

**CITY OF CHARLOTTESVILLE, VIRGINIA  
CITY COUNCIL AGENDA**



Agenda Date:	June 21, 2022
Action Requested:	2nd of 2 Readings of Ordinance
Presenter:	Chris Cullinan, Director of Finance Lauren Hildebrand, Director of Utilities
Staff Contacts:	Chris Cullinan, Director of Finance Lauren Hildebrand, Director of Utilities
<b>Title:</b>	<b>Proposed Utility Rates for FY2023 (effective July 1, 2022)</b>

**Background:**

The City of Charlottesville owns and operates public utilities for water, wastewater, natural gas, and stormwater. Utility services are essential on a daily basis to both individuals and to the entire community. Thoughtful, deliberate planning and sufficient financial resources ensure efficient and orderly maintenance and operation of these systems. This need for investment in our utility systems is not without cost, but our utility rates must also be balanced with the need for continued affordability for our customers.

Each of the City's utilities is accounted for separately as enterprise funds. Enterprise funds are operated on a self-supporting basis, meaning that each utility is required to cover the full costs of providing its service. The City's utilities are funded solely through their rates and related fees and charges and are not subsidized with general tax revenues. The utilities do not operate on a for-profit basis. As such, utility rates are calculated annually to bring each fund to a break-even point; however, variable factors such as weather, usage, and number of customers may result in an unexpected and unanticipated operating surplus or deficit during any given year. If so, the surpluses or deficits are accounted for and remain within their respective utility fund.

Rivanna Water and Sewer Authority (RWSA), which provides the treatment services for the City, is one of the largest fixed cost elements for the water and wastewater budgets. For FY'23, the rates for RWSA have increased and they are incorporated in the City's proposed utility rates.

**Discussion:**

*Proposed Utility Rates for FY'23*

The budgets for each of the utilities have been thoroughly examined for opportunities to minimize costs without sacrificing service. Based on the revenue requirements needed to operate and maintain each utility and the above recommendations, the City is proposing the following rates in the water, wastewater, and gas utility:

- \$69.75/1,000 cubic feet (cf) of water (average annual composite rate of seasonal rates),

- \$83.80/1,000 cf of wastewater, and;
- \$97.65/8,000 cf of natural gas.

In addition, the City is proposing a modification of the facility fees for water meters 3-inches and larger to reflect the additional capacity provided by a new type of meter. The table below reflects the current facility fees and proposed facility fees associated with each meter size.

Water Meter Facility Fees				
Meter Size	Current ERC	Proposed ERC	Current Facility Fee	Proposed Facility Fee
5/8"	1	1	\$3,100	\$3,100
1"	2.5	2.5	\$7,750	\$7,750
1 1/2"	5	5	\$15,500	\$15,500
2"	8	8	\$24,800	\$24,800
3"	15	25	\$46,500	\$77,500
4"	25	50	\$77,500	\$155,000
6"	50	80	\$155,000	\$248,000

Wastewater Facility Fees				
Meter Size	Current ERC	Proposed ERC	Current Facility Fee	Proposed Facility Fee
5/8"	1	1	\$5,350	\$5,350
1"	2.5	2.5	\$13,375	\$13,375
1 1/2"	5	5	\$26,750	\$26,750
2"	8	8	\$42,800	\$42,800
3"	15	25	\$80,250	\$133,725
4"	25	50	\$133,725	\$267,500
6"	50	80	\$267,500	\$428,000

For the stormwater utility, there are minimal changes to the budget and stormwater fees are proposed to remain unchanged for the coming year at \$1.20 per 500 square feet of impervious surface.

