

# “The Path Forward”

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## DeKalb County Water & Sewer Capital Improvement Program (CIP)

October 15, 2024

Picture: Scott Candler Plant - main building entrance





# Executive Summary

1. DeKalb County has successfully initiated plan to address the deteriorating water and sewer infrastructure
  - a. Completed \$1.25B in investments since 2017
  - b. Used multiple funding sources for the water and sewer infrastructure investment (grants, low interest loans, SPLOST, federal and state support, fees, bonds)
  - c. February 2021 - the BOC approved CIP 2021 which included improvements to Scott Candler Water Treatment Plant and other water and sewer infrastructure as well as considering the first ever master plans for water and sewer
2. In 2022, the Governing Authority adopted a 6% rate increase. This is the only rate increase in the past decade (since 2014).
3. Due to optimization efforts, which decreased costs and increased revenues, additional rate increases were delayed.
4. Post COVID-19, inflationary pressures dramatically increased operational and capital costs.
  - a. Funding is available for ongoing capital improvement projects at Scott Candler Water Treatment Plant but only through 2025.
  - b. Therefore, additional funding is needed to complete these critical infrastructure repairs and improvements.



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Other Infrastructure Priorities**

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**Water Treatment Plant Project  
Funding and Other Revenue Needs**

DEKALB COUNTY  
**NEW DAY PROJECT  
WATER METER  
REPLACEMENTS IN  
PROGRESS**

Questions?

Call (404) 378-4475 or visit [www.dekalbcountyga.gov/newdayproject](http://www.dekalbcountyga.gov/newdayproject)

# DEKALB'S WATER AND SEWER INFRASTRUCTURE SUCCESSES

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**\$1.25B CIP Investment Since 2017**

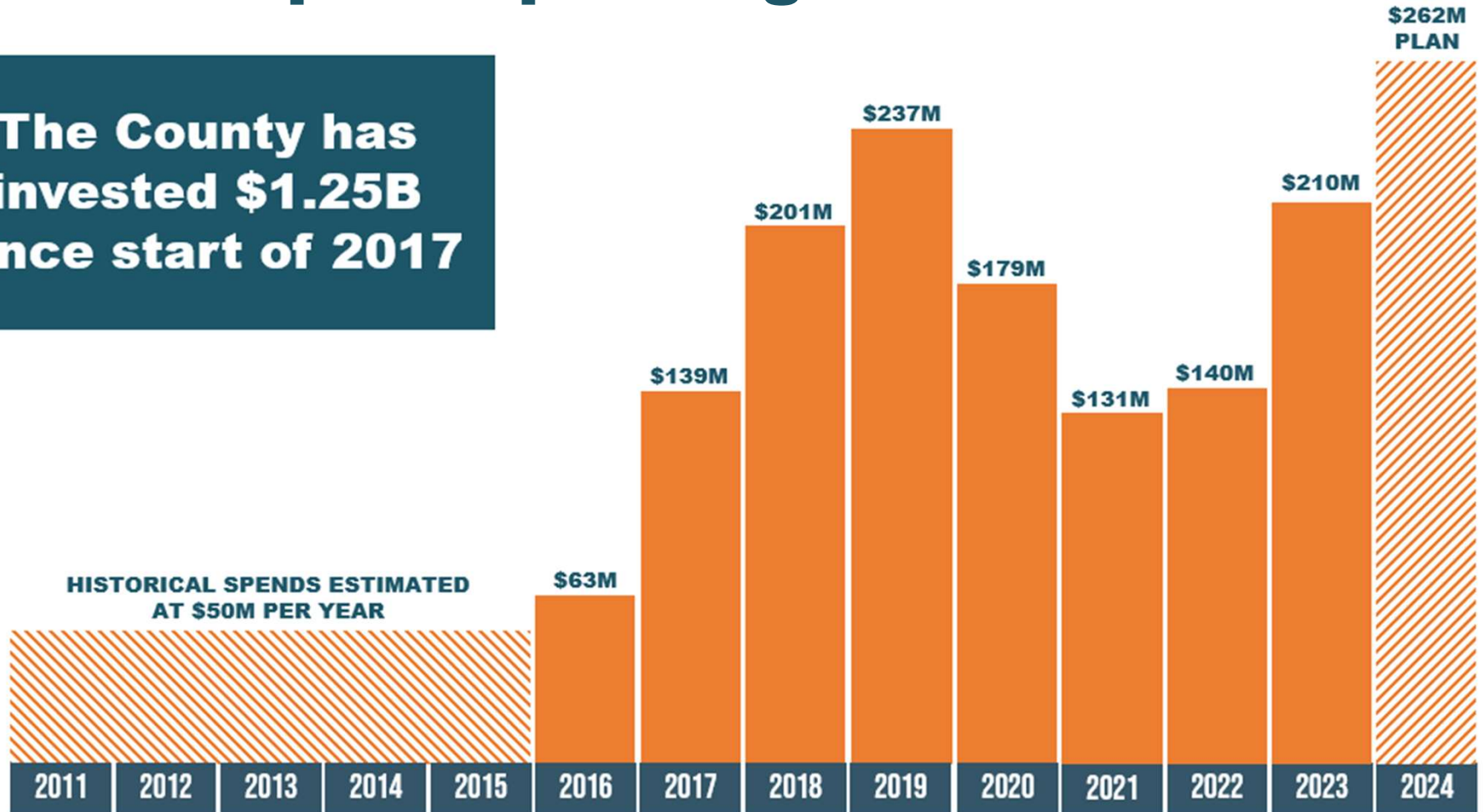
- \$520M Water Infrastructure
- \$730M Wastewater Infrastructure

