

Utilities Operations Overview



FY2024

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: **20,791** tickets in 2022.
- **24/7/365 Utilities Call Center**
The Utilities Call Center handles approximately **25,000** calls per year.
- **Customer Service**
Last year, we processed **7,116** Move-ins and **7,013** Move-outs.
- **Online Bill Pay Services**
In October 2021, we launched a new bill pay portal. To date, **4,050** customers have registered for Autopay, and **9,647** customers receive paperless billing.
- **Emergency Operations**
Emergency response to water and gas leaks as well as sewer backups. Over **600** leaks checked per year.
- **GIS Mapping and Maintenance**
36,739 feet of utility lines entered and **580** CCTV videos cataloged last year.
- **Meter Reading and Maintenance**
We performed **483,751** meter readings including **2,060** implausible meter readings and **799** ERT replacements in 2022.
- **Development Site Plan Review**
Our engineers reviewed and followed the implementation of **190** site plans in 2022.

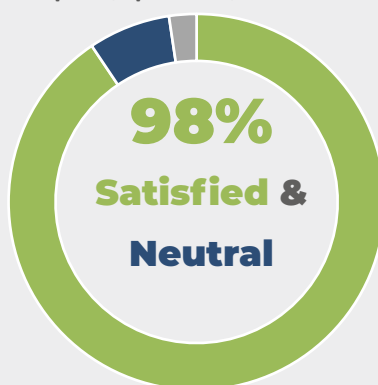
Customer Satisfaction

Experience Interacting with Utilities Department Staff (% Satisfied)*

Ease of contacting
department staff



Overall responsiveness to your
request, question, or concern



How satisfied are you 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



14,800
CUSTOMERS
SERVED



4.6 million
GALLONS OF WATER
PROVIDED DAILY



179 miles
OF WATER
MAINS



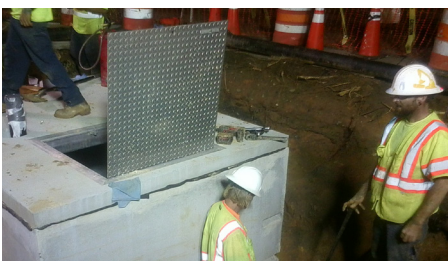
169 miles
OF WASTEWATER
MAINS



8,302
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.

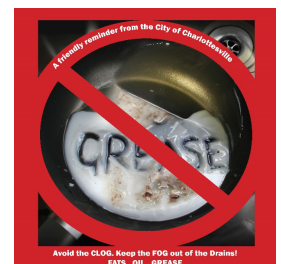


Water Loss Prevention

- 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 2022, **14 leaks** totalling **502,560 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:
 - **8,900 linear feet** in 2022 and **120,954 linear feet** of water lines have been replaced since 2010 (**12.8%** of the entire water system).
 - Total construction cost: **\$30.6 million**
- Water service line replacement:
 - **4,705 linear feet** in 2022 and **52,218 linear feet** of water services have been replaced since 2010 (**16.5%** of the City-owned water services).
- Wastewater main rehabilitation program:
 - **22,986 linear feet** of wastewater lines were rehabilitated or replaced in 2022 and over **343,728 linear feet** of main have been rehabilitated or replaced since the program's inception in 2009 (**38.5%** of the wastewater system).
 - Total construction cost: **\$33.6 million**
- Manhole rehabilitation or replacement:
 - **1,190 manholes** have been rehabilitated or replaced since the program's inception (**20.7%** 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 water service to your home



Reliability of sewer 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 Asset Management

- Utilities has had an active Stormwater Conveyance System Rehabilitation Program since 2010.
- Stormwater rehabilitation program:
 - **6,250 linear feet** of stormwater lines rehabilitated or replaced in 2022 and **77,695 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:
 - **454 structures** rehabilitated or replaced since the program's inception (**5.4%** of the system's storm structures).





Gas System

Natural Gas by numbers



21,300
CUSTOMERS
SERVED



343 miles
GAS MAIN
LINES



303 miles
GAS SERVICE
LINES



32
REGULATOR
STATIONS



10,945
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 – this partnership with the Arbor Day Foundation provided **200 free trees** to Charlottesville Utilities customers to strategically plant on their property, delivering energy-and cost-saving benefits.
- Popular energy-efficiency rebates include **\$100 Programmable Thermostat** and **\$300 Attic Insulation** rebates.
- Charlottesville Gas Energy Efficiency Program – offers energy efficiency upgrades at **no cost to income-qualified households**, with **136 gas customers** benefitting from the program since its launch.

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.

3) Updated Infrastructure:

- Charlottesville Utilities was awarded a **\$7.1 million grant** from the Natural Gas Distribution Infrastructure Safety and Modernization program, part of the broader Bipartisan Infrastructure Law, to replace Utilities' last remaining section of legacy cast iron pipes helping to strengthen the system's resiliency and reduce methane emissions.



Decarbonization Study

- The Decarbonization Study will help Charlottesville Utilities to responsibly and accurately determine how the gas utility can be part of the solution in achieving Community Climate Action goals of a **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.

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

