



Meter Infrastructure Replacement Program

Glen Diaz, Utility Services Director

September 12, 2024

WSSC WATER AT A GLANCE



- ★ **106 years** of no drinking water quality violations, ever.
- ★ **Peak Performance Awards** for wastewater treatment and resource recovery excellence.



8th

Largest combined water and wastewater utility in the United States by population served



1.9M
Residents served



162 MGD
Water provided each day



1000 Sq. Miles
Size of WSSC Water's Service Area



1,700+
Members of Team H₂O deliver on our mission



\$114.9B
WSSC Water supports the economic output of Prince George's and Montgomery counties



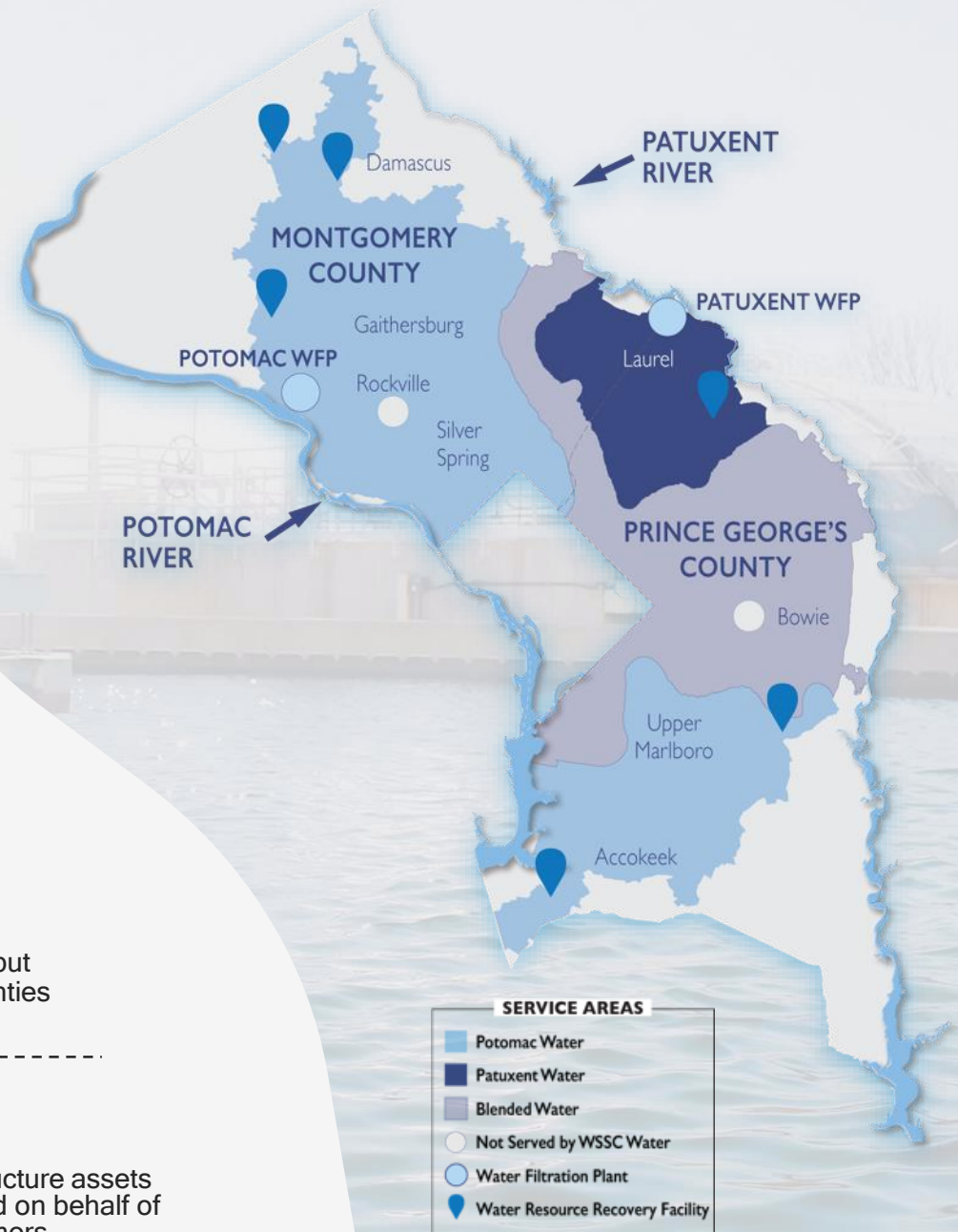
\$1.8B
FY2025 Operating & Capital Budget