*Contractor working on New Day Project*



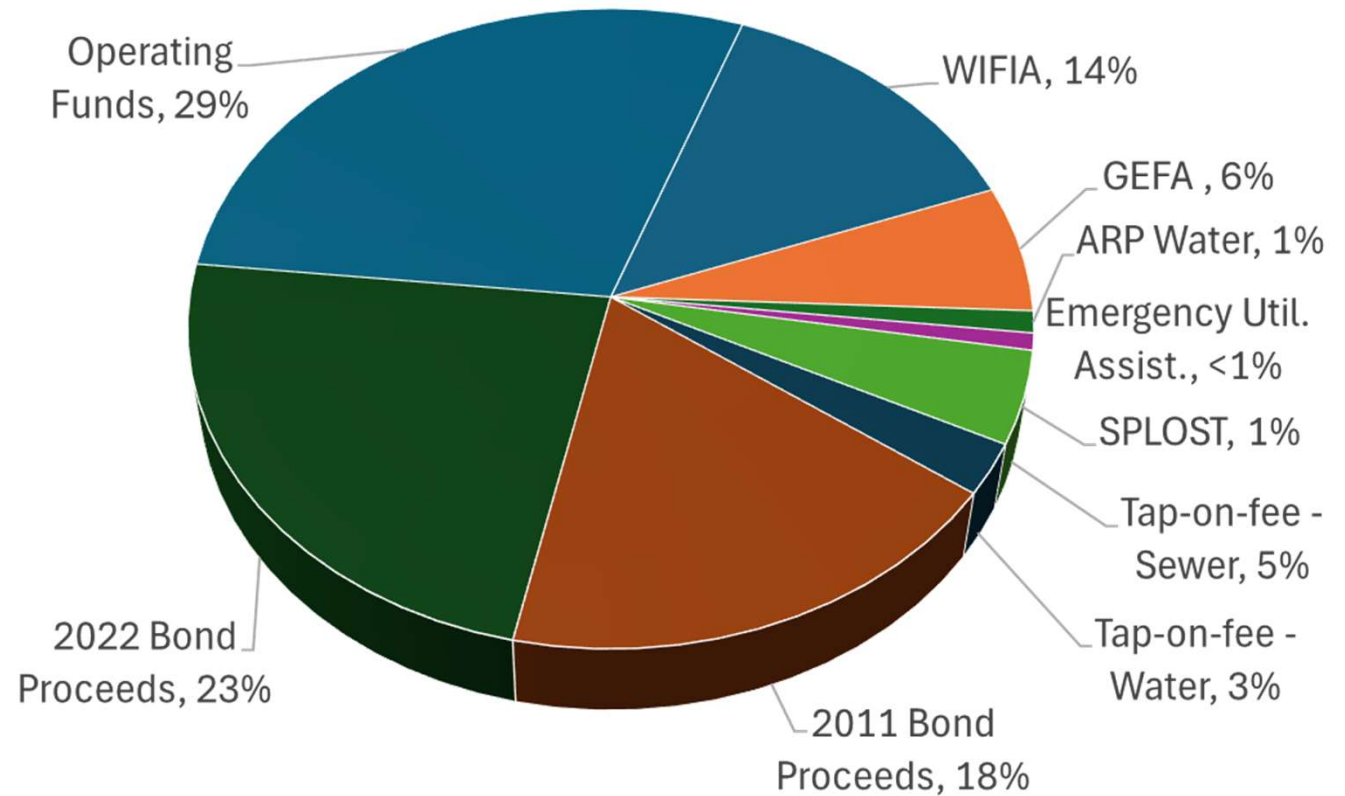
# Historic Capital Spending

The County has invested \$1.25B since start of 2017



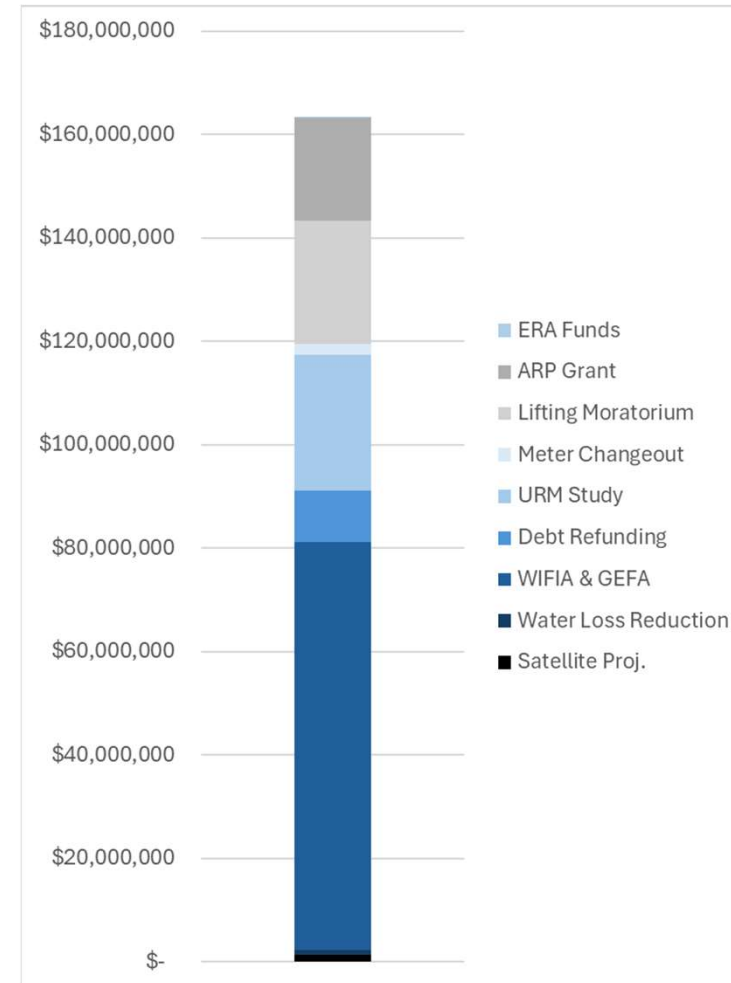
# 2017-2024 CIP Spend by Funding Source

DeKalb's Water and Sewer CIP is made possible through a diverse mix of funding tools.



# Savings 2021-2024

- **Decreased Expenses (\$90,000,000 to \$110,000,000):**
  - ✓ Reducing Water Loss (\$1,000,000 saved)
  - ✓ Maximizing Low Interest Debt WIFIA & GEFA (\$79,000,000 in costs avoided)
  - ✓ Debt Refunding (\$9,800,000 saved)
  - ✓ Eliminating Negative Arbitrage (\$20,000,000 avoided)
- **Increased Revenue (\$74,000,000):**
  - ✓ Commercial Accounts Audit (\$26,413,763 collected)
  - ✓ Meter Changeout Program (\$2,000,000 collected)
  - ✓ Lifting the Service Disconnection Moratorium (\$23,800,000 collected)
  - ✓ American Rescue Plan Grant (\$20,000,000)
  - ✓ Emergency Utility Assistance (\$1,655,512 awarded)



By increasing revenues and reducing cost, DeKalb has optimized over \$164 million in revenue savings from 2021 through 2024. Hence delaying the need for a rate increase.



# Impact of Inflation Post-Pandemic on Operations and CIP Despite Revenue Optimization

- DWM salaries have increased 13% since 2019 (from \$58.1M to \$65.4M)
  - DWM personnel cost are 27% of 2024 Budget
- System Operations:
  - Chemicals for the treatment of water and wastewater – increased 150% since 2014 (from \$3.5M to \$8.7M)
  - Components/Parts/Fittings – 51% increase since 2019 (from \$63 to \$95 per linear foot)

