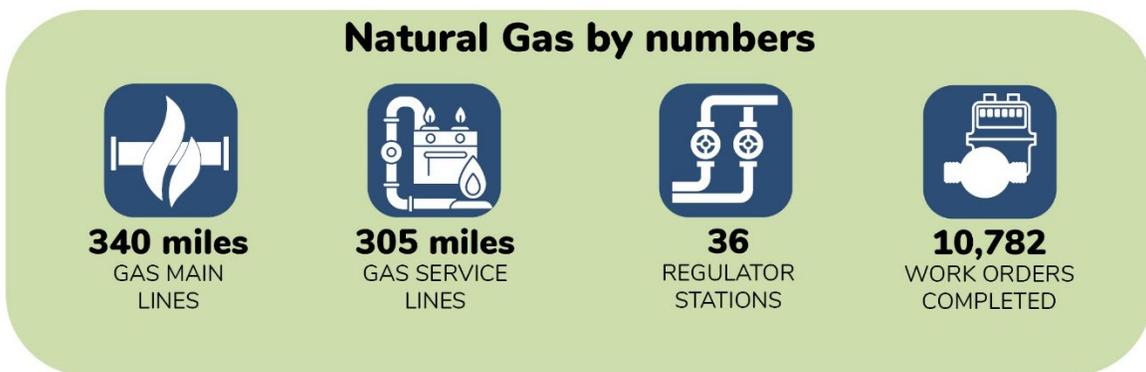
In response, the Department of Utilities is developing a new campaign aimed at raising awareness of both existing and new energy efficiency initiatives. This campaign will utilize the same outreach strategies employed in the award-winning gas safety campaign. A series of TV commercials featuring the highly recognizable mascot Flicker will be created. Flicker will interact with actors to promote the free weatherization and attic insulation self-assessment tool. These commercials will be aired on local TV networks and streamed on Comcast digital platforms, highlighting limited-time rebate offers to encourage customer action. Following the media campaign, targeted postcards with a QR code will be distributed to guide customers to our website for more information.

4.6 GAS ASSISTANCE PROGRAM

The City’s Gas Assistance Program (GAP) provides financial assistance to residents who need help to pay heating bills. This fund supplements assistance that is available to many people under other programs and may be the assistance available for some residents who need help but do not qualify under the guidelines of other programs. In FY’24, the City provided 48 households with \$13,736.10 in assistance. Contributions from area businesses and residents help to supplement the amount of money that is available for assistance. The FY’26 budget includes no new funding, since there is sufficient funding (\$126,375) from prior years to fund the program in FY’26.

4.7 GAS INFRASTRUCTURE ASSET MANAGEMENT

4.7.1 Gas System Overview



Due to a comprehensive replacement of the natural gas system in prior decades, and the primary material being high-density polyethylene (HDPE) pipe, there are very few replacement projects needed due to aging infrastructure. Currently, the natural gas system consists of 340 miles of gas mains and 305 miles of gas service lines.

Two hundred seventy miles of the gas main system are constructed of high-density polyethylene (HDPE) pipe, equating to approximately 79.5% of the entire system. Additionally, 99% of the natural gas service lines within the system are HDPE. HDPE is an extruded plastic pipe which possesses satisfactory material strength qualities and is resistant to corrosion. HDPE has become the industry standard for intermediate to low pressure natural gas distribution systems throughout the country.

Sixty-eight miles of the natural gas system consist of cathodically protected coated steel pipelines, which is approximately 20.2% of the entire system. Due to the maximum allowable operating pressure of HDPE, operators are required to utilize coated steel for their high-pressure distribution pipelines. These pipelines are induced with cathodic protection either by galvanic anode or impressed current systems. The functionality of the cathodic protection system is continuously monitored by Charlottesville Gas employees to verify that all facilities are appropriately meeting federal regulations and properly combatting below ground corrosion.

Charlottesville Gas currently operates approximately one mile of cast iron pipe within the entire system. Compared to other operators like the City of Danville and the City of Richmond, one mile of cast or

ductile iron is a small amount to maintain. For example, the City of Richmond operates approximately 176 miles of cast or ductile iron main and the City of Danville operates approximately five miles of cast or ductile iron main. Charlottesville Gas is decades ahead of other gas distribution operators in terms of system enhancement and leak mitigation due to the tremendous effort of the utility to modernize the system with dependable and gas tight materials.

Exhibit 36: Comparison of Miles of Pipe by Type among Public Gas Systems in Virginia

Company	Miles of Cast Iron	Miles of Ductile Iron	Total Miles
City of Richmond	121.35	54.68	176.03
City of Danville	0.06	5.61	5.67
City of Charlottesville	1	0	1

Table 1 - Cast & Ductile Iron Gas Mains by Company

4.7.2 Enhanced Leak Detection and Repair Program

The City of Charlottesville utilizes state-of-the-art leak detection equipment to pinpoint hazardous and non-hazardous natural gas leaks throughout the system and has invested over \$500,000 to provide every natural gas field crew, gas service technician, leak survey technician, and first responder with Heath Consultants Detecto-Pak Infrared (DP-IR) leak detectors. The Heath Consultants DP-IR is recognized across the industry as an extremely sensitive piece of equipment capable of detecting leaks as small as one part per million. Another advantage of this equipment is it is only capable of detecting methane, eliminating the possibility of false alarms. For mobile leak surveying, leak survey technicians utilize a truck mounted Sensit Vehicle Methane Detector. The Vehicle Methane Detector uses advanced infrared technology to pinpoint leaks in environments and terrain that are not accessible by foot.

In addition to utilizing advanced technology for leak detection, the City of Charlottesville conducts leak survey inspections more frequently than required. By the Department of Transportation (DOT) Pipeline Safety Standards, the City of Charlottesville is required to conduct a complete leak survey of the entire distribution system once every five years. However, to prevent hazardous leaks and to minimize fugitive emissions into the atmosphere, the City of Charlottesville completes a system-wide leak survey once every three years.