\$5.9B
6-Year Capital Improvements Program



\$9B
In infrastructure assets maintained on behalf of our customers





WSSC WATER
DELIVERING THE ESSENTIAL

Current Meter Stats



503,840

Active Meters

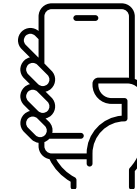
Prince George's: 249,616
Montgomery: 254,224



343,065

Inside Meters

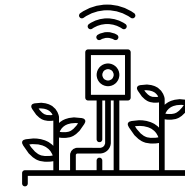
Prince George's: 164,450
Montgomery: 178,615



470,247

**Meters Being
Manually Read**

Prince George's: 226,808
Montgomery: 243,439



33,593

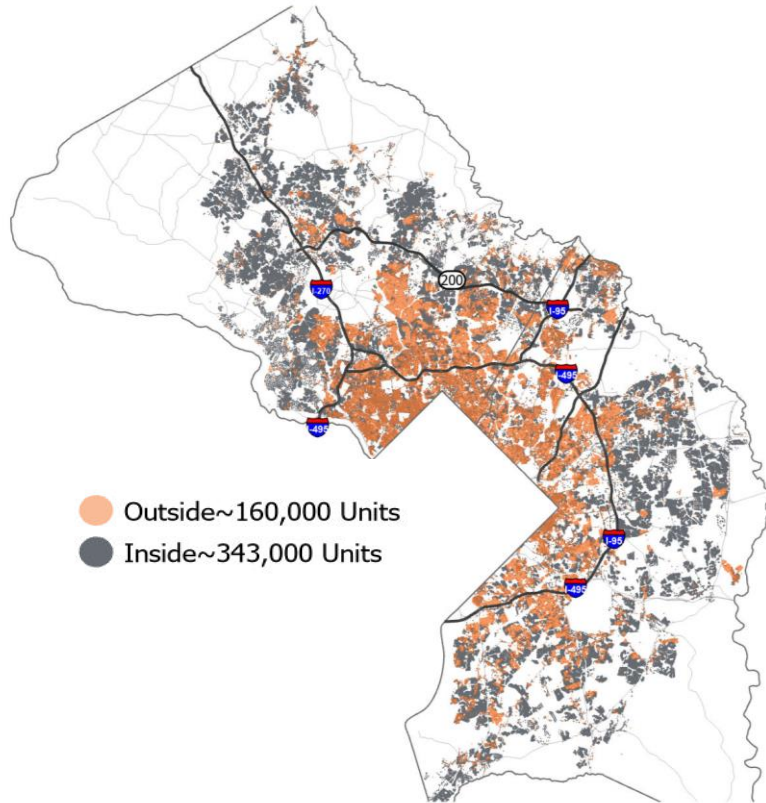
**Automatic
Meter Reading
(AMR) Meters**