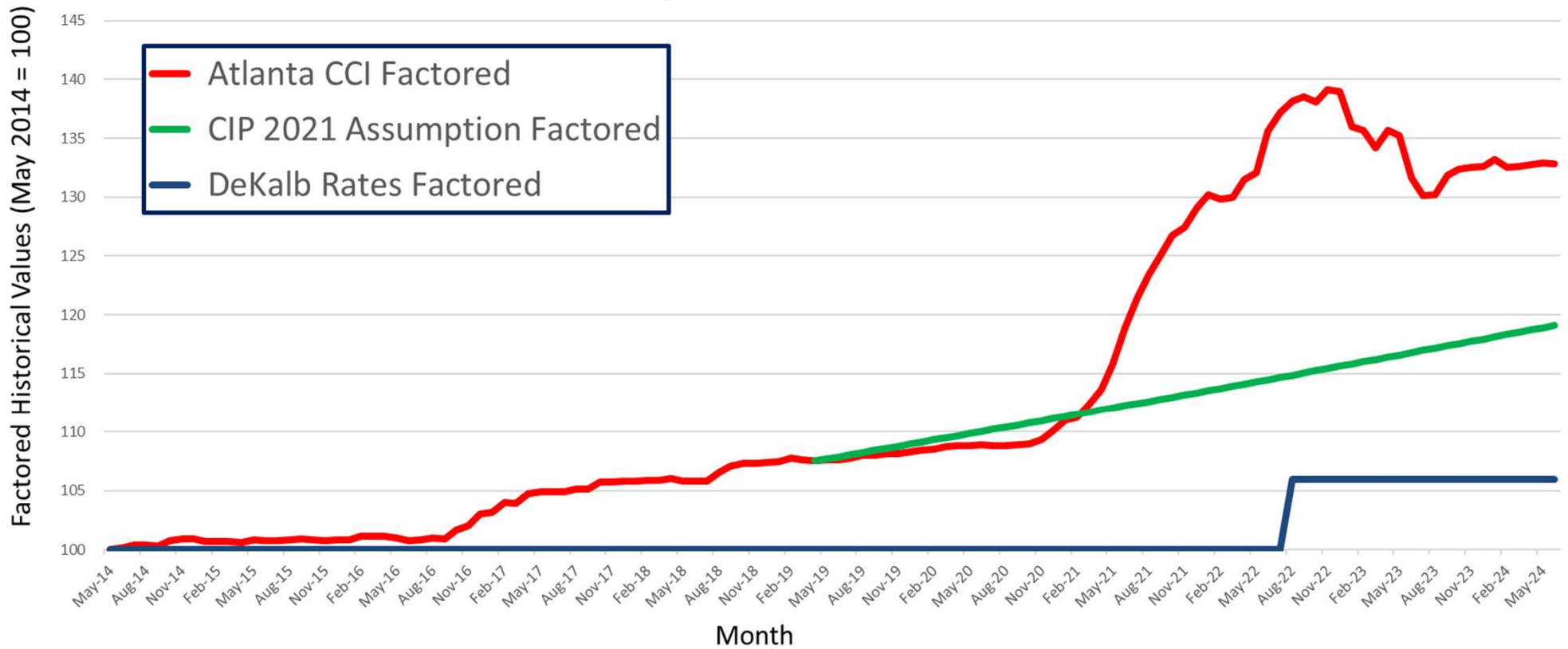




# Impact of Inflation Post Pandemic

- Inflationary Pressure – Atlanta Engineering News Report (ENR) Construction Cost Index (CCI) – pre-pandemic to current peaked with an 40% increase but ductile iron prices have increase 80%
- In January 2024 capital improvements at Scott Candler Water Treatment Plant were estimated at \$250M but are now \$294M
  - Added one project
  - Refined cost based on recent construction estimates
- Considering the impact of the recent storms on supplies and contracting capabilities.

## DeKalb County Water/Sewer Rates versus Atlanta ENR CCI May 2014 to Date

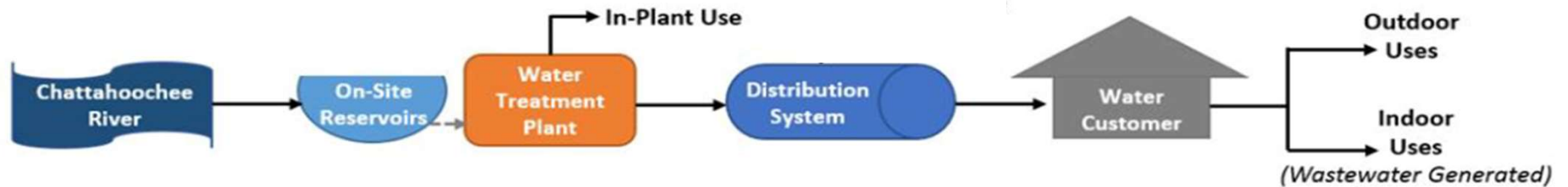


# Water System Overview

## Components & Gaps



# DeKalb County's Single Water Source/Supply



The Chattahoochee River is the County's sole water source.

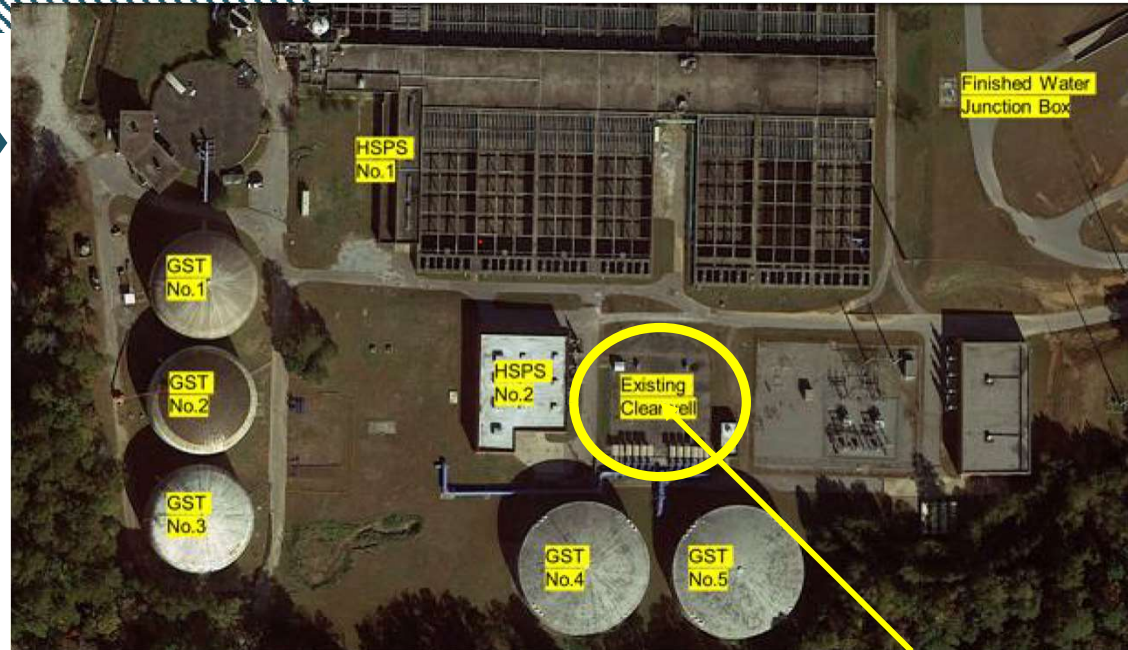
**DeKalb County is the only county in the metro Atlanta area of its size (population served) with one water supply source and one Water Treatment Plant (WTP)''**

(Source: DeKalb Water Master Plan 2020)



