

At A Glance

City of Charlottesville

Utility Rate Report



The following material provides a brief summary of the rate and fee recommendations for water, wastewater, stormwater, and natural gas for FY2023. All rates will go into effect July 1st, 2022. For a thorough explanation and details of the recommendations, please refer to the FY2023 Utility Rate Report.

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 cubic feet (cf) of gas. This information is based on utility rates and charges adopted July 1st, 2021, and proposed rates and charges.

	Current Based on rates adopted 7/1/21	Proposed Effective 7/1/22	Change	Percent
Water ¹	\$29.76	\$33.40	\$3.64	12.23%
Wastewater ¹	\$38.04	\$39.02	\$0.98	2.58%
Gas ¹	\$50.60	\$49.80	(\$0.80)	-1.58%
Stormwater ²	\$5.86	\$5.86	\$0	0%
Total	\$124.26	\$128.08	\$3.82	3.07%

(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 are proposed to increase by \$9.10 per 1,000 cf based on the amount of water used, which is a 15.0% 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 Use (cf per month)	Current Composite Water (per 1,000 cf)	Current Water Usage (charge per month)	Proposed Composite Water (per 1,000 cf)	Proposed Water Usage (charge per month)	\$ Change	% Change
Minimal User (10 th Percentile)	140	\$60.65	\$8.49	\$69.75	\$9.76	\$1.27	14.96%
Small User (25 th Percentile)	250	\$60.65	\$15.16	\$69.75	\$17.44	\$2.28	15.04%
Median User (50 th Percentile)	400	\$60.65	\$24.26	\$69.75	\$27.90	\$3.64	15.00%
Large User (75 th Percentile)	610	\$60.65	\$37.00	\$69.75	\$42.55	\$5.55	14.99%
High Volume User (90 th Percentile)	880	\$60.65	\$53.37	\$69.75	\$61.38	\$8.01	15.01%

Wastewater Rates

Where your Wastewater Dollar goes ...



\$0.56

RWSA (PURCHASE OF WASTEWATER TREATMENT)



\$0.25

CITY OPERATIONS AND
MAINTENANCE



\$0.17

CITY DEBT SERVICE
(INFRASTRUCTURE)



\$0.02

CUSTOMER SERVICE
& BILLING

FY' 23 Budget

\$15,785,453

Usage Rate

Wastewater usage rates are proposed to increase by \$2.46 per 1,000 cf based on the amount of water used, which is a 3.0% 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 Use (cf per month)	Current Wastewater (\$ per 1,000 cf)	Current Wastewater Usage (charge per month)	Proposed Wastewater Rate (\$ per 1,000 cf)	Proposed Wastewater Usage	\$ Change	% Change
Minimal User (10 th Percentile)	140	\$81.34	\$11.39	\$83.80	\$11.73	\$0.34	2.98%
Small User (25 th Percentile)	250	\$81.34	\$20.34	\$83.80	\$20.95	\$0.61	3.00%
Median User (50 th Percentile)	400	\$81.34	\$32.54	\$83.80	\$33.52	\$0.98	3.01%
Large User (75 th Percentile)	610	\$81.34	\$49.62	\$83.80	\$51.12	\$1.50	3.02%
High Volume User (90 th Percentile)	880	\$81.34	\$71.58	\$83.80	\$73.74	\$2.16	3.02%

Water & Wastewater

Facility Fees

The City is modifying the facility fees for water meters 3-inches and larger to reflect the additional capacity provided by a new type of water meter. The base cost per ERC will remain the same. The table below reflects the current facility fees and proposed facility fees associated with each meter size.

Water Meter Size (in inches)	ERC		Water Facility Fees		Wastewater Facility Fees	
	Current	Proposed	Current	Proposed	Current	Proposed
5/8	1	1	\$ 3,100	\$ 3,100	\$5,350	\$5,350
1	2.5	2.5	\$ 7,750	\$ 7,750	\$13,375	\$13,375
1 1/2	5	5	\$15,500	\$ 15,500	\$26,750	\$26,750
2	8	8	\$ 24,800	\$ 24,800	\$42,800	\$42,800
3	15	25	\$ 46,500	\$77,500	\$80,250	\$133,725
4	25	50	\$77,500	\$ 155,000	\$133,725	\$267,500
6	50	80	\$ 155,000	\$ 248,000	\$267,500	\$428,000

Stormwater Rates

Where your Stormwater Dollar goes ...