Prince George's: 22,808
Montgomery: 10,785

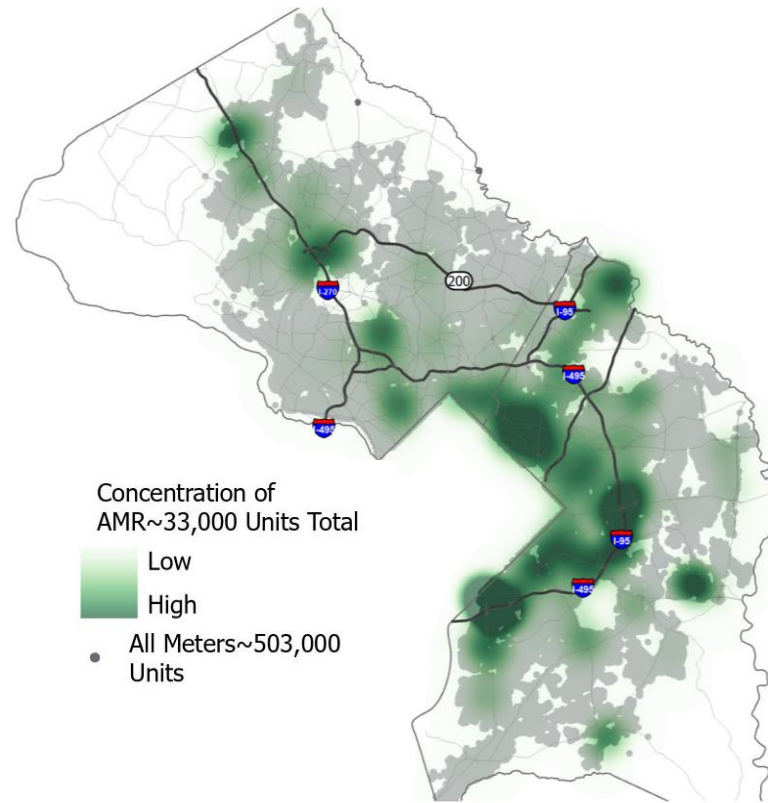
17 Years
Average Age of Meters

15-20 Years
Useful Life of Meters

Population of WSSC Water Meters

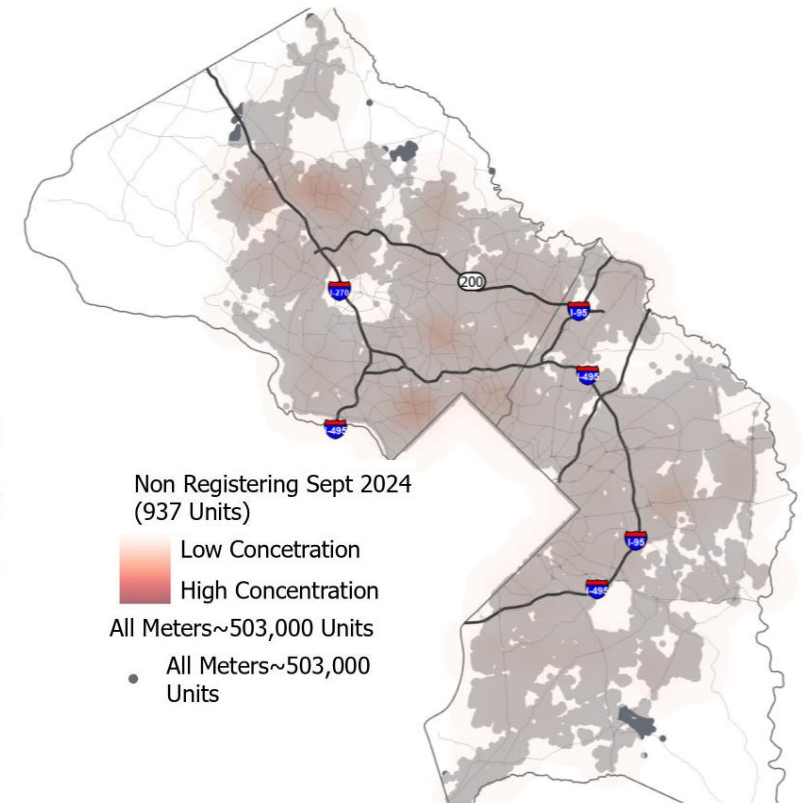


Total Population of Water Meters



Concentration of Meters Currently Being Read Using AMR (Commercial Businesses and New Development)

Note: Meters fitted with AMR can be read from a moving vehicle nearby



Concentration of Non-registering Meters

Background & Challenges

- Approximately **96%** of meters are **read manually**
 - Meter Readers walk 7-10 miles each day
 - Current process involves quarterly billing - leaving customers unaware of on-property leaks resulting in high bills
 - High occurrence of estimated bills
- **56%** of meter population is **older than 15 years**
 - Meter expected useful life 15-20 years
- **Outdated and obsolete** touch read system for reading over 470,000 meters
- Routes with mixed meter reading technologies creates **data collection complexity**
- Water Audit found nearly **\$35M in revenue loss** annually due to inaccurate meters

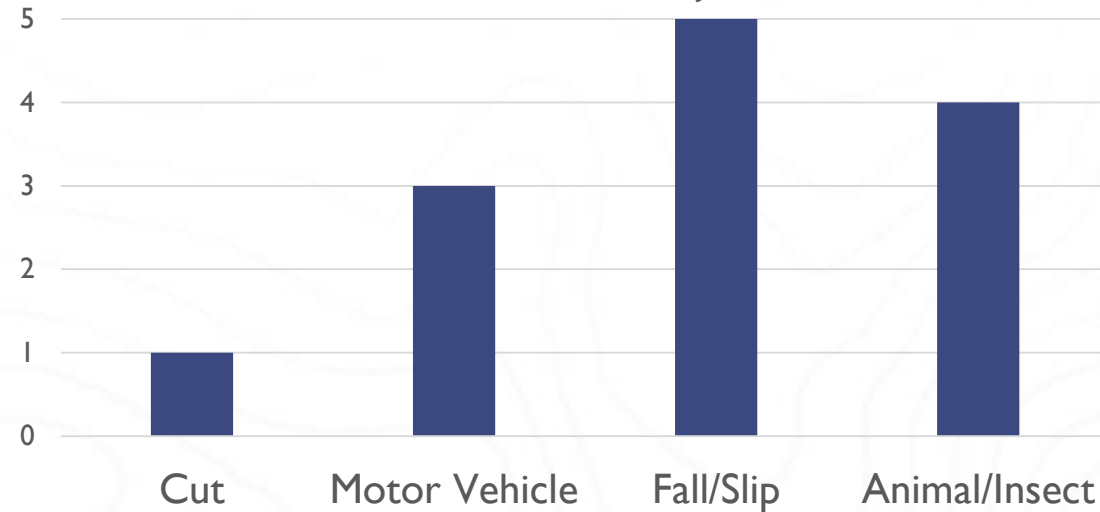
An Enhanced Meter Infrastructure will resolve these and other operational challenges causing pain points for customers and WSSC Water