Remnant aging facilities

Electrical Building – structural issues – project in procurement



- ▶ Originally built in 1942.
- ▶ New plant was constructed in 2007.
- ▶ Remnants of the old plant remain

05/31/2018 14:31

October 15, 2024

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Transfer Pump #13 Starter Cabinet

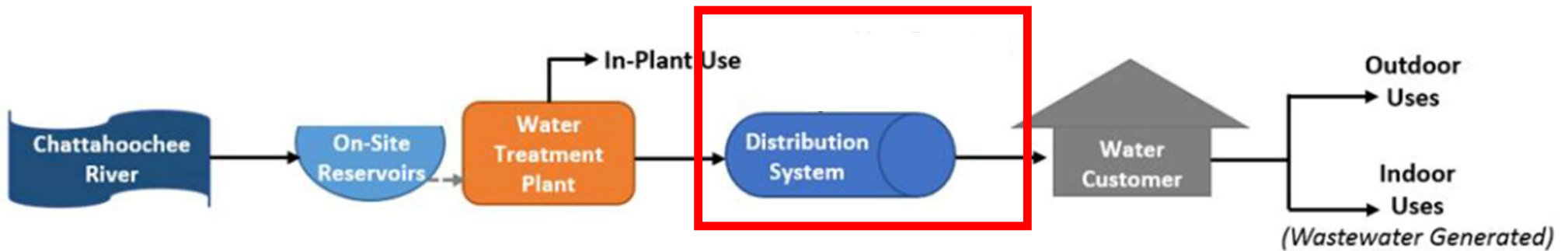
Transfer Pumps



1989 transfer pumps

October 15, 2024

# Water Treatment Overview



## Consists of:

- ▶ ~3,000 miles of water pipe ranging from 1.5- to 54-inch diameter
- ▶ Major pump station at plant
- ▶ 21 tanks - 16 in system; 5 at plant.



# Aging Transmission Mains

Both the Buford Highway pipeline that failed in 2019 and the McLendon that failed in 2024 carry about 35% of the flow in the system.

Buford Highway – 2019  
Ductile Iron



McLendon Road  
42" diameter  
Feb/April 2024  
Prestressed Concrete



Celia Way  
January 2023  
Prestressed Concrete

October 15, 2024





A photograph of a worker in a high-visibility vest and hard hat standing in a wooded area, pointing towards a large pipe. The scene is dimly lit, suggesting an underground or shaded environment. The worker is wearing a brown long-sleeved shirt, blue jeans, and a yellow hard hat. The vest is bright yellow with reflective stripes. The background is filled with bare tree branches and some green leaves. A large, dark, cylindrical pipe is visible in the foreground, partially obscured by the worker's arm.

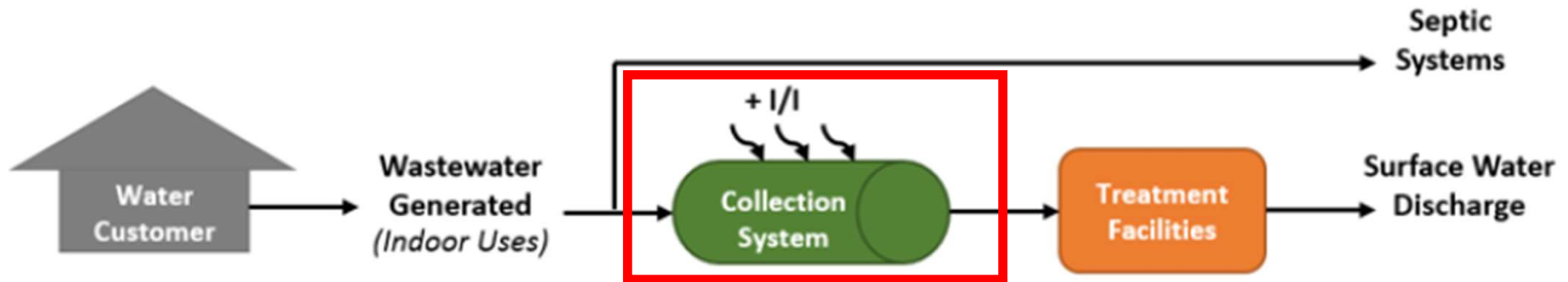
*Snapfinger Creek Sewer Spill  
The Champion – August 26, 2017*

# **Wastewater System Overview**

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## **Components & Gaps**

# Wastewater System Overview



## Collection System:

- ▶ Has been the focus of Consent Decree efforts since 2011
- ▶ Over 1,000,000 LF of system rehabilitated or replaced since 2017 (7.3% of system) – over \$725M spent on wastewater since 2017
- ▶ Still ... continued major investments are still required by Consent Decree and growth.



# Major Trunks

Remaining projects required by the modified Consent Decree are to increase the capacity of the major trunk sewers and addressing the Priority Fix List.

This is a major undertaking with projects larger, more complex and more expensive than previously thought in CIP 2021:

- Pipe diameters up to 72”
- 28 miles of trunk sewer
- Over 700 properties with direct impacts
- Three interstate freeway crossings (I20, I285 & I85).