The Department of Transportation also requires the City of Charlottesville to conduct leak surveys in business districts on a yearly basis. However, the City of Charlottesville has expanded its leak mitigation efforts by conducting biannual surveys on our remaining one mile of cast iron pipe and annual surveys on our high-pressure mains (>400psi).

The City of Charlottesville takes voluntary and involuntary releases of natural gas into the atmosphere very seriously and has put policies and procedures in place to mitigate the release of methane to the atmosphere. The following exhibits illustrates the results of the City of Charlottesville’s leak mitigation program and the impact the program has had on annual leak trends. As the table shows, the City of Charlottesville has experienced a significant reduction in leaks per mile. The City of Charlottesville is well below the national average and attributes this success to more stringent internal policies and the excellent work of the men and women who implement these procedures daily.

Exhibit 37: Comparison of Number of Leaks Per Mile in Charlottesville vs. National Average

Year	Leaks Per Mile					
	2019	2020	2021	2022	2023	2024
City of Charlottesville (w/ Excavation Damages)	0.218	0.207	0.156	0.213	0.163	0.121
City of Charlottesville (w/o Excavation Damages)	0.174	0.173	0.100	0.167	0.133	0.095
National Average	0.299	0.281	0.279	0.271	0.263	0.270

Table 2 - Annual Leak Data by Year

4.7.3 Natural Gas Capital Improvement Projects

Due to a system wide replacement of the natural gas system, there is not a need for an ongoing replacement program. However, the Department is preparing for two large projects with the current capital budget. The first is a gas meter and regulator abnormal operating conditions (AOC) contract.

Abnormal operating conditions (AOC) are conditions identified by Charlottesville Gas that may indicate a malfunction of a component or deviation from normal operations. The conditions primarily consist of corroded above ground gas meter piping or gas meters and meter sets not having protection from vehicle traffic. Currently, the Department has a large backlog of AOCs and are working toward issuing a construction contract for remediation of the issues.

In recent years, Utilities has requested annual contracts with construction firms to assist in setting protective concrete bollards around meters sets in need of protection from vehicular traffic. Many AOCs are being corrected by both contractors and in-house personnel. This bollard project is set to expire before the end of FY'25 and has resulted in a significant reduction in the backlog of meters requiring vehicle protection.

In April 2023, Charlottesville Utilities was awarded a \$7,100,000 grant from the Pipeline and Hazardous Materials Safety Administration’s Natural Gas Distribution Infrastructure Safety and Modernization (NGDISM) grant program. The NGDISM program is part of the broader Bipartisan Infrastructure Law, which will provide nearly \$1 billion in federal funding over the next five years to support public gas systems’ efforts to repair, rehabilitate, and replace aging pipes and reduce methane emissions. This grant facilitates the completion of Utilities’ system-wide upgrade program by expediting the replacement of the last remaining section of legacy pipes. The last mile of 10-inch cast iron main line will be replaced with 4-inch HDPE plastic pipe, first-generation polyethylene and other legacy pipe will be replaced with 2-inch HDPE, and 20 gas meters will be removed from the interior of several buildings. The project will help to eliminate all components in Charlottesville’s natural gas system that have a higher probability of leaks.

Surveying for the project began in December 2023, with the engineering design of the pipe replacement occurring in 2024 and 2025. PHMSA has issued a Finding of No Significant Impact (FONSI) regarding the environmental impact of the replacement project. Community outreach efforts to inform businesses,

residents, and the wider community as to the scope and timing of the project is to take place, and project bidding is scheduled for early 2026. Construction for the project is anticipated to begin in late Spring of 2026.

4.8 FY'26 REVENUE REQUIREMENTS

This section of the report outlines the current and projected costs of operating and maintaining the City’s natural gas system which constitute the revenue requirements (i.e., the amount of revenue required to be collected from customers).

4.8.1 Current Revenue Requirements (FY'26)

The FY'26 revenue requirements for the gas utility total \$35,356,398, the largest components being the purchase of gas from BP (43% of the total) and operations and maintenance costs (34% of the total).