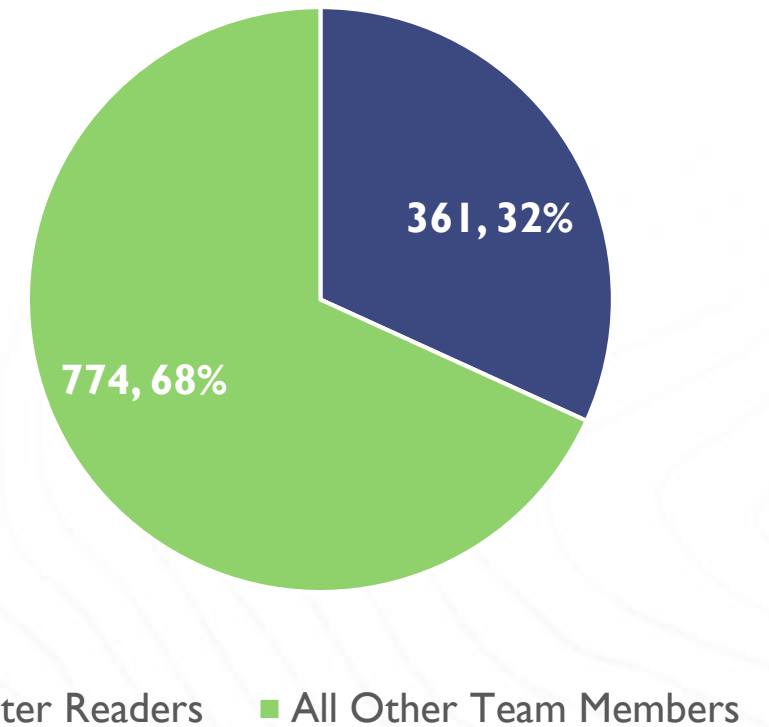
Workforce Challenges

- High Meter Reader Turnover
- Obsolete Touch Read System
 - Used to read over 470k meters
- Safety Issues Accessing Private Properties
 - Over 340,000 meters located inside
- Meter Readers account for **19%** of WSSC Water workplace injuries