October 15, 2024





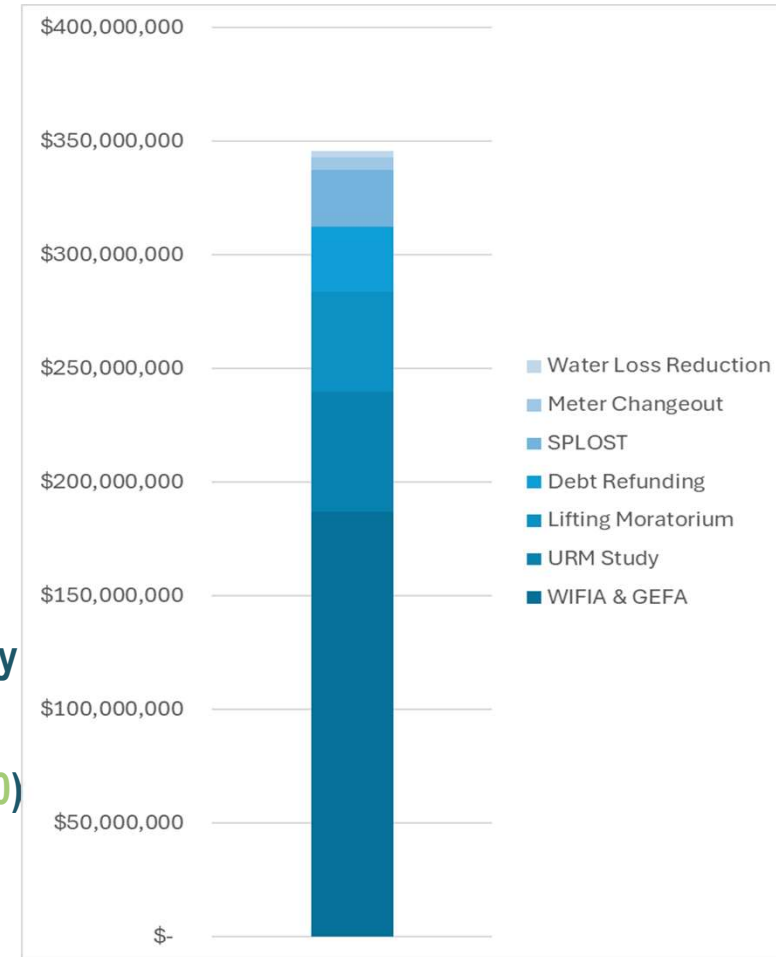
*Stone Mountain/Lithonia Water Project  
Completed 2023 – WIFIA 2 Loan*

# **MOVING FORWARD**

Future Optimization Efforts &  
Funding Sources

# Future Optimization Efforts

- Continue Reduction in Expenses:
  - ✓ Reducing Water Loss (\$2,750,000)
  - ✓ Maximizing Low Interest Debt WIFIA & GEFA (\$187,000,000)
  - ✓ Savings from Debt Refunding (\$28,500,000)
- Continue to Increase Revenues:
  - ✓ Improved Collections (\$44,000,000)
  - ✓ Applied for \$52,000,000 in multiple grant-type funding (assisted by FEMA, GA DNR, USACE and Congressman Johnson)
  - ✓ Special Purpose Location Option Sales Tax; SPLOST (\$25,000,000)
  - ✓ Commercial Accounts Added Revenue (\$52,800,000)
  - ✓ Meter Changeout Program (\$5,500,000)



Because of improvement efforts, Watershed will save a total of \$346 million - reducing the need for additional revenues in the face of inflationary pressures



# Moving Forward

- Complete the Water First designation in 2024
- Apply for additional GEFA funding in 2025
- Apply for a third WIFIA loan in 2026
- Continue water loss reduction efforts by implementing new leak detection technology
- Continue grant funding applications
- Continue to address the remaining non-responsive residential accounts
- Address commercial past-due accounts
- Continue to monitor and report dispute levels

# Funding Exists for the 2025 Water Treatment Plant Projects

Scott Candler Water Treatment Plant Projects	2025 Spend
Electrical Building No. 2 Repairs	\$ 2,668,160
SCADA - Controls	\$ 3,200,000
Transfer Pump Station Improvements	\$ 15,000,000
Clearwell and High Service Pump Station Upgrades - Phase A	\$ 20,532,000
Power Resilience	\$ 5,230,000
Emergency Drought Response Implementation Plan	\$ 450,000
Filter Assessment and Evaluation for Upcoming PFAS Regulations	\$ 1,000,000
Caustic Soda to Liquid Lime Conversion	\$ 500,000
Miscellaneous SCWTP Improvement Projects	\$ 2,000,000
<b>TOTAL</b>	<b>\$ 50,580,160.00</b>

Funding Sources	Amount
Water Tap Fees	\$ 2,000,000.00
SPLOST	\$ 10,000,000.00
WIFIA	\$ 25,782,000.00
Pay Go	\$ 2,800,000.00
Grant Application	\$ 10,000,000.00
<b>TOTAL</b>	<b>\$ 50,582,000.00</b>





## **To Fill the Remaining Funding Gap Driven by Inflationary Pressures**

1. Increase water and wastewater rates beginning on March 1, 2025, and annually through 2027
2. Adopt three-year schedule of water and sewer rates (2025 through 2027)
3. Issue bonds
4. Continue looking for additional funding sources



# Rate Increase Recommendation

1. Address issues at the Scott Candler Water Treatment Plant, the water system and the wastewater system
2. Meet Bond Resolution Requirements: rate increases are needed to meet minimum Rate Covenant requirements required by Bond Resolution.
3. Maintain Financial Stability: financially stable utilities establish and meet financial metrics. While Watershed has established financial metrics, the metrics are not being met.
4. Maintain Bond Ratings: the lack of rate increases in 2023 and 2024 could result in negative rating actions.
5. Fund the Capital Program: funding the capital program will require additional debt which requires rate increases to support. The Bond Resolution stipulates requirements for additional Parity bonds, rate increases are needed to meet these requirements.