Exhibit 38: Gas Utility FY'26 Revenue Requirements

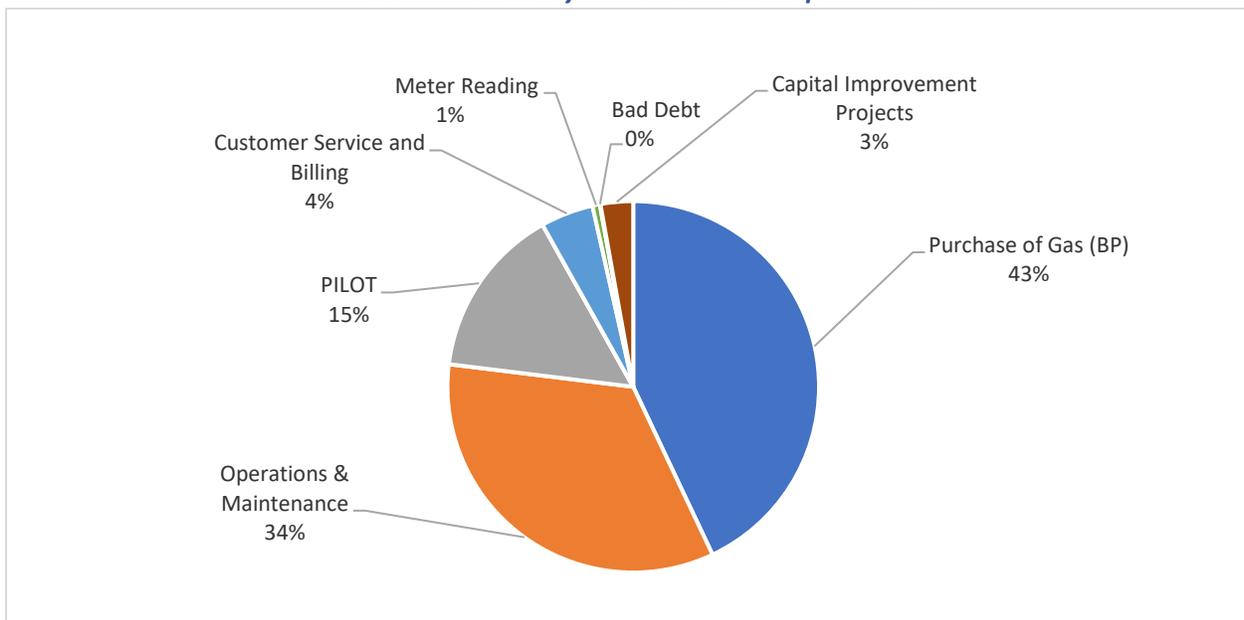
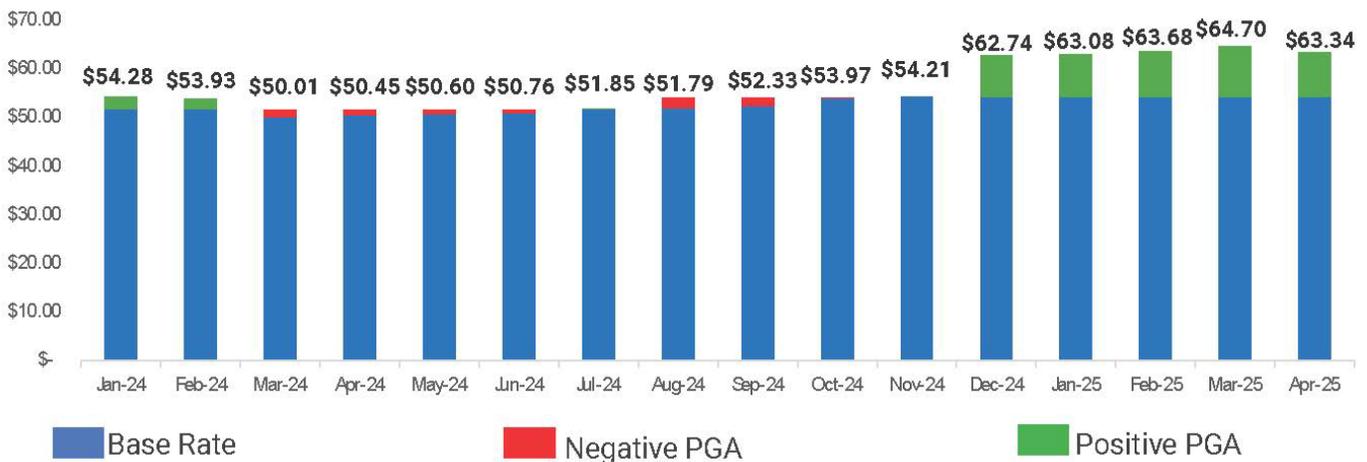


Exhibit 39: Comparison of Gas Revenue Requirements FY'25 to FY'26

Revenue Requirements	FY'25	FY'26	\$ Change	% Change
Purchase of Gas (BP)	\$9,048,147	\$15,195,487	\$6,147,340	68%
City Operations and Maintenance	\$11,372,712	\$12,010,251	\$637,539	6%
Payment in Lieu of Taxes	\$5,048,027	\$5,279,833	\$231,806	5%
Capital Improvement Projects	\$1,000,000	\$1,000,000	\$0	-
Customer Service & Billing	\$1,826,690	\$1,870,827	\$44,137	2%
TOTAL	\$28,295,576	\$35,356,398	\$7,060,823	25%

When setting the base rate each July 1st, the City uses data from the most recent month to project the cost. Natural gas is a commodity that is traded daily and whose value fluctuates based on factors beyond the City’s control (weather, politics, conflict, etc.). As noted above, the gas utility operates on a breakeven basis. To account for the fluctuation in gas prices, the City calculates a monthly Purchase Gas Adjustment (PGA) to adjust the base rate up or down. This ensures that the utility is generating sufficient revenues to cover its costs and that customers are not being over or undercharged.

Exhibit 40: Average Residential Customer Gas Bill with PGA



The cost of gas has increased significantly over the last year relative to the previous year. This year’s rates reflect normalizing gas prices, as the market and weather conditions surrounding the previous rate setting attributed to lower gas prices in FY’25. The exceptionally mild winter in 2023-2024 decreased gas demand and the price of gas leading into the spring rate setting in 2024. Customers experienced negative PGAs from August to October 2024 on top of a relatively low base price for gas. This trend reversed when the price of gas increased more than one dollar in December of 2024, closer to the average historical Federal Energy Regulatory Commission (FERC) gas prices in recent years.

City Operations and Maintenance costs are projected to increase by \$637,539 due primarily to an adjustment in salaries and benefits costs. Contractual services are also increasing.

The Payment in Lieu of Taxes (PILOT) is based on a formula of 23% of prior year budgeted expenses less cost of purchasing gas. It is a payment from the utilities to the City’s General Fund and represents the taxes the utilities would pay if the City were a private company providing utility services.

4.9 MONTHLY SERVICE CHARGE

Like water and sewer, the City assesses a Monthly Service Charge for gas to recoup the fixed costs of providing utility services such as customer service, billing, meter services, and infrastructure. There are no changes to the \$10.00 Monthly Service Charge.

4.10 Gas Rates

The City is projecting to collect a total of \$35,356,398 to operate the gas utility in FY'26. \$33,997,398 is projected to be collected from gas rates. Miscellaneous revenues total approximately \$359,000. A fund balance of \$1,000,000 will be used to cash fund capital improvement projects and other utility billing expenses.