#### *Impact on Average Customer*

Utility customers continue to conserve water and natural gas, which is both good for the environment and for their utility bill. The average residential water customer is using 400 cubic feet (cf) per month. Similarly, the average residential gas customer is using 4,600 cf. Based on these usage figures and the proposed utility rates, the average residential customer is projected to spend the following per month:

<u>Service</u>	<u>Current</u> (based on rates adopted 7/1/21)	<u>Proposed</u> (Effective 7/1/22)	<u>Change</u>	<u>Percent</u>
Water <sup>1</sup>	\$29.76	\$33.40	\$3.64	12.23%
Wastewater <sup>1</sup>	\$38.04	\$39.02	\$0.98	2.58%
Natural Gas <sup>1</sup>	\$50.60	\$49.80	-\$0.80	-1.58%
Stormwater <sup>2</sup>	\$5.86	\$5.86	\$0	0%
<b>TOTAL</b>	<b>\$124.26</b>	<b>\$128.08</b>	<b>\$3.82</b>	<b>3.07%</b>

(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.

For City residential customers who receive water, wastewater, stormwater and natural gas (87.5% of City residents), their total utility bill is projected to rise by \$3.82 per month, or 3.07%. For residential customers who receive just water, wastewater and stormwater service, their utility bill will increase by \$4.62 per month, or 5.90%. The proposed rate report can be found at <https://www.charlottesville.gov/602/Utility-Billing>.

### **Alignment with City Council's Vision and Strategic Plan:**

City Utilities operations supports City Council's "A Green City" vision. It contributes to the Strategic Plan's Objectives:

- 3.2 - To provide reliable and high-quality infrastructure,
- 3.4 - Be responsible stewards of natural resources,
- 5.1 - Integrate effective business practices and strong fiscal policies.

### **Community Engagement:**

The public hearing was held June 6, 2022. The notice for the public hearing was advertised in the newspaper during the weeks of May 16, 2022 and May 23, 2022.

### **Budgetary Impact:**

The Utility Funds (water, wastewater, and natural gas) are self-sustaining enterprise funds that are supported by the revenues from customers' usages. The stormwater fee is based on the impervious surface of the property.

Note: The approval of the utility rates has no impact on the General Fund.

### **Recommendation:**

Staff recommends approval of the proposed rates.

### **Alternatives:**

As noted above, the utilities operate on a self-sustaining, break-even basis. If the proposed rates are not adopted, the utilities would not financially perform in this manner which in turn would impact the City's ability to efficiently and reliably operate these systems. The City's ability to invest in these critical infrastructure systems would be negatively impacted as well. Additionally, the City would not meet its long-term financial policy by not having sufficient working capital for its utilities.

### **Attachments:**

Ordinance  
At a Glance  
Utilities Operations Overview

**AN ORDINANCE  
 AMENDING AND REORDAINING CHAPTER 31 (UTILITIES) OF THE CODE  
 OF THE CITY OF CHARLOTTESVILLE, 1990, AS AMENDED,  
 TO ESTABLISH NEW UTILITY RATES AND SERVICE FEES  
 FOR CITY GAS, WATER AND SANITARY SEWER.**

**BE IT ORDAINED** by the Council of the City of Charlottesville, Virginia, that:

**1. Sections 31-56, 31-57, 31-60, 31-61, 31-62, 31-102, 31-106, 31-153, 31-156 and 31-158 of Chapter 31, of the Code of the City of Charlottesville, 1990, as amended, are hereby amended and reordained as follows:**

**CHAPTER 31. UTILITIES**

**ARTICLE II. GAS**

**DIVISION 2. TYPES OF SERVICE; SERVICE CHARGES**

**Sec. 31-56. Rates - Generally.**

The firm service gas rates based on monthly meter readings shall be as follows:

Basic Monthly Service Charge	\$ 10.00	
First 3,000 cubic feet, per 1,000 cubic feet	<del>\$8.9908</del>	<u>\$8.8087</u>
Next 3,000 cubic feet, per 1,000 cubic feet	<del>\$8.5198</del>	<u>\$8.3559</u>
Next 144,000 cubic feet, per 1,000 cubic feet	<del>\$8.0489</del>	<u>\$7.9031</u>
All over 150,000 cubic feet, per 1,000 cubic feet	<del>\$7.5779</del>	<u>\$7.4504</u>

**Sec. 31-57. Air conditioning.**

(a) Gas service at the rate specified in this paragraph (“air conditioning rate”) shall be available to customers who request such service in writing and who have installed and use air conditioning equipment operated by natural gas as the principal source of energy. The air conditioning rate will be ~~\$7.3421~~ \$7.3471 per one thousand (1,000) cubic feet of gas used per month.

