

Utilities Operations Overview



FY2025

The Department of Utilities is committed to providing the Charlottesville community with safe, reliable, and sustainable utility services by dedicated and knowledgeable staff.

Core Programs & Services

Department-Wide

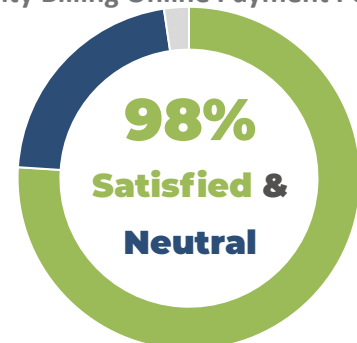
- **Utility Location Oversight**
Protecting infrastructure & critical facilities, including utility locating: **31,569** tickets in 2023.
- **24/7/365 Utilities Call Center**
The Utilities Call Center handles approximately **25,000** calls per year.
- **Customer Service**
Last year, we processed **6,493** Move-ins and **6,521** Move-outs.
- **Online Bill Pay Services**
In October 2021, we launched a new bill pay portal. To date, **4,357** customers have registered for Autopay, and over **12,500** customers receive paperless billing.
- **Emergency Operations**
Emergency response to water and gas leaks as well as sewer backups. **853** leaks checked in 2023.
- **GIS Mapping and Maintenance**
50,831 feet of utility lines entered and **1,327** CCTV videos cataloged last year.
- **Meter Reading and Maintenance**
We performed **449,777** meter readings including **2,141** implausible meter readings and completed **701** ERT replacements in 2023.
- **Development Site Plan Review**
Our engineers reviewed and followed the implementation of **170** site plans in 2023.

Customer Satisfaction

Experience Interacting with Utilities Department Staff (% Satisfied)*



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



*Department of Utilities Customer Satisfaction Survey - SurveyMonkey – February, 2023



Water Distribution & Wastewater Collection



Water & Wastewater by numbers



14,500
CUSTOMERS
SERVED



4.5 million
GALLONS OF WATER
PROVIDED DAILY



179 miles
OF WATER
MAINS



168 miles
OF WASTEWATER
MAINS



7,447
WORK ORDERS
COMPLETED

Water Quality

- The quality of our drinking water meets and exceeds all regulatory requirements and expectations for safety and reliability. A water quality report is prepared annually and is available online.
- 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 **935 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 **329** large water meters have been replaced since the program's inception.
- Annual system-wide leak detection survey:
 - In 2023, **5 leaks** totalling **184,320 GPD** were detected and repaired.
- Ultrasonic meter installation:
 - Is more accurate and measures low flow usage.



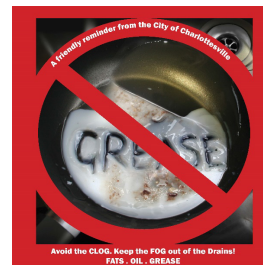
Water & Wastewater Asset Management

- Water main replacement program:
 - 7,706 linear feet** in 2023 and **128,660 linear feet** of water lines have been replaced since 2010 (**13.6%** of the entire water system).
 - Total construction cost: **\$30.6 million**
- Water service line replacement:
 - 3,501 linear feet** in 2023 and **55,719 linear feet** of water services have been replaced since 2010 (**17.4%** of the City-owned water services).
- Wastewater main rehabilitation program:
 - 11,666 linear feet** of wastewater lines were rehabilitated or replaced in 2023 and over **355,394 linear feet** of main have been rehabilitated or replaced since the program's inception in 2009 (**40.1%** of the wastewater system).
 - Total construction cost: **\$36.4 million**
- Manhole rehabilitation or replacement:
 - 1,325 manholes** have been rehabilitated or replaced since the program's inception (**22.4%** of the City's wastewater manholes).



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.



Customer Satisfaction

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

Rate the value that you pay for your water service



Rate the value that you pay for your sewer service



Reliability of your water service



Reliability of your sanitary sewer service



The vast majority of our customers rated the value of their water and sewer service as fair and above (good and excellent).



Stormwater

Stormwater by numbers



15,000
BILLABLE
CUSTOMERS



8,340
STORMWATER
STRUCTURES



130 miles
OF SUBSURFACE
CONVEYANCE PIPING



460
OUTFALLS

Stormwater Asset Management

- Utilities has had an active Stormwater Conveyance System Rehabilitation Program since 2010.
- Stormwater rehabilitation program:
 - 77,771 linear feet** rehabilitated or replaced (**11.3%** of the system since the program's inception).
 - Total construction cost: **\$11.8 million**
- Structure rehabilitation or replacement:
 - 456** structures rehabilitated or replaced since the program's inception (**5.4%** of the system's storm structures).





Gas System

Natural Gas by numbers



21,050
CUSTOMERS
SERVED



340 miles
GAS MAIN
LINES



304 miles
GAS SERVICE
LINES



36
REGULATOR
STATIONS



10,034
WORK ORDERS
COMPLETED

Greenhouse Gas Reduction Strategy

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

1) Energy-efficiency programs:

- Energy-Saving Trees – The program has **given away 700 trees** for planting. Beginning in the fall of 2024, Utilities will increase the program frequency to twice yearly (Spring and Fall).
- Popular energy-efficiency rebates include a **\$100 Programmable Thermostat** and **\$300 Attic Insulation** rebates. Beginning July 1, 2024, the \$200 Tankless Water Heater rebate will be paused as the utility evaluates its existing rebate offerings.
- Charlottesville Gas Energy Efficiency Program (CGEEP) offers **energy efficiency upgrades at no cost** to income-qualified households. Since its launch, **179 gas customers** have benefitted from the program. The utility is developing a reduced-cost home weatherization program to complement CGEEP. The revenue from the newly established gas connection fee will fund this new program.

2) Carbon offset program:

- This program allows Utilities to invest in various carbon sequestration projects all over the world. Charlottesville Gas currently **offsets 25%** of its emissions through this program. Future carbon offset projects will be selected in partnership with the City's Office of Sustainability.

3) Updated Infrastructure:

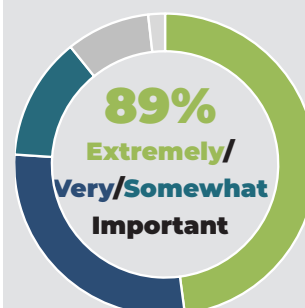
- Charlottesville Utilities was awarded a **\$7.1 million grant** from the Natural Gas Distribution Infrastructure Safety and Modernization program to replace Utilities' last remaining section of legacy cast iron pipes helping to strengthen the system's resiliency and reduce methane emissions. Construction is scheduled to start in Spring 2025.

Decarbonization Study

- The Decarbonization Study will help Charlottesville Utilities determine how the gas utility can be part of the solution in achieving Community Climate Action goals of **45% reduction** in community-wide GHGs **by 2030** and **carbon neutrality by 2050**. The Study will evaluate several pathways and their impact on emissions, reliability of service, and cost to customers. **Community Engagement sessions** will occur in the **Summer of 2024**.

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 natural gas service