Exhibit 41: Gas Rate Calculation FY'26

Revenue Requirements	FY'26
Purchase of Gas (BP)	\$15,195,487
City Operations and Maintenance	\$12,010,251
Payment in Lieu of Taxes	\$5,279,833
Capital Improvement Projects	\$1,000,000
Customer Service & Billing	\$1,624,001
Debt/Debt Service Funding	\$20,000
Meter Reading	\$226,827
TOTAL	\$35,356,398
Revenue to be Collected	FY'26
Other Funding Sources	
Fund Balance	\$1,000,000
Miscellaneous Revenues	\$359,000
<i>Subtotal</i>	<i>\$1,359,000</i>
Revenue to Be Collected Through Rates	
Transportation Fees	\$56,294
Firm Sales	\$25,190,588
Interruptible Sales	\$8,750,515
<i>Subtotal</i>	<i>\$33,997,398</i>
TOTAL REVENUE TO BE COLLECTED	\$35,356,398

The table below compares the gas rates for FY '26 to the current gas rates.

Exhibit 42: Current Gas Rates Compared to FY'26 Gas Rates

Rate (per 1,000 cf)	Current Rates FY25' Rates	Proposed FY26' Rates	\$ Change	% Change
Firm Service (1st to 3,000 cf)	\$9.7813	\$12.4070	\$2.63	26.84%
Firm Service (next 3,000 cf)	\$9.1798	\$11.7596	\$2.58	28.10%
Firm Service (next 144,000 cf)	\$8.5784	\$11.1121	\$2.53	29.54%
Firm Service (over 150,000 cf)	\$7.9769	\$10.4647	\$2.49	31.19%
Air Conditioning	\$7.3471	\$9.8398	\$2.49	33.93%
Interruptible Service (up to 600,000 cf)	\$7.3466	\$9.6895	\$2.34	31.89%
Interruptible Service (over 600,000 cf)	\$6.6850	\$8.9886	\$2.30	34.46%
Gas Light (charge per month)	\$17.5100	\$17.5100	-	0.00%
Small Volume Transportation Customer	\$3.2827	\$3.4713	\$0.19	5.74%
Large Volume Transportation Customer	\$1.9696	\$2.0828	\$0.11	5.75%
Base Unit Cost (Firm Service)	\$3.7668	\$5.9327	\$2.17	57.50%
Base Unit Cost (Interruptible Service)	\$1.8332	\$3.8488	\$2.02	109.95%

4.11 IMPACTS ON CUSTOMERS

The tables below illustrate the impacts of the FY'26 rates on customer's bills at various usage rates. The applicable Monthly Service Charges are included in the calculations.

Exhibit 43: Customer Impacts at FY'26 Gas Rates and Charges

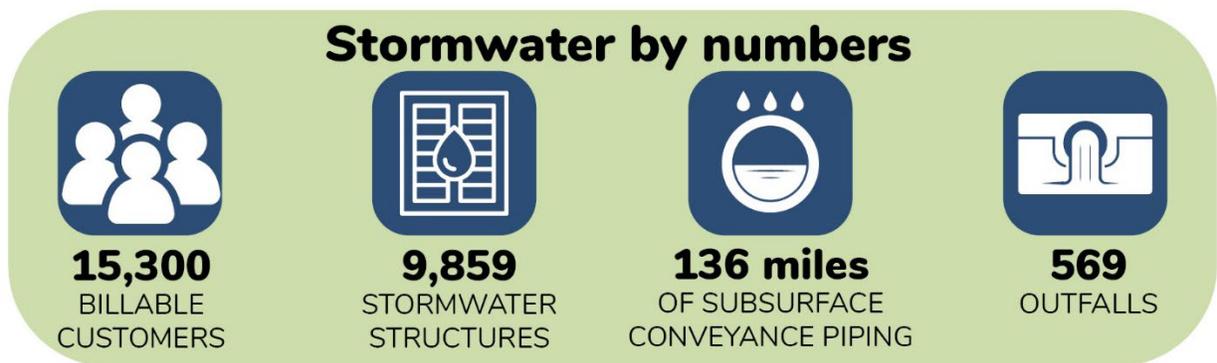
Firm Customers Usage Per CF	FY25' Monthly Gas Bill with most recent PGA	FY26' Monthly Gas Bill with most recent PGA	\$ Change	% Change
4,000	\$56.62	\$58.98	\$2.36	4.16%
4,600	\$63.35	\$66.04	\$2.69	4.25%
20,000	\$227.47	\$238.07	\$10.60	4.66%
60,000	\$651.60	\$682.55	\$30.96	4.75%

Interruptible Customers Usage Per CF	FY25' Monthly Gas Bill with most recent PGA	FY26' Monthly Gas Bill with most recent PGA	\$ Change	% Change
100,000	\$794.66	\$1,028.95	\$234.29	29.48%
400,000	\$2,998.64	\$3,935.80	\$937.16	31.25%
1,000,000	\$7,118.96	\$8,547.70	\$1,428.74	20.07%
2,000,000	\$13,746.46	\$15,232.70	\$1,486.24	10.81%

5. STORMWATER

5.1 OVERVIEW

The Stormwater Utility, adopted by the Charlottesville City Council in 2013, is the dedicated funding source for maintenance and rehabilitation of the City's aging stormwater conveyance system, compliance with federal and state stormwater regulations, to address drainage problems, and pursue and maintain environmental stewardship through the City's Water Resource Protection Program (WRPP).



5.2 CUSTOMER SATISFACTION SURVEY

The Stormwater Utility recently came back under the umbrella of services provided by the Department of Utilities. To enhance our understanding of community awareness regarding this division, the utility was included in the Utilities Satisfaction Survey. In the 2025 Utilities Customer Satisfaction Survey, 87% of respondents rated the value they pay for the stormwater service as fair, good, or excellent. However, 25% reported that they are not familiar with the utility's services and unable to rate the value. To improve these baseline survey results, the Department will launch rebranding initiatives in FY'26 for the Stormwater Utility to raise awareness of the diverse range of programs it manages.