(b) The director of finance may, when it is impracticable to install a separate meter for air conditioning equipment, permit the use of one (1) meter for all gas delivered to the customer, in which instance the director of finance shall estimate the amount of gas for uses other than air conditioning and shall bill for such gas at the rates provided in applicable sections of this division.

...

**Sec. 31-60. Interruptible sales service (IS).**

(a) *Conditions. . . .*

(b) *Customer's agreement as to discontinuance of service. . . .*

(c) *Basic monthly service charge.* The basic monthly charge per meter for interruptible sales service ("IS gas") shall be sixty dollars (\$60.00).

(d) *Rate.* For all gas consumed by interruptible customers the rate shall be ~~\$7.2178~~ \$7.0120 per one thousand (1,000) cubic feet for the first six hundred thousand (600,000) cubic feet, and ~~\$6.6937~~ \$6.5125 per one thousand (1,000) cubic feet for all volumes over six hundred thousand (600,000) cubic feet.

(e) *Annual Minimum Quantity.* Interruptible rate customers shall be obligated to take or pay for a minimum quantity of one million two hundred thousand (1,200,000) cubic feet of gas annually. Each year, as of June 30, the director of finance shall calculate the total consumption of each interruptible customer for the preceding twelve (12) monthly billing periods and shall bill any customer that has consumed less than the minimum quantity for the deficient amount at the rate of ~~\$7.2178~~ \$7.0120 per one thousand (1,000) cubic feet. Any new customer shall be required to enter into a service agreement with the City prior to the start of service. If an interruptible customer terminates service, the annual minimum requirement shall be prorated on the basis of one hundred thousand (100,000) cubic feet per month for each month the customer has received service since the last June 30 adjustment.

(f) *Contract required. . . .*

**Section 31-61. Interruptible Transportation Service (TS).**

(a) *Generally. ...*

(b) *Rates.* The rates for interruptible transportation service ("TS gas") shall be as follows:

(1) ~~\$2.6462~~ \$2.6287 per dekatherm for a customer receiving only TS gas, and

(2) ~~\$1.5877~~ \$1.5772 per dekatherm, for customers who transport 35,000 or more dekatherms per month ("large volume transportation customers"), regardless of whether such large volume transportation customer receives only TS gas, or also receives IS service.

(c) *Basic Monthly Service Charges. ...*

(d) *Special terms and conditions. ...*

(e) *Extension of facilities. . . .*

(f) *Billing month. . . .*

- (g) *Lost and unaccounted-for gas. . . .*
- (h) *Combined IS and TS customer using more than provided or scheduled by customer....*
- (i) *TS Customer providing more gas, or less gas, than customer's usage. ...*
- (j) *Other terms and conditions. . . .*

**Section 31-62. Purchased gas adjustment.**

In computing gas customer billings, the basic rate charges established under sections 31-56, 31-57, 31-60 and 31-61 shall be adjusted to reflect increases and decreases in the cost of gas supplied to the city. Such increases or decreases shall be computed as follows:

(1) For the purpose of computations herein, the costs and charges for determining the base unit costs of gas are:

- a. Pipeline tariffs;
- b. Contract quantities; and
- c. Costs of natural gas, in effect or proposed as of ~~April 1<sup>st</sup>, 2021~~, April 1<sup>st</sup>, 2022

(2) Such base unit costs are ~~\$4.2810~~ \$5.1715 per one thousand (1,000) cubic feet for firm gas service and ~~\$2.8498~~ \$3.4986 per one thousand (1,000) cubic feet for interruptible gas service.