Meter Reader Injuries



Work Days Lost Due to Injury



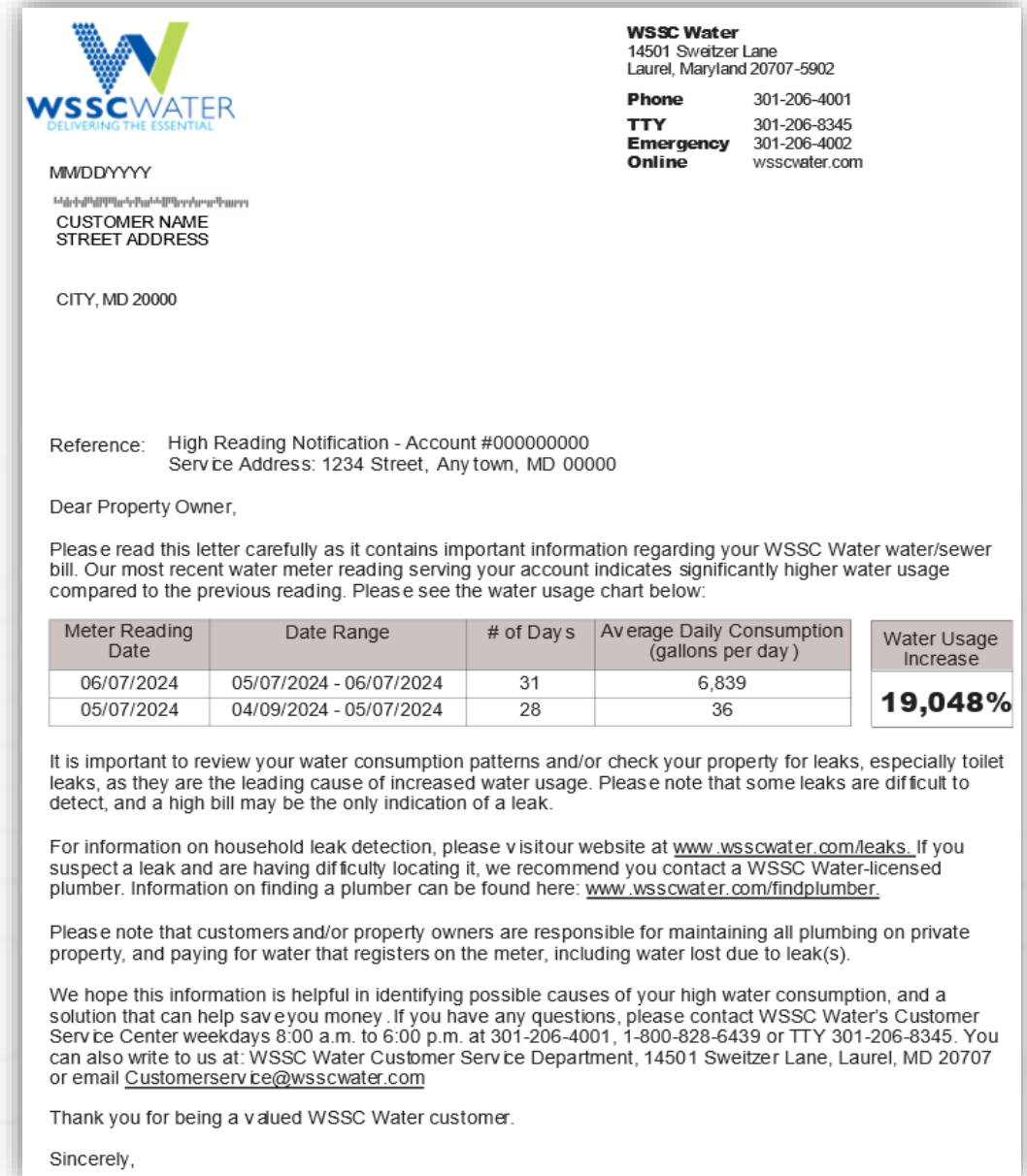
An Enhanced Meter Infrastructure will resolve these and other operational challenges causing pain points for customers and WSSC Water

Benefits of an Enhanced Meter Infrastructure



Customer

- Supports affordability efforts
 - Enables monthly billing - smaller, more frequent bills to allow ability to maintain monthly payment plans
- Near real-time on-property leak detection
- Enhances ability to conserve water and save money
- More accurate meter reads and bills
- Near real-time water usage data
- Proactive and enhanced customer service with meter alarms
- On-demand reads to troubleshoot customer concerns
- Safer environment for valued customers



WSSC Water
14501 Sweitzer Lane
Laurel, Maryland 20707-5902

Phone 301-206-4001
TTY 301-206-8345
Emergency 301-206-4002
Online wsscwater.com

MMDDYYYY
CUSTOMER NAME
STREET ADDRESS
CITY, MD 20000

Reference: High Reading Notification - Account #000000000
Service Address: 1234 Street, Anytown, MD 00000

Dear Property Owner,

Please read this letter carefully as it contains important information regarding your WSSC Water water/sewer bill. Our most recent water meter reading serving your account indicates significantly higher water usage compared to the previous reading. Please see the water usage chart below:

Meter Reading Date	Date Range	# of Days	Average Daily Consumption (gallons per day)	Water Usage Increase
06/07/2024	05/07/2024 - 06/07/2024	31	6,839	19,048%
05/07/2024	04/09/2024 - 05/07/2024	28	36	

It is important to review your water consumption patterns and/or check your property for leaks, especially toilet leaks, as they are the leading cause of increased water usage. Please note that some leaks are difficult to detect, and a high bill may be the only indication of a leak.

For information on household leak detection, please visit our website at www.wsscwater.com/leaks. If you suspect a leak and are having difficulty locating it, we recommend you contact a WSSC Water-licensed plumber. Information on finding a plumber can be found here: www.wsscwater.com/findplumber.