5.3 Regulatory Compliance

As an operator of a drainage system that collects stormwater runoff and discharges to its local waterways, Charlottesville is regulated by the Virginia Department of Environmental Quality (DEQ) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer System (MS4 General Permit). The permit requires the development and implementation of a stormwater management program that reduces the discharge of pollutants from our MS4 to local waterways to the maximum extent practicable. Through annual reporting to DEQ, the City summarizes the status of permit compliance and stormwater management program elements pertaining to six required Minimum Control Measures (MCM). Compliance with the MCMs include:

- Policies, projects, and programs related to public education, outreach, and participation, non-stormwater discharge detection and elimination,
- Administration of erosion and sediment control and stormwater management requirements relating to land disturbing activities,
- Inspection and maintenance of post-construction stormwater control facilities,
- Implementation of Stormwater Pollution Prevention Plans for City-owned properties,
- Training of City staff, and
- Stormwater conveyance infrastructure and water resources protection and improvement projects.

In addition to the six MCMs, the MS4 General Permit also includes requirements for the City to develop and implement Action Plans for impaired waters that do not meet state water quality standards, and for which a total maximum daily load (TMDL) has been established. The Action Plans detail how the City intends to reduce the pollutants of concern that are causing the water quality impairment. The City has TMDL Action Plans for the Chesapeake Bay as well as local waterways, including the Rivanna River, Meadow Creek, Moores Creek, Schenks Branch, and Lodge Creek.

5.4 CREDIT AND ASSISTANCE PROGRAMS

5.4.1 Stormwater Utility Fee Credit Program

The Stormwater Utility Fee Credit Program was adopted by the Charlottesville City Council in FY'14. The Credit Program is required by state law as a component of a municipal stormwater utility. Under the Program, property owners who operate and maintain stormwater management facilities that help control stormwater runoff, reduce pollution, or both, may apply for and receive credit toward their stormwater utility fee.

The amount of credit is calculated based on the impervious area treated by the facility and not the entire impervious area of a site. To determine the credit amount, the pollutant removal rate of the facility is first calculated. Then, the percentage of pollutant removal is multiplied by the impervious area that is being treated. The resulting footage is subtracted from the overall impervious area and the stormwater utility fee is adjusted accordingly. Credits are applied annually and are dependent on the facility passing an inspection that ensures proper functionality.

5.4.2 Charlottesville Conversation Assistance Program (CCAP)

The CCAP is provided in partnership with the Thomas Jefferson Soil and Water Conservation District and provides a one-time cost share for property owners who install eligible water resources stewardship practices on their property (i.e., conservation landscaping, rain gardens, etc.). The cost share can reimburse homeowners up to 80% of the cost incurred for project implementation. For a description of the program and a full list of eligible practices, please go to: <https://www.tjswcd.org/best-%20management-practices-homeowners/>. The annual budget for the CCAP is \$32,000.

5.4.3 Financial Relief Program

The Charlottesville City Council adopted a financial relief program in February 2014 to assist homeowners who experience hardship in paying their stormwater utility fee. The program has an annual budget of \$25,000 and is paid from the General Fund. The program provides a reduction in the stormwater utility fee for residents who are eligible for at least 60% Real Estate Tax Relief, with the stormwater utility fee reduction matching the percentage received in real estate tax relief. The program also provides a 25% stormwater utility fee reduction for residents who are approved for the Charlottesville Housing Affordability Program (CHAP).

5.5 STORMWATER INFRASTRUCTURE ASSET MANAGEMENT

5.5.1 Stormwater Infrastructure Systems

Charlottesville's stormwater conveyance system is integrated throughout the City's municipal boundary. Over the past year, the Stormwater Utility has made a great effort towards asset management, identification of stormwater assets in the City's GIS database, data verification, and stormwater modeling.

The stormwater conveyance system consists of approximately 136 miles of pipe and 9,859 structures, including 569 outfalls. The City owns and maintains the stormwater conveyance system located within the public street right-of-way, on City-owned land, and within City-held easements on private property. The City does not own, nor maintain, the stormwater conveyance systems owned by other public entities or those located on privately-owned land without an easement. The entire stormwater conveyance network ultimately discharges to local streams, rivers, drainage ways, floodplains, and low-lying areas.

The stormwater piping ranges in age, size, and material type. Pipe materials include vitrified clay (VC), corrugated metal (CMP), reinforced concrete (RCP), ductile iron (DI), polyvinyl chloride (PVC), and high-density polyethylene (HDPE). The size of pipes in the system ranges from 4- to 96-inches in diameter and some are 60+ years old. Structures in the system include manholes, junction boxes, drainage inlets, and catch basins. Of the 136 miles of pipe, approximately 51% (69.4 miles) are City-owned, 18% (24.5 miles) of pipe are privately-owned on private property, and the remaining 31% (42.1 miles) are documented as unconfirmed ownership. Approximately 10% (13.6 miles) of the stormwater infrastructure system conveys streams that have been piped.

Structures are typically constructed of brick, cinder block, precast concrete, or cast-in-place concrete. Approximately 52% (5,127) of the 9,859 stormwater structures within the municipal boundary are City-owned, 26% (2,563) are privately-owned on private property, and the remaining 22% (2,169) being documented as unconfirmed ownership.

The City's 569 recorded outfalls are inspected, maintained, and documented separately as part of the City's Municipal Separate Storm Sewer System (MS4) permit requirements.