(3) In the event of any changes in pipeline tariffs, contract quantities or costs of scheduled natural gas, the unit costs shall be recomputed on the basis of such change in accordance with procedures approved by the city manager. The difference between the unit costs so computed and the base unit costs shall represent the purchased gas adjustment to be applied to all customer bills issued beginning the first billing month after each such change.

**ARTICLE III. WATER AND SEWERS GENERALLY**

**Sec. 31-102. - Application for water service; water connection charges generally; installation of meters, etc.**

(a) Whenever any person owning or leasing property for which water service has been installed desires the initiation of water delivery, they shall make written application to the director of finance on forms prescribed by the director.

(b) Whenever any person owning or leasing property along an existing city water main desires to provide a service connection from such main to such property, they shall make application to the director of finance on forms prescribed by the director. The charge for a water connection for a meter provided, installed and set by the city under this subsection. The cost of connecting to the city water shall be determined based on the water meter size or equivalent residential connections (ERC), whichever fee is greater, shall be as follows:

Water Meter Size (inch)	ERC	Water Meter Set Fee	Water Facility Fee
5/8	1	\$325.00	\$3,100.00
1	2.5	\$495.00	\$7,750.00
1 1/2	5	\$565.00	\$15,500.00
2	8	\$635.00	\$24,800.00
3	15-25	\$825.00	<del>\$46,500.00</del> \$77,500.00
4	25-50	\$965.00	<del>\$77,500.00</del> \$155,000.00
6	50-80	\$1,145.00	<del>\$155,000.00</del> \$248,000.00

(c) In new subdivisions or any portion thereof the city may, if the city manager deems it to be in the best interest of the city, install water connections at the same time the water main or mains are installed in the new streets and prior to the time that the streets are paved, provided:

- (1) The subdivider so requests;
- (2) The subdivider gives assurance in writing that the lots will be built upon within a reasonable time; and
- (3) The subdivider designates on a plat the desired location of such connections. The charge for a water connection shall be as indicated in subsection (b) of this section.

(d) All installations made pursuant to subsections (b) and (c) of this section, from and including the meter to the main, shall be the property of the city, and the city shall maintain such service line and meter.

(e) In new subdivisions, such as apartment or office complexes or shopping centers, the city may, if the city manager deems it to be in the best interest of the city, install water meters at approximately the same time the water main or mains are installed in the project, provided:

- (1) The subdivider or developer so requests;
- (2) The subdivider or developer gives assurance in writing that the project will be built within a reasonable time;
- (3) The subdivider or developer designates on a plat the desired location of any main or mains, service lines and meters; and
- (4) The subdivider or developer installs at their expense any required mains and service lines in accordance with city standards.

The charge for a water connection shall be as indicated in subsection (b) of this section.

**Sec. 31-106. - Sewer connections generally.**

(a) All sanitary sewer connections shall be done by the applicant; extensions of all lines in city streets shall be performed by or approved in advance by the city. The cost of connecting to the city sewer shall be determined based on the water meter size or equivalent residential connections (ERC), whichever fee is greater, as follows:

Meter Size (inch)	ERC	Sewer Facility Fee
5/8	1	\$5,350.00
1	2.5	\$13,375.00
1 1/2	5	\$26,750.00
2	8	\$42,800.00
3	15-25	<del>\$80,250.00</del> \$133,725.00
4	25-50	<del>\$133,725.00</del> \$267,500.00
6	50-80	<del>\$267,500.00</del> \$428,000.00

For the purposes of this subsection, multi-family housing shall equal 0.5 ERC per unit and hotels shall equal 0.33 ERC per room. "Multi-family housing" shall include all buildings or structures with three (3) or more dwelling units, regardless of whether the units are individually owned or leased.