Stormwater rates are proposed to 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.

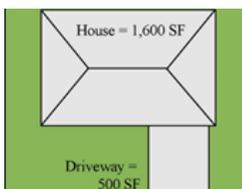
As part of the larger Water Resources Protection Program (WRPP), the City has adopted a stormwater utility fee to provide a dedicated and stable source of funding for stormwater management activities. Funds received are used to help the City comply with federal and state stormwater regulations, rehabilitate 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 are proposed to decrease for all natural gas customers. For the average residential gas customer, gas rates are proposed to decrease by 1.58%



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 (using FY22 base rate)	Proposed Monthly Gas Bill (using FY23 base rate)	\$ Change	% Change
Minimal User	4,000	\$45.49	\$44.78	(\$0.71)	-1.56%
Average User	4,600	\$50.60	\$49.80	(\$0.80)	-1.58%
Large User	20,000	\$175.22	\$172.14	(\$3.08)	-1.76%
High Volume User	60,000	\$497.17	\$488.26	(\$8.91)	-1.79%

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 gas cost used to calculate 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 2022 PGA	Proposed Monthly Gas Bill with April 2022 PGA	\$ Change	% Change
Minimal User	4,000	\$55.67	\$54.96	(\$0.71)	-1.27%
Average User	4,600	\$62.31	\$61.50	(\$0.80)	-1.28%
Large User	20,000	\$226.10	\$223.02	(\$3.08)	-1.36%
High Volume User	60,000	\$649.82	\$640.91	(\$8.91)	-1.37%

Utilities Operations Overview



FY23

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

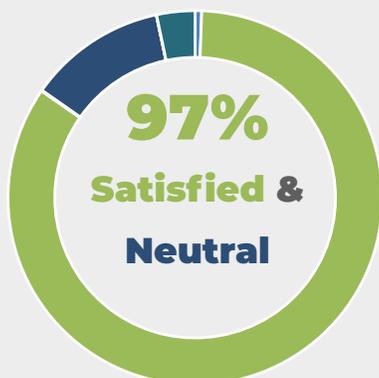
Department-Wide

- **Utility Location Oversight**
Protecting infrastructure & critical facilities, including utility locating: **17,252** tickets in 2021.
- **24/7/365 Utilities Call Center**
The Utilities Call Center handles approximately **25,000** calls per year.
- **Customer Service**
Last year, we processed **7,273** Move-ins and **7,181** Move-outs.
- **Online Bill Pay Services**
In October 2021, we launched a new bill pay portal. To date, **2,236** customers have registered for Autopay, and **5,968** customers receive paperless billing.
- **Emergency Operations**
Emergency response to water and gas leaks as well as sewer backups. Over **560** leaks checked per year.
- **GIS Mapping and Maintenance**
37,588 feet of utility lines entered and **1,098** CCTV videos cataloged last year.
- **Meter Reading and Maintenance**
We performed **479,895** meter readings including **2,411** implausible meter readings and **1,040** ERT replacements in 2021.
- **Development Site Plan Review**
Our engineers reviewed and followed the implementation of **194** site plans in 2021.

Customer Satisfaction

Experience Interacting with Utilities Department Staff (% Satisfied)*

Staff knowledge and technical competence



Overall responsiveness to your request, question, or concern



How satisfied you are with the new Utility Billing Online Payment Portal?



*Department of Utilities Customer Satisfaction Survey - SurveyMonkey – February, 2022



Water Distribution & Wastewater Collection



Water & Wastewater by numbers



14,500
CUSTOMERS
SERVED



4.5 million
GALLONS OF WATER
SOLD DAILY



183 miles
OF WATER
MAINS



172 miles
OF WASTEWATER
MAINS



8,572
WORK ORDERS
COMPLETED

Water Quality

- 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.



Granular Activated Carbon (GAC) treatment providing superior quality water to our community.

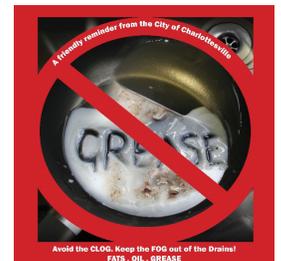


Water Loss Prevention

- Meter testing and replacement program:
 - Over **323** large water meters have been completed since the program's inception.
- Annual system-wide leak detection survey:
 - In 2021, **13 leaks** totalling **534,240 GPD** were detected and repaired.
- Ultrasonic meter installation:
 - Is more accurate and measures low flow rates.