5.5.2 Stormwater Modeling

This year, the Stormwater Utility completed a stormwater model of the Moores Creek watershed within the City boundary, covering approximately one-third of the City's total area. This project was funded by a Community Flood Preparedness Fund (CFPF) grant through the Department of Conservation and Recreation (DCR). With this model, staff can run different rain scenarios to predict potential areas that may be negatively affected. Staff can also utilize the model to determine the outcomes of potential capital improvement projects. This is completed by changing the infrastructure data to match the proposed project and running the model to determine the size and scope of the improvement. When determining what improvement option to use, multiple options can be modeled to provide a comparison and determine the most cost-effective option.

The Moores Creek model was run with several storm scenarios and the Rock Creek Watershed was determined to be an area of concern for stream and nuisance flooding. The approximately 1000-acre drainage area to Rock Creek extends from Jefferson Park Avenue in the north down past 5th Street SW to Moores Creek in the south, and includes the Fifeville, Johnson Village, and part of the Fry's Spring neighborhoods. The Stormwater Utility recently contracted with a consultant to study the Rock Creek Watershed and to determine potential projects to mitigate concerns. This study is scheduled to be completed in October of 2025 and the results of the study will be factored into the Capital Improvement Program (CIP).

The Stormwater Utility is currently working on a CRPF grant funded project to develop a stormwater model of the urban Rivanna and Meadow Creek watersheds. The completion of this model will cover the remaining portions of the stormwater facilities within the City's boundaries. When this model is complete, staff will run similar scenarios as were run for the Moores Creek model to determine any areas of potential concern.

5.5.3 Stormwater Infrastructure Maintenance

The combination of an integrated and co-mingled privately-owned and City-owned stormwater conveyance system that ranges widely in age, condition, and material presents many challenges to infrastructure and asset management. The deterioration of both City and privately-owned stormwater infrastructure can cause significant problems, including sinkholes, clogged pipes, and drainage and erosion issues. Pipes constructed of VC and CMP materials are often older and more prone to deterioration due to age and the natural lifecycle of these construction materials.

The rehabilitation, replacement, and repair of VC and CMP pipes, along with the associated structures in the City right-of-way and on City-owned parcels, comprise much of the work performed by the Stormwater Utility maintenance staff. The Department has also utilized contractors to replace and rehabilitate stormwater conveyance infrastructure in the City right-of-way, under easement to the City, and in limited cases, on private property. This work is performed to address deteriorating stormwater infrastructure and drainage issues. Additionally, non-routine repairs are completed in a timely manner, as they arise, often in response to subsidence in and around City streets and sidewalks.

The Department also completes routine maintenance and repairs to the stormwater conveyance system. Materials are paid for with operation and maintenance funds or capital funds, depending on the size and scope of the project.

To date, approximately 15.6 miles (11.5%) of pipe have been rehabilitated or replaced and 533 (5.4%) structures have been installed, rehabilitated, or replaced at a cost of \$13,031,469.

5.5.4 Stormwater Utility In-House Maintenance

In an effort to move towards a more proactive, rather than a traditional reactive approach to maintenance efforts, the Stormwater Utility has begun utilizing its own in-house maintenance staff to perform a large number of inspections and maintenance work on the stormwater system. Much of this work has traditionally been performed under contract.

Exhibit 44: Comparison of Contracted and In-House Work Performed

Tasks	Contracted Work	In-House Maintenance
Clean & TV (LF)	16,009	11,383
CIPP Lining (LF)	61	0
Replacement (LF)	15	293
Point Repairs	0	0
New Structures	2	0
Structures Rebuilt	0	40
Structure Repairs	0	31

The Stormwater Utility’s in-house maintenance staff have always provided routine maintenance, such as clearing basins during leaf removal season and answering calls for service for blocked inlets and pipes. Over the past year, staff has worked hard to develop additional processes to address routine maintenance issues, emergency response, and resident generated concerns. In-house crews have responded to 219 requests for service that included replacing 293 linear feet of stormwater pipe, rehabilitating 71 stormwater structures, responding to 15 reported sinkholes, repairing three eroded ditch banks, responding to 17 high water complaints, and addressing 33 reported clogged pipes or catch basins. An additional 41 requests were able to be addressed administratively.

Stormwater crews have been working hard to be proactive in identifying potential issues before they become problematic. In FY’25, the crews have flushed and performed closed circuit television (CCTV) inspections of 11,383 linear feet of stormwater pipe, which is part of the effort to meet or exceed the City’s MS4 permit requirement of cleaning and flushing 10% of the City’s stormwater infrastructure, pipes, and structures annually.

This past year the Stormwater Utility purchased and received a new, fully equipped, CCTV truck. The addition of this new CCTV system will allow in-house staff to increase their proactive efforts in identifying potential issues early.

5.5.5 Stormwater Utility Capital Improvement Plan

The Stormwater Utility CIP is intended to address infrastructure needs, water quality improvements, and environmental stewardship. The CIP was adopted by the Charlottesville City Council when the Stormwater Utility Ordinance was approved in March of 2013. The first five-year CIP for the Stormwater Utility covered the period FY'14–FY'18 and work has continued under subsequent annual CIPs. The CIP is evaluated on a yearly basis and occurs in conjunction with the utility rate development process.

With an annual budget of \$1,500,000, the Stormwater Utility CIP is funded by Stormwater Utility fees that remain after the Stormwater Utility's operation and maintenance budgets are funded. The balance of the CIP is then funded through bond sale proceeds.

5.5.6 Water Resources Master Plan

The Charlottesville Water Resources Master Plan was developed in 2016 and published in 2017. The goal of the Master Plan is to apply criteria to select and prioritize capital projects that improve water quality and/or resolve drainage issues. The final Master Plan is comprised of a drainage improvement CIP and a water quality CIP.

Projects included in the drainage improvement CIP address a combination of both historic and more recently identified drainage issues, while projects in the water quality CIP focus on the implementation of stormwater best management practices, stormwater management facility retrofits, and stream restoration projects designed to improve water quality. Projects that were selected for the water quality CIP are based on cost effectiveness and potential to provide pollutant reductions that the City can use toward meeting its Chesapeake Bay (TMDL) Action Plan requirements.