# MASTER BOND RESOLUTION REQUIREMENTS

- Working Capital Reserve
- Rate Covenant
- Parity Test



# Working Capital Reserve

## Master Bond Resolution

- legal agreement providing commitments of outstanding bonds & providing the terms, provisions and conditions for the issuance of future bonds.

## Working Capital Reserve

- a reserve available for unexpected situations and to take advantage of opportunities.

## Master Bond Resolution Working Capital Reserve Requirement

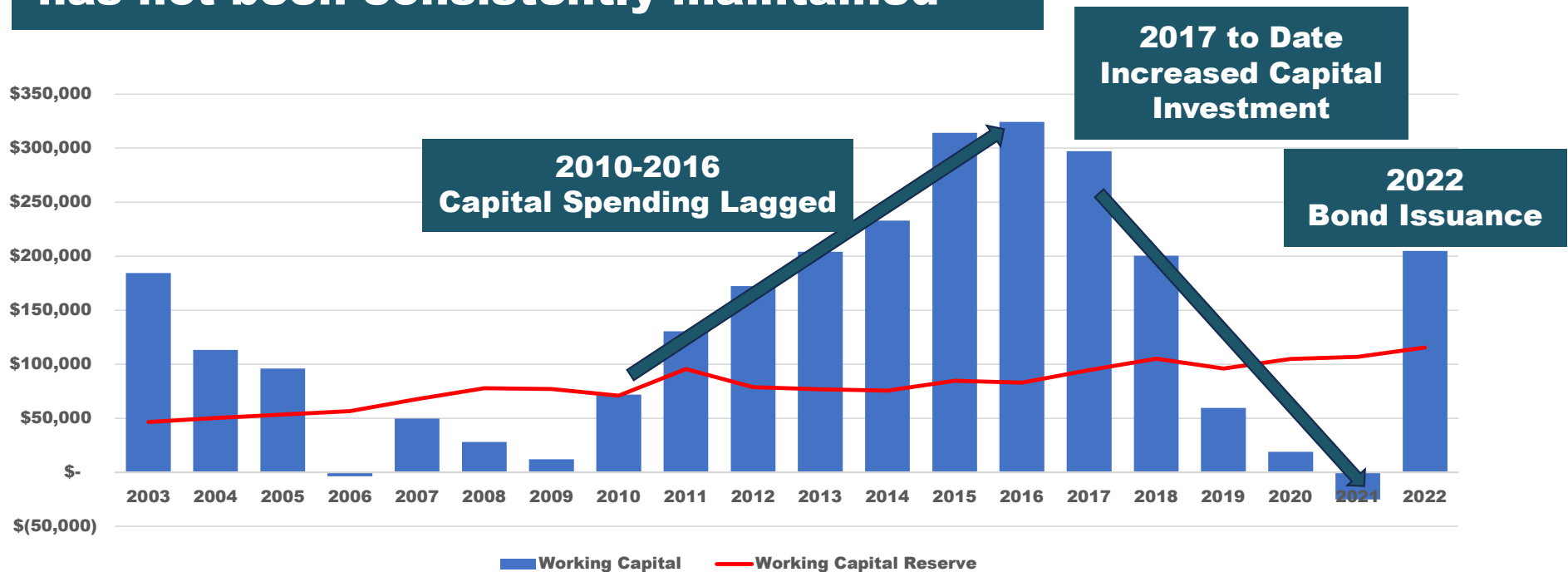
- Section 4.3.12: “an amount as the Director of Finance of the county deems reasonable and prudent”

**DMW Working Capital Reserve target is 4 to 6 months\* of operating expenses.**

\* Industry standard for Working Capital Reserve is 3 to 6 months of operating expenses  
\* Rating Agencies expect 490-700 days for similarly rated systems

# Historical Working Capital Reserve Level

**Watershed's Working Capital Reserve target (6 months of Operating Expenses) has not been consistently maintained**





# Rate Covenant & Debt Service Coverage

## Rate Covenant:

- an agreement to maintain rates and fees sufficient to operate the System (generally measured as Debt Service Coverage)

## Master Bond Resolution Rate Covenant:

- Section 6.1.1: Provide for 100% of Expenses of Operation and Maintenance
- Section 6.1.2: Net Revenue (after payment of Expenses of Operation and Maintenance) equal to at least 120% of annual debt service requirement on Senior Bonds (Debt Service Coverage)

## County Debt Service Coverage Goal:

- Debt Service Coverage of at least 175% in order to generate Pay-Go funding and meet rating expectations

### Debt Service Coverage Formula:

$$\frac{\text{Revenue} - \text{Operating Expn.}}{\text{Annual Debt Payment}} = \text{at least } 1.20 \text{ (120\%)}$$

