

At A Glance City of Charlottesville

FY2022



Utility Rate Report

The following material provides a brief summary of the rate and fee recommendations for water, wastewater, stormwater, and natural gas for FY2022. All rates will go into effect July 1, 2021. For a thorough explanation and details of the recommendations, please consult the Utility Rate Report FY2022.

The table below illustrates the monthly impact on an average 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. This information is based on utility rates and charges adopted July 1, 2019 and proposed FY 2022 rates and charges. There was no rate increase for any utilities July 1, 2020. Specific changes to each utility's rate are discussed in this report.

	Current Based on rates adopted 7/1/19	Adopted Effective 7/1/21	Change	Percent
Water ¹	\$27.61	\$29.76	\$2.15	7.79%
Wastewater ¹	\$37.06	\$38.04	\$0.98	2.64%
Gas ¹	\$50.85	\$50.60	(\$0.25)	-0.49%
Stormwater ²	\$5.86	\$5.86	\$0	0%
Total	\$121.38	\$124.26	\$2.88	2.37%

(1) Rates include monthly service charge

(2) The budget impact shown reflects a residential monthly average fee and provides consistency with other utilities. Stormwater fees are rounded to the next whole billing unit and are billed to property owners biannually.

Water Rates

Where your Water Dollar goes ...



Usage Rate

Water rates have increased by \$4.13 per 1,000 cf based on the amount of water used which is a 7.30% increase



Impact on the Customer

The impact on a customer's bill will depend on how much water is consumed. The average single-family household uses 400 cf/month (2,992 gallons/month; approximately 100 gallons/day). To the extent an individual customer's usage differs from the average will determine the impact of the proposed rate on their bill. The table below shows the monthly impact on water customers at different amounts of usage.

	Water Used/Month (cf)	Current Composite Water Rate/1,000 cf	Current Water Usage Charge/month	Adopted Composite Water Rate/1,000 cf	Adopted Water Usage Charge/month	\$ Change	% Change
Minimal User (10 th Percentile)	140	\$56.52	\$7.91	\$60.65	\$8.49	\$0.58	7.31%
Small User (25 th Percentile)	250	\$56.52	\$14.13	\$60.65	\$15.16	\$1.03	7.29%
Median User (50 th Percentile)	400	\$56.52	\$22.61	\$60.65	\$24.26	\$1.65	7.30%
Large User (75 th Percentile)	610	\$56.52	\$34.48	\$60.65	\$37.00	\$2.52	7.31%
High Volume User (90 th Percentile)	880	\$56.52	\$49.74	\$60.65	\$53.37	\$3.63	7.30%

Wastewater Rates

Where your Wastewater Dollar goes ...



\$0.56

RWSA (PURCHASE OF WASTEWATER TREATMENT)



\$0.23

CITY OPERATIONS AND MAINTENANCE



\$0.19

CITY DEBT SERVICE (INFRASTRUCTURE)



\$0.02

CUSTOMER SERVICE & BILLING

FY' 22 Budget

\$16,059,081

Usage Rate

Wastewater usage rates have increased by \$1.20 per 1,000 cf based on the amount of water used which is a 1.50% increase.



Impact on the Customer

The impact on a customer's bill will depend on how much water is consumed. The average single-family household uses 400 cf/month (2,992 gallons/month; approximately 100 gallons/day). To the extent an individual customer's usage differs from the average will determine the impact of the proposed rate on their bill. The table below shows the monthly impact on wastewater customers at different amounts of usage.

	Water Used/Month (cf)	Current Wastewater Rate/1,000 cf	Current Wastewater Usage	Adopted Wastewater Rate/1,000 cf	Adopted Wastewater Usage	\$ Change	% Change
Minimal User (10 th Percentile)	140	\$80.14	\$11.22	\$81.34	\$11.39	\$0.17	1.50%
Small User (25 th Percentile)	250	\$80.14	\$20.04	\$81.34	\$20.34	\$0.30	1.50%
Median User (50 th Percentile)	400	\$80.14	\$32.06	\$81.34	\$32.54	\$0.48	1.5%
Large User (75 th Percentile)	610	\$80.14	\$48.89	\$81.34	\$49.62	\$0.73	1.49%
High Volume User (90 th Percentile)	880	\$80.14	\$70.52	\$81.34	\$71.58	\$1.06	1.50%

Water & Wastewater

Monthly Service Charge

The monthly service charge for water and wastewater has changed. The monthly service charge has increased to \$5.50 for water and \$5.50 for wastewater for a 5/8" meter. The adopted combined monthly service charges for water and sewer are as follows:

Water Meter Size (in inches)	Current	Adopted	\$ Change
5/8	\$ 10.00	\$ 11.00	\$1.00
1	\$ 25.00	\$ 27.50	\$2.50
1 1/2	\$ 50.00	\$ 55.00	\$5.00
2	\$ 80.00	\$ 88.00	\$8.00
3	\$ 160.00	\$176.00	\$16.00
4	\$ 250.00	\$ 275.00	\$25.00
6	\$ 500.00	\$ 550.00	\$50.00
14	\$ 3,267.00	\$ 3,602.50	\$335.50

Stormwater Rates

Where your Stormwater Dollar goes ...