As used herein, a "sewer facility fee" is defined as a charge levied to offset existing or planned future capital costs necessary to meet the service needs of city sanitary sewer customers. The amount of the sewer facility fee is based on the customer's water meter size, or the number of equivalent residential connections as indicated above.

(b)Connections shall be made only upon application in writing on a form provided by the director of finance, to whom applications shall be made, and the payment above mentioned shall be made at the time of application.

(c)All applicant connections to the city's sewer lines shall be made only by a certified master plumber after securing a proper permit. All such connections must be inspected and approved by the city.

(d)All connections to mains of the city sewerage system, whether inside or outside of the city, shall be made only by the use of a mechanical tapping saddle with straps or bands circling the entire pipe compressing a rubber seal against the main line, or a polyvinyl chloride or ductile iron wye in the line. Any portion of the house sewer line within any street or road right-of-way shall be ductile iron, polyvinyl chloride or cast iron.

(e)In new subdivisions or any portion thereof, the city may, if the city manager deems it to be in the best interest of the city, install sewer connections at the same time the sewer main or mains are installed in the new streets and prior to the time that the streets are paved; provided:

- (1) The subdivider so requests;
- (2) The subdivider gives assurance in writing that the lots will be built upon within a reasonable time; and
- (3) The subdivider designates on a plat the desired location of such connections.

The charge for sewer connections shall be as indicated in subsection (a) of this section.



**ARTICLE IV. WATER AND SEWER SERVICE CHARGES**

**Sec. 31-153. Water rates generally.**

(a) Water rates shall be as follows:

(1) Monthly service charge....

	<u>May-September</u>	<u>October-April</u>
(2) Metered water consumption, per 1,000 cu. ft.	<del>\$70.08</del> <u>\$80.59</u>	<del>\$53.91</del> <u>\$62.00</u>

(b) This section shall not apply to special contracts for the consumption of water which have been authorized by the city council.

**Sec. 31-156. Sewer service charges generally.**

(a) Any person having a connection directly or indirectly, to the city sewer system shall pay therefor a monthly charge as follows:

(1) Monthly service charge ...

(2) An additional charge of ~~eighty one dollars and thirty four cents (\$81.34)~~ eighty-three dollars and eighty cents (\$83.80) per one thousand (1,000) cubic feet of metered water consumption.

(b) Any water customer not discharging the entire volume of water used into the city's sanitary sewer system shall be allowed a reduction in the charges imposed under this section, provided such person installs, at his expense, a separate, City-approved water connection to record water which will not reach the City sewer system. The cost and other terms of City Code section 31-102 shall apply. For customers with monthly water consumption in excess of thirty thousand (30,000) cubic feet, where the director of finance considers the installation of a separate meter to be impracticable, the director may establish a formula which will be calculated to require such person to pay the sewer charge only on that part of the water used by such person which ultimately reaches the city sewers.

**2. The foregoing amendments shall become effective July 1, 2022.**

# At A Glance

## City of Charlottesville

# Utility Rate Report

FY2023



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 1<sup>st</sup>, 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 1<sup>st</sup>, 2021, and proposed rates and charges.

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

(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 <sup>th</sup> Percentile)	140	\$60.65	\$8.49	\$69.75	\$9.76	\$1.27	14.96%
Small User (25 <sup>th</sup> Percentile)	250	\$60.65	\$15.16	\$69.75	\$17.44	\$2.28	15.04%
Median User (50 <sup>th</sup> Percentile)	400	\$60.65	\$24.26	\$69.75	\$27.90	\$3.64	15.00%
Large User (75 <sup>th</sup> Percentile)	610	\$60.65	\$37.00	\$69.75	\$42.55	\$5.55	14.99%
High Volume User (90 <sup>th</sup> 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 <sup>th</sup> Percentile)	140	\$81.34	\$11.39	\$83.80	\$11.73	\$0.34	2.98%
Small User (25 <sup>th</sup> Percentile)	250	\$81.34	\$20.34	\$83.80	\$20.95	\$0.61	3.00%
Median User (50 <sup>th</sup> Percentile)	400	\$81.34	\$32.54	\$83.80	\$33.52	\$0.98	3.01%
Large User (75 <sup>th</sup> Percentile)	610	\$81.34	\$49.62	\$83.80	\$51.12	\$1.50	3.02%
High Volume User (90 <sup>th</sup> Percentile)	880	\$81.34	\$71.58	\$83.80	\$73.74	\$2.16	3.02%