5.5.7 Infrastructure projects

The Stormwater Utility has been working with a consulting firm on several infrastructure focused projects which are in addition to smaller projects in the rehabilitation/replacement program. The following are four large scale projects in various stages of progress.

Saint Charles Court

The Saint Charles Court infrastructure project is intended to address street flooding issues, as well as remedy severe erosion issues that threatens the roadway and pose a potential significant hazard to drivers. This project involved coordination and participation from adjacent property owners to allow access to the property during construction. The design phase of this project was completed in 2025, and staff is currently working with a consultant to move the project into the construction phase.

Forest Hills Avenue

The Forest Hills Avenue project was identified in the Water Resources Master Plan in 2017. This project will address not only needed infrastructure improvements, but water quality and environmental stewardship, as well. This project directly affects six private properties. The stormwater infrastructure is being redesigned to lessen the long-term impact to the property owners and will include the restoration of a portion of the creek that flows through the rear of the properties. All the property owners have expressed their excitement and support for this long-awaited project. The design phase of the project is scheduled to be completed in FY'25 with construction planned for FY'26.

Jefferson Park Avenue (JPA) Box Culvert Rehabilitation

The Stormwater Utility is addressing an aging and deteriorating box culvert under JPA. In the past year, the Utilities Department, with the help of a consulting firm, has been reviewing multiple options to rehabilitate this structure in place, since excavation and direct replacement of the structure is not a viable option. The intent is to determine the best option for rehabilitation in FY'25 and construction scheduled to occur in FY'26.

Druid Avenue

This project was also identified in the Water Resources Master Plan in 2017. The scope of the project is to address inadequate drainage around the 700 block of Druid Ave. However, the current infrastructure design is no longer a functional option. Currently, the project is in the survey and data gathering phase to determine design options. The project is planned to complete the design phase in FY'26 with construction scheduled for FY'27.

5.5.8 Water Quality Improvement Projects

Rivanna Restoration at Riverview Park Project

Currently, the Stormwater Utility is participating in the Rivanna Restoration at Riverview Park and Biscuit Run Stream Restoration projects, which have both received Stormwater Local Assistance Fund (SLAF) grant funds from DEQ. The SLAF was established by the Virginia General Assembly to support local governments in the planning, design, and implementation of cost-effective water quality improvement projects.

The City, in partnership with the Rivanna Conservation Alliance (RCA), local design firms Ecosystem Services and Wolf Josey Landscape Architects, and community stakeholders, is undertaking the Rivanna Restoration at Riverview Park project. This comprehensive initiative aims to restore critical sections of riverbank, enhance water quality and native habitat, repair a severely eroding stormwater outfall, and provide more opportunities for the community to safely access the river in one of Charlottesville's most cherished natural recreational areas.

Riverview Park serves as a major hub for outdoor activities and is the City's only public access point to the Rivanna River for wading, boating, and fishing. It is also home to the Rivanna Trail, a Virginia-designated bird and wildlife trail frequented by hikers, bikers, and runners. However, the park faces significant environmental challenges, including severe riverbank erosion, stormwater outfall deterioration, loss of land and trees, and habitat degradation. These issues threaten both the park's ecosystem and its accessibility to the community.

The Rivanna Restoration at Riverview Park Project will include regrading and stabilizing more than 900 feet of eroding riverbank, repairing a rapidly degrading stormwater outfall channel, adding new river access areas and improved trails, restoring native habitats through tree and meadow plantings, and more. The project will improve water quality, increase recreational safety, improve the long-term sustainability of the park, and make the park and the Rivanna River more accessible to the community. Extensive community engagement was led by RCA, and design permitting work is nearing completion in FY'25. Construction of the project is scheduled to occur in FY'26.

This project is made possible through grants from the National Fish and Wildlife Foundation and the Stormwater Local Assistance Program, with support from the City's Stormwater Utility, U.S. Environmental Protection Agency, the Chesapeake Bay Program, and other funding organizations.

To track the progress of this project, visit www.tinyurl.com/riverview-restoration.

Biscuit Run Stream Restoration Project

The Biscuit Run stream restoration project is being undertaken by Albemarle County in the newly opened Biscuit Run Park. Biscuit Run is a tributary of Moores Creek, a major City waterway just downstream of 5th Street SW near 5th Street Station. An approximately one-mile portion of Biscuit Run with heavily eroded streambanks and undermined trees will undergo restoration work to improve water quality, increase habitat diversity, reduce downstream flooding, and better manage stormwater runoff. The restoration design for phase one primarily entails installing intermittent log jam structures along the stream reach, mimicking beaver dams. This will cause water to pool up behind the log jam structures and allow storm flows to more easily escape into the floodplain and reduce erosion in the channel. This approach will also create wetlands that would have been a more prominent part of the Biscuit Run landscape hundreds of years ago. These wetlands increase the diversity of wildlife and plant habitats in the Biscuit Run valley and reduce flooding and erosion pressure on portions of Biscuit Run farther downstream. Left to its own devices, the Biscuit Run valley would likely require hundreds of years to restore itself. This project's intervention will provide an "ecological uplift" so that this stream valley can heal within a matter of years rather than centuries.

The restoration of Biscuit Run will result in the reduction of pollutants of concern, including nitrogen, phosphorus, and sediment. Both the City and Albemarle County have requirements in their MS4 General Permits to achieve reductions of those pollutants to meet Chesapeake Bay cleanup goals by 2028. The City is in need of nitrogen reductions, while the County is in need of phosphorus reductions. As a result, the City and County entered into a formal Memorandum of Understanding to share the costs and pollutant reductions resulting from the project. The City financial contribution of up to \$800,000 is from Stormwater Utility CIP funding. The City will be purchasing nitrogen reductions at the price of \$500/pound, up to a total of 1,600 pounds. The final City financial contribution and amount of nitrogen reduction is to be determined based upon the final as-built survey of the project.