Stormwater rates remain constant for the coming year at \$1.20 per 500 square feet of impervious surface (or part thereof) per month. Stormwater fees are billed concurrently with real estate tax assessments and are due in June and December.

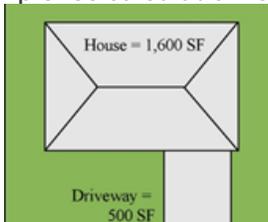
Modernize and maintain infrastructure integrity while pursuing environmental stewardship.

As part of the larger Water Resources Protection Program (WRPP), the City has adopted a stormwater utility fee to provide a dedicated and stable source of funding for stormwater management activities. Funds received are used to help the City comply with federal and state stormwater regulations, rehabilitate the City's aging stormwater infrastructure, address drainage and flooding problems, and pursue environmental stewardship.

Impact on the Customer

The stormwater utility fee is charged to property owners based on the amount of impervious area on their property (areas covered by hard surfaces, such as: buildings, concrete, gravel, etc.).

An example fee calculation is provided below:



Example Fee Calculation

- Total impervious area (house and driveway): 2,100 SF
- Divide by 500 square feet: $2,100 / 500 = 4.2$ billing units
- Round to the next whole number: 4.2 rounds to 5 billing units
- Multiply the number of billing units by the rate (\$1.20 per billing unit per month) to determine annual fee: $5 \times \$1.20 \times 12 = \72 annual fee, billed \$36 due in June and December

Gas Rates

Where your Natural Gas Dollar goes ...



Usage Rate

Gas rates have slightly decreased for the minimal and average residential natural gas customer. However, large and high volume residential rates have increased by 3.4% and 4.85% respectively.



Impact on the Customer

The impact on a customer's bill will depend on the volume of gas that the customer uses. The average single family household uses 4,600 cubic feet of natural gas per month. The table below shows the monthly impact on gas customers at different amounts of usage.

	Gas Used (cf per month)	Current Monthly Gas Bill based on rates adopted 7/1/20	Adopted Monthly Gas Bill	\$ Change	% Change
Minimal User	4,000	\$45.74	\$45.49	(\$0.25)	-0.55%
Average User	4,600	\$50.85	\$50.60	(\$0.25)	-0.49%
Large User	20,000	\$169.46	\$175.23	\$5.77	3.40%
High Volume User	60,000	\$474.21	\$497.23	\$23.02	4.85%

The base rate is set on July 1st each year. This base rate is calculated using the cost of gas at that time. However, gas is purchased throughout the year and the cost per cubic foot of natural gas varies by month due to various factors (weather, economics, etc) which are hard to predict. The purchased gas adjustment (PGA) acts as a "true up" to account for the differences between the current market cost of gas and the base rate. This ensures that customers are not over or underpaying and that the City is not over or under collecting.

	Gas Used (cf per month)	Recent Monthly Gas Bill with April 2021 PGA	Adopted Monthly Gas Bill with April 2021 PGA	\$ Change	% Change
Minimal User	4,000	\$47.35	\$47.10	(\$0.25)	-0.53%
Average User	4,600	\$52.71	\$52.45	(\$0.26)	-0.49%
Large User	20,000	\$177.51	\$183.25	\$5.74	3.23%
High Volume User	60,000	\$498.37	\$521.26	\$22.89	4.59%

Utilities Operations Overview



FY22

The Charlottesville Department of Utilities provides the Charlottesville community with safe and reliable natural gas, drinking water, and wastewater services at a reasonable cost in an environmentally responsible manner.

Core Programs & Services

Department-Wide

- **Utility Location Oversight**
Protecting infrastructure & critical facilities, including utility locating: **15,968** tickets in 2020.
- **24/7 Utilities Call Center**
The Utilities Call Center handles approximately **25,000** calls per year.
- **Customer Service**
Last year, we processed **7,435** Move-ins and **7,220** Move-outs.
- **Development Site Plan Review**
Our engineers reviewed and followed the implementation of **158** site plans in 2020.
- **Emergency Operations**
Emergency response to water and gas leaks as well as sewer backups. Over **550** leaks checked per year.
- **GIS Mapping and Maintenance**
209,695 feet of utility lines entered or updated and **1,033** CCTV videos cataloged last year.
- **Meter Reading and Maintenance**
We performed **439,253** meter readings including **2,334** implausible meter readings and **1,204** ERT replacements in 2020.

Customer Satisfaction

Customer Ratings

Experience Interacting with Utilities Department Staff (% Satisfied)*

Politeness & courtesyness of staff



Staff knowledge and technical competence



Overall responsiveness to your requests, questions, or concerns



*Department of Utilities Customer Satisfaction Survey - SurveyMonkey – February, 2021



Water Distribution & Wastewater Collection



Water & Wastewater by numbers



14,800
CUSTOMERS
SERVED



4.54 million
GALLONS OF WATER
SOLD DAILY



184 miles
OF WATER
MAINS



172 miles
OF WASTEWATER
MAINS



9,193*
WORK ORDERS
COMPLETED

* BASED ON 2020 CALENDAR YEAR

Water Quality Highlights

- The quality of our drinking water meets and exceeds all regulatory requirements and expectations for safety and reliability.
- Cross-contamination:
 - The situation in which water flows in a direction that is opposite from the intended flow is called backflow and presents a serious hazard to our water supply.
 - The City's Department of Utilities currently maintains inspection records for **850 backflow devices** in an effort to protect and provide the highest quality water to the City residents.