Fats, Oils, and Grease Program

- 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.



Water & Wastewater Asset Management

- Water main replacement program:
 - **10,812 linear feet** in 2021 and **112,054 linear feet** of water lines have been replaced since 2010 or **11.6%** of the entire water system.
 - Total construction cost: **\$27.7 million**
- Water service line replacement:
 - **5,273 linear feet** in 2021 and **47,513 linear feet** of water services have been replaced since 2010 (**15%** of the City-owned water services).
- Wastewater main rehabilitation program:
 - **6,449 linear feet** of wastewater lines were rehabilitated or replaced in 2021 and over **251,834 linear feet** of main have been rehabilitated or replaced since the program's inception in 2009 (**28%** of the wastewater system).
 - Total construction cost: **\$22.2 million**
- Manhole rehabilitation or replacement:
 - **1,182 manholes** have been rehabilitated or replaced since the program's inception (**20%** of the City's wastewater manholes).



Customer Satisfaction

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

Reliability of your water service to your home

Reliability of your wastewater service to your home



Rate the value that you pay for your water service

Rate the value that you pay for your sewer service



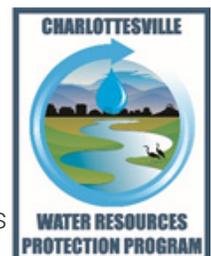
Also in this survey, the vast majority of our customers rated the value of their water and sewer service as fair and above (good and excellent).



Stormwater CIP

Stormwater Improvement

- Utilities has had an active Stormwater Conveyance System Rehabilitation Program since 2010.
- Stormwater rehabilitation program:
 - **5,685 linear feet** of stormwater lines rehabilitated or replaced in 2021 and **71,445 linear feet** rehabilitated or replaced or **10.4%** of the system since the program's inception.
 - Total construction cost: **\$10.8 million**
- Structure rehabilitation or replacement:
 - **440** structures rehabilitated or replaced since the program's inception (**5%** of the system's storm structures).





Gas System

Natural Gas by numbers



21,300
CUSTOMERS
SERVED



342 miles
GAS MAIN
LINES



300 miles
GAS SERVICE
LINES



32
REGULATOR
STATIONS



11,585
WORK ORDERS
COMPLETED

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.

1) Energy-efficiency programs:

- Energy Saving Trees - this partnership with the Arbor Day Foundation provides Charlottesville Utilities customers with a free tree to strategically plant on their property, delivering energy- and cost-saving benefits to their home.
 - Almost all **250** available trees were reserved in 48 hours, with the few remaining claimed shortly thereafter.
 - The successful planting of these trees will provide the community with **823,418 lbs.** of carbon sequestration over 20 years.
- Popular energy-efficiency rebates includes **\$100 Programmable Thermostat**, **\$200 Tankless Water Heater** and **\$300 Attic Insulation Rebates**.
- Charlottesville Gas Energy Efficiency Program (CGEEP) program offering energy efficiency upgrades at no cost to income-qualified households.
 - Since its launch, **124** gas customers have benefited from the program. Of the total CGEEP recipients, **68%** were Charlottesville homeowners, and **73%** had at least one family member age 60 years or older living in the same household.
 - The energy-saving varies a lot from home to home (from 3% to 51% reduction). On average, we noticed a **20%** reduction in gas consumption during the winter months.
 - To date, the Charlottesville Department of Utilities has invested **\$173,066** in the CGEEP program.



2) Carbon offset program:

- This program allows Utilities to invest in various carbon sequestration projects all around the world.
 - Charlottesville Gas currently offsets **25%** of its emissions through this program.
 - According to the 2019 City's GHG Inventory by Sector and Fuel Type Report (Released 2022), there has been a reduction of natural gas emissions in our community of **30%** (baseline 2011). This reduction is consistent with the City-wide GHG reduction.
 - Carbon Offset program allows Utilities to meet the citywide climate action goals of a **45%** reduction by 2030.

In our recent Utilities Customer Satisfaction Survey, our customers show high levels of satisfaction with access to gas service, and value of natural gas.

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

Rate the value that you pay for your gas service