# Water & Wastewater

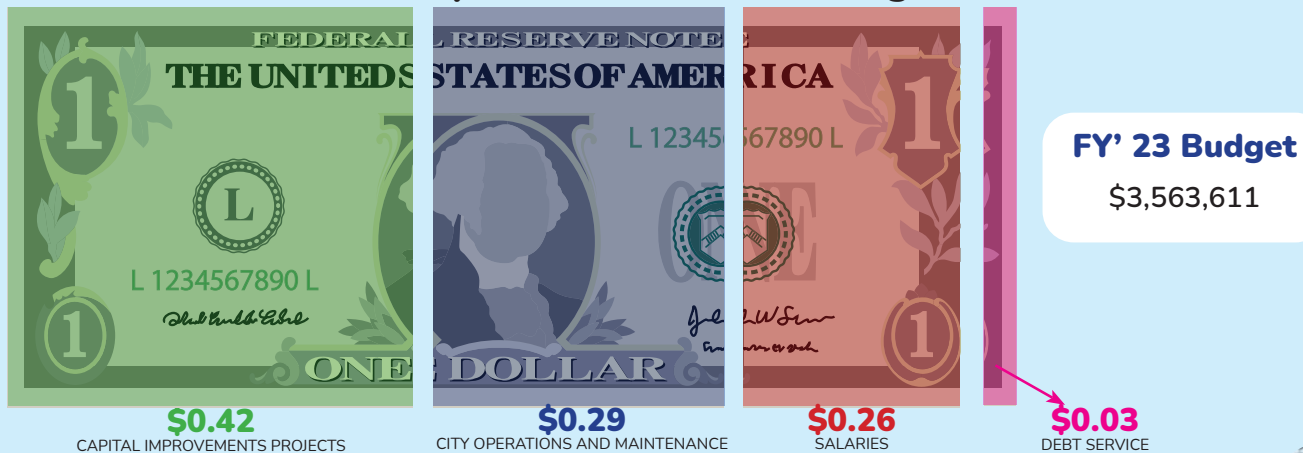
## Facility Fees

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.

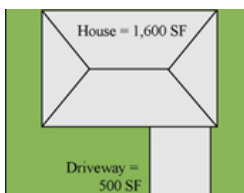
As part of the larger Water Resources Protection Program (WRPP), the City has adopted a stormwater utility fee to provide a dedicated and stable source of funding for stormwater management activities. Funds received are used to help the City comply with federal and state stormwater regulations, rehabilitate 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:

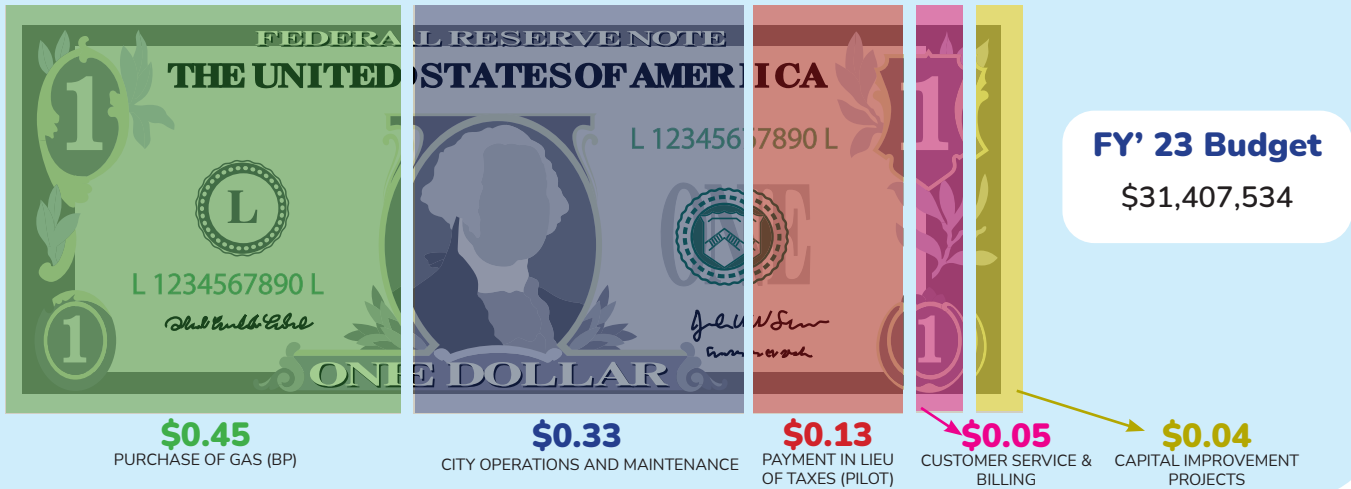
#### Example Fee Calculation



- 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	<b>(\$0.80)</b>	<b>-1.58%</b>
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 1<sup>st</sup> 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	<b>(\$0.80)</b>	<b>-1.28%</b>
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

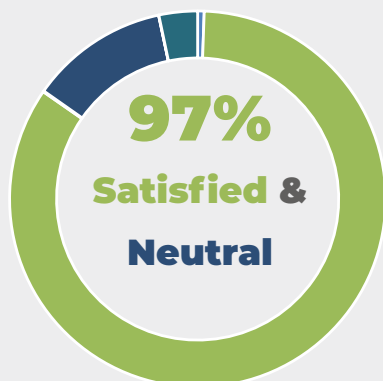
### Department-Wide

- **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.

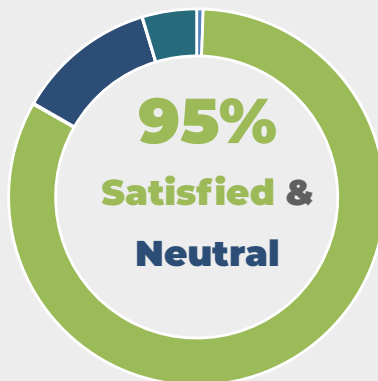
## Customer Satisfaction

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



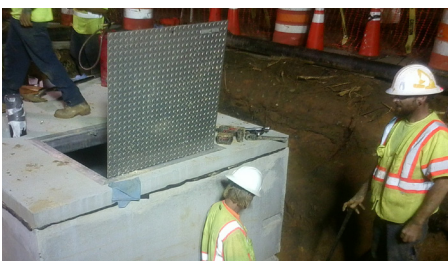
**8,572**  
WORK ORDERS  
COMPLETED

## 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.

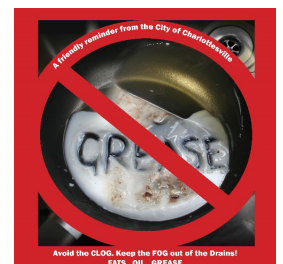


## Water Loss Prevention

- 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



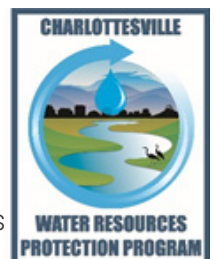
Also in this survey, the vast majority of our customers rated the value of their water and sewer service as fair and above (good and excellent).



## 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