5.6 STORMWATER UTILITY FINANCIAL STABILITY

The Stormwater Utility budget is broken down into four categories: Fee Revenue, Salaries and Benefits, Operations and Maintenance, and Transfer to Capital. The fee revenue is budgeted towards salaries, benefits, and operations and maintenance expenses with any remaining revenue being transferred to the Stormwater Utility Capital Improvement Fund. The fee has seen no adjustment since its adoption in 2013. Like other City Departments and programs, the Stormwater Utility has experienced increases in its operations and maintenance costs over many years with rising costs continuing into the future.

Five-year budget projections show that the fee will need to be modified in the coming years. The Stormwater Utility budget will need to grow annually to ensure the level of service that is currently being provided to our residents is maintained, while also being able to present a balanced budget.

In future years, Utilities staff will present to the Charlottesville City Council, Stormwater Utility Fee adjustment options that will ensure the continuation of the current level of service, as well as opportunities to increase the level of service that is provided to the residents of Charlottesville.

5.7 REVENUE REQUIREMENTS

As shown in the table below, the total expenditures for the Utility of approximately \$3.44 million is projected to remain the same from FY'25 to FY'26.

Exhibit 45: Comparison of Stormwater Revenue Requirements FY'25 to FY'26

Revenue Requirements	FY'25 Budget	FY'26 Budget	\$ Change	% Change
Salaries & Benefits	\$1,036,306	\$1,086,855	\$50,549	4.88%
Operating Expenditures	\$778,583	\$728,034	-\$50,549	-6.49%
Capital Projects	\$1,500,000	\$1,500,000	\$0	0.00%
Debt Service	\$129,683	\$129,683	\$0	0.00%
TOTAL	\$3,444,572	\$3,444,572	\$0	0.00%

5.7.1 Stormwater Utility Fee Rate FY'26

The Stormwater Utility fee rate was adopted in March 2013 at \$1.20 per 500 sq. ft. of impervious surface on a property per month. Since its adoption there have been no adjustments to the fee rate. The fee covers the operational and maintenance costs associated with the Stormwater Utility. As previously mentioned, capital infrastructure costs are paid through a combination of fee revenues remaining after the funding of the operation and maintenance expenses and bond sale proceeds.

Exhibit 46: Stormwater Utility Fee Rate FY'26

Current	Proposed	\$ Change	% Change
STORMWATER (per 500 sq. ft. impervious area)			
\$1.20	\$1.20	\$0.00	0.00%

GLOSSARY

Base Rate – The gas rate as set each year as of July 1, consisting of budgeted operating costs and current wholesale gas prices; it is adjusted each month to reflect changes in the cost of wholesale gas through the PGA.

Basin – A geographical area of the City wastewater collection system.

Carry-over – the City Council directive by which unobligated funds remaining at the end of a budget year may be carried forward to the next budget year to cover costs.

CCTV – Closed circuit televising – Technology in which a camera, driven via remote control through the sanitary sewer, allows the operator to view blockages/breakages, etc., in the line and to schedule necessary maintenance accordingly.

Cubic foot – 7.48 gallons of water – The standard measure of water usage chosen by the City of Charlottesville.

Debt Service – The amount required to pay the annual principal and interest payments on long term debt, such as bonds.

Degree Day – The measure of relative heating requirements determined by subtracting the average temperature for the day from 65 degrees. The higher the number of degree days, the lower the temperature and, therefore, the higher the heating need.

dth – Dekatherm; a measurement of gas that is 1,000,000 BTU (British thermal units) of heat. A metered volume of gas (mcf) is converted by the thermal factor, which varies with the temperature, to a constant heat value (dth) for billing purposes. Both purchases and sales are measured and priced by dth.

Facility Fee – The charge that the City of Charlottesville imposes for a new water or wastewater connection for the proportionate share of use of the water and wastewater infrastructure capacity. The charge is made when there is no service provided to the area prior to the request or if the existing connection is smaller than is required.

Indirect Cost - Local governments have overhead and administrative costs essential to operating the government and providing services to the public. Examples include costs incurred for a city manager, human resources, financial management, and information technology. Although these services typically reside in the General Fund, they also support departments in other funds, such as utilities. The indirect cost associated with these services and then charged to other funds is calculated, typically annually, based on a standard methodology of cost allocation.

mcf – 1,000 cf; a volumetric measurement of water flows. One mcf of water is approximately 7,480 gallons.

NYMEX – New York Mercantile Exchange - The City purchases gas from its supplier based on closing monthly prices from this exchange.

Payment In Lieu Of Taxes (PILOT) – An annual payment to the City's General Fund. The formula for water and wastewater used each year to calculate the amount of transfer is based on the prior year budgeted revenues from sales. The formula for gas is prior year expenses less cost of sales.

PGA – Purchased Gas Adjustment; the change in the annual base rate. It is calculated monthly to reflect the change in wholesale gas costs.

Rate of Return – The discount or interest rate that is used to calculate the maximum investment that the City will make to assess a potential gas line extension project, based on an expected flow of income.

Rate Stabilization – Money that has been set aside in prior years for the specific purpose of offsetting all or a portion of a potential utility rate increase.

Water Loss Factor – The difference between the amount of water purchased by the City from Rivanna Water and Sewer Authority for distribution and the amount that is billed to City customers. The loss may result from leaks, inaccurate meters, firefighting, and other unmetered uses.

Working Capital – Current assets (cash and other liquid assets) less liabilities due within one year or net liquid assets available for use in current operations.

Working Capital Requirement – A formula used to calculate the amount needed to pay operating expenses for 60 days for water, wastewater, and for gas. This formula is used to ensure that there are adequate cash balances maintained to pay all obligations on time, without borrowing from the City's General Fund.