Please note that customers and/or property owners are responsible for maintaining all plumbing on private property, and paying for water that registers on the meter, including water lost due to leak(s).

We hope this information is helpful in identifying possible causes of your high water consumption, and a solution that can help save you money. If you have any questions, please contact WSSC Water's Customer Service Center weekdays 8:00 a.m. to 6:00 p.m. at 301-206-4001, 1-800-828-6439 or TTY 301-206-8345. You can also write to us at: WSSC Water Customer Service Department, 14501 Sweitzer Lane, Laurel, MD 20707 or email Customerservice@wsscwater.com

Thank you for being a valued WSSC Water customer.

Sincerely,

Benefits of an Enhanced Meter Infrastructure



Environmental

- Decreases overall water demand through efficient use and leak detection
- AMI decreases carbon footprint and fuel consumption with less trucks on the road
- The World Health Organization reports **no adverse effects** from exposure to radio frequency from Smart Meters. Risk from exposure has been determined to be significantly lower than long-term cell phone use.



Utility

- Creates safer work environment for valued employees
- Enhances system maintenance; provides opportunity to move meters out of homes and into public space
- Cost savings resulting from enhanced maintenance practices and reduced water loss through leak detection
- AMI system alarms improve operation of distribution system through near-real-time data
- Ability to leverage other water infrastructure replacement efforts - water main replacement
- Reduction in high-bill and disputed bill complaints

Developing a **Customer-Focused** Strategy

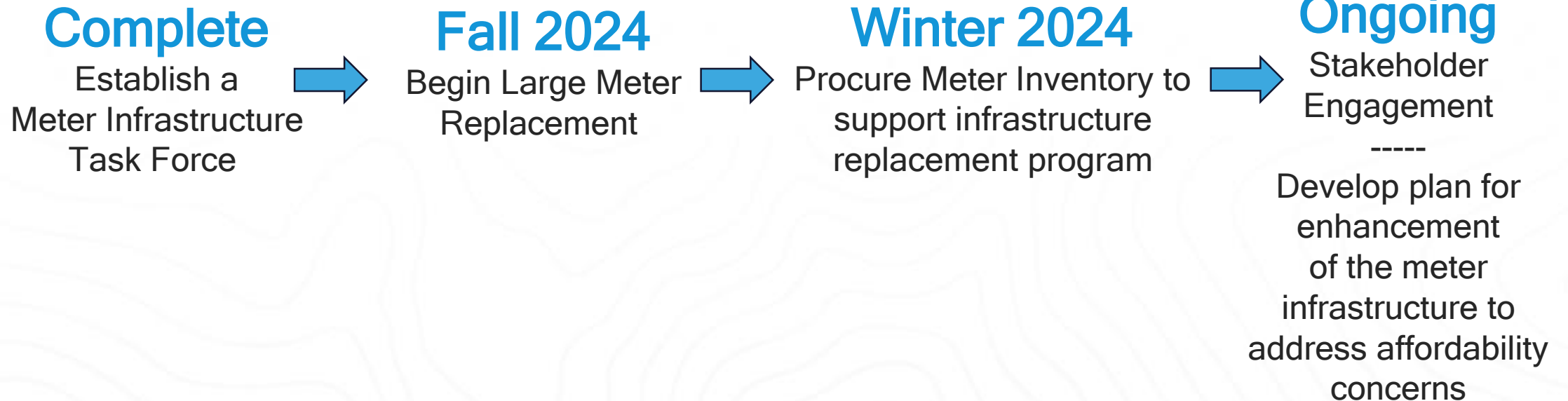


- Prioritize and replace large meters (ongoing)
- Prioritize small residential meters for replacement
 - Address customers in disadvantaged areas with affordability concerns
 - Customer Assistance Program (CAP)
 - Delinquent accounts
 - Prioritize replacements by meter reading cycle
- **Request For Information (RFI) Advertised**
 - Gathered information on metering infrastructure considerations to assist with the development of meter infrastructure strategy
 - Meter Devices, Software, System Support and Maintenance
 - Environmental Impacts
 - Funding Sources and Financial Benefits
 - Social Impacts

A Path Forward

- **Continue** large meter replacement
- **Develop and implement** a strategy to enhance the residential meter infrastructure to increase accuracy and support monthly billing
 - Leverage insights from RFI
 - Coordinate meter replacements with water main replacement and new water connection efforts
- **Continued support from the counties** to implement an Enhanced Meter Infrastructure

Short-Term/Medium-Term Approach





Questions?