### DSC 2023 data (preliminary):

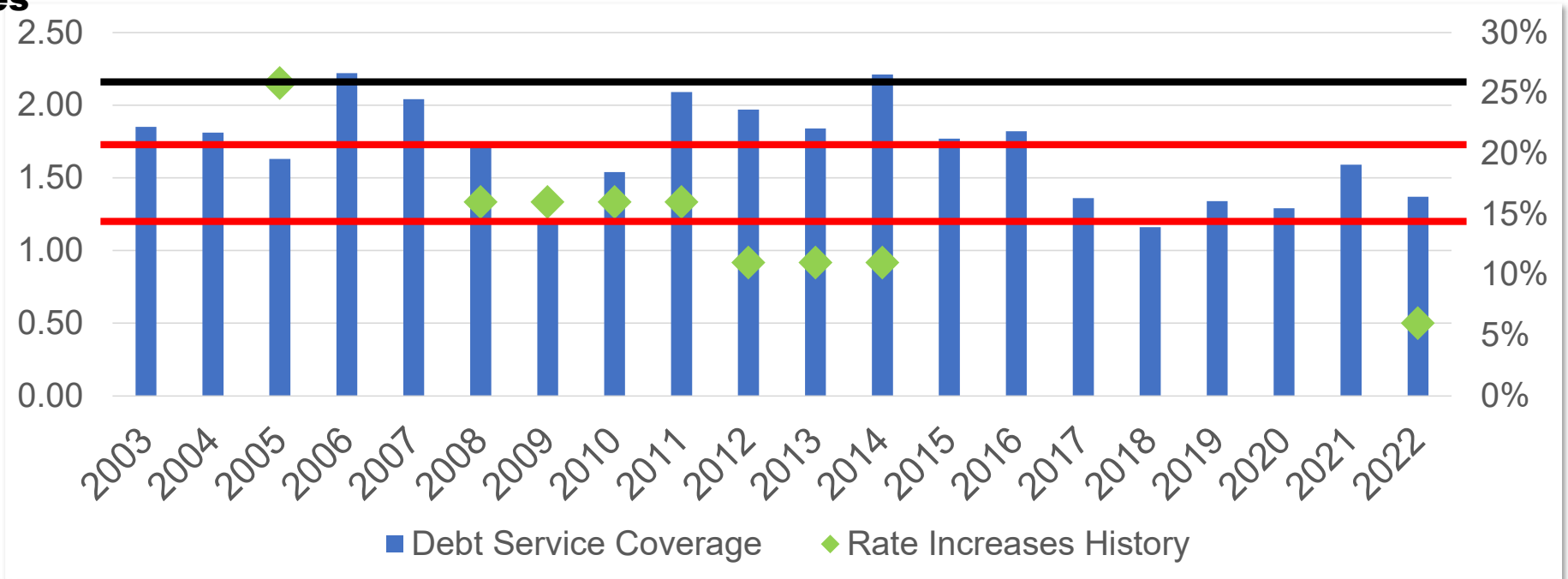
$$\frac{\$325\text{M} - \$204\text{M}}{\$78\text{M}} = 1.55$$

# Historical Debt Service Coverage

**Since 2016, Debt Service Coverage has fallen below the County's target level of 175%.**

**Average DSC of Similarly Rated Utilities**

**220%**  
**175%**  
**120%**



# Expenses have Increased in Comparison to Revenues

Between 2014 and 2022, revenues were flat as a result of limited rate increases.

In 2014 expenses were 48% of revenues; 65% in 2022.





# Parity Test (Additional Bonds Test)

## Parity Test:

- required for the issuance of future Senior Bonds (Parity Bonds)
- a forecasted debt service coverage test that must be met over the “Forecast Period”

## Master Bond Resolution Parity Test Covenant (Section 5.3.1 (b)(2)):

- The “Forecast Period” is determined to be eight (8) years from the year Parity Bonds are issued.
- **First three years:** Forecasted Net Operating Revenues at least equal to debt service requirement 100% (including the bonds being issued)
- **Next five years:** Forecasted Net Operating Revenues at least equal to 120% of maximum debt service requirement
- Forecasted Net Operating Revenues may not take into account any rate increase to be imposed in the future, unless such rate increase has been adopted by the Governing Authority.

# DeKalb's W&S Revenue Credit

- Current Credit Ratings on DeKalb's Water & Sewerage Revenue Bonds (Sr/Second Liens): Aa2/Aa3 (Moody's); AA-/NR (S&P); NR/AA- (Fitch)
- The ratings were last affirmed in conjunction with the 2023 Refunding Bonds in September 2023. The rating agencies review the County's ratings at least annually.

Strengths	Challenges
<ul style="list-style-type: none"> <li>• Unlimited rate setting authority with recently demonstrated willingness to utilize this authority</li> <li>• Large system size and growing customer base</li> <li>• Affordable rates</li> </ul>	<ul style="list-style-type: none"> <li>• Sizeable capital needs will require substantial new borrowing</li> <li>• Debt service coverage, while historically stable, is lower than comparably rated peers</li> </ul>

## Factors that could lead to a downgrade:

- Slower than expected revenue growth from customer base weakness or County's reluctance to increase utility rates
- Decline in debt service coverage and/or liquidity (cash reserves)
- Material growth in debt and/or capital spending without commensurate increases in revenue