Water Loss Prevention Highlights

- Meter testing and replacement program:
 - **48 large water meters** have been replaced in 2020 and over **323** since the program's inception.
- Annual system-wide leak detection survey:
 - In 2020, **6 leaks** totaling **141,120 GPD** were detected and repaired.
- "Low Flow" ultrasonic meter installation:
 - Accurately measures low flow rates.

Water & Wastewater Asset Management Highlights

- Water main replacement program:
 - **5,915 linear feet** in 2020 and **92,213 linear feet** of water mains have been replaced since 2010 or **9.5%** of the entire water system.
- Water service line replacement:
 - **3,245 linear feet** in 2020 and **42,240 linear feet** of water services have been replaced since 2010 or **15%** of the City-owned water services.
- Wastewater main rehabilitation program:
 - **4,213 linear feet** of wastewater main were rehabilitated or replaced in 2020 and over **245,500 linear feet** of main have been rehabilitated or replaced since the program's inception in 2009 or **27%** of the wastewater system.
- Manhole rehabilitation or replacement:
 - **1,145 manholes** have been rehabilitated or replaced since the program's inception or **19%** of the City's wastewater manholes.



Fats, Oils, and Grease Program Highlights

- The City of Charlottesville prohibits the discharge of fats, oils, and grease (FOG) down the drain into the City's wastewater system.
- The City of Charlottesville maintains an active FOG program that routinely inspects and advises best management practices to over **300 city food service establishments** on an annual basis on how to properly dispose of FOG.
- We provide FOG Kits to residents to help properly dispose fats, oils, and grease from cooking.



Customer Satisfaction

In our recent Utilities Customer Satisfaction Survey, our customers show high levels of satisfaction with the dependability of our services.

Reliability of water service to your home

Reliability of your sanitary sewer service



Rate the value that you pay for your water service

Rate the value that you pay for your sewer service



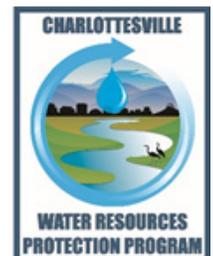
Also in this survey, the vast majority of our customers rated the value of their water and sewer service as fair and above (good and excellent).



Stormwater CIP

Stormwater Improvements Highlights

- Utilities has had an active Stormwater Conveyance System Rehabilitation Program since 2010.
- Stormwater rehabilitation program:
 - **5,235 linear feet** of stormwater main rehabilitated or replaced in 2020 and **65,000 linear feet** rehabilitated or replaced or **9.1%** of the system since the program's inception.
- Structure rehabilitation or replacement:
 - **433** structures rehabilitated or replaced since the program's inception or **5%** of the system's storm structures.





Gas System

Natural Gas by numbers



20,900
CUSTOMERS
SERVED



340 miles
GAS MAIN
LINES



298 miles
GAS SERVICE
LINES



36
REGULATOR
STATIONS



12,164*
WORK ORDERS
COMPLETED

* BASED ON 2020 CALENDAR YEAR

Greenhouse Gas Reduction Strategy

Adoption of a two-pronged strategy to help reduce greenhouse gas emissions (GHG) in our community due to natural gas usage:

- Energy-efficiency programs to reduce natural gas usage per household.
- Carbon offset program invests in environmental improvement projects that help counterbalance our greenhouse gas emissions.

Energy-efficiency programs:

- Popular energy-efficiency rebates includes **\$100 Programmable Thermostat**, **\$200 Tankless Water Heater** and **\$200 Attic Insulation Rebates**.
- Charlottesville Gas Energy Efficiency Program (CGEEP) program offering energy efficiency upgrades at no cost to income-qualified households.
 - Since its launch, **84** gas customers have benefited from the program. Of the total CGEEP recipients, **70%** were Charlottesville homeowners, and **75%** had at least one family member age 60 years or older living in the same household.
 - To date, the Charlottesville Department of Utilities has invested **\$112,636** in the CGEEP program.



Carbon offset program:

- This program allows Utilities to invest in various carbon sequestration projects all around the world.
 - From reforestation projects in the Peruvian Amazon to capturing agricultural methane on large farms in the Midwest, this program allows Utilities to move toward carbon neutrality by 2050.

In our recent Utilities Customer Satisfaction Survey, our customers show high levels of satisfaction with access to gas service, value of natural gas and support of the implementation of carbon offset programs.

How important is it to have gas available to your home?



Rate the value that you pay for your gas service



Would you support the implementation of Carbon Offset programs for your gas service?



*46% of respondents support the implementation without reservation, and 45% would support carbon offset programs as long as they do not increase gas rates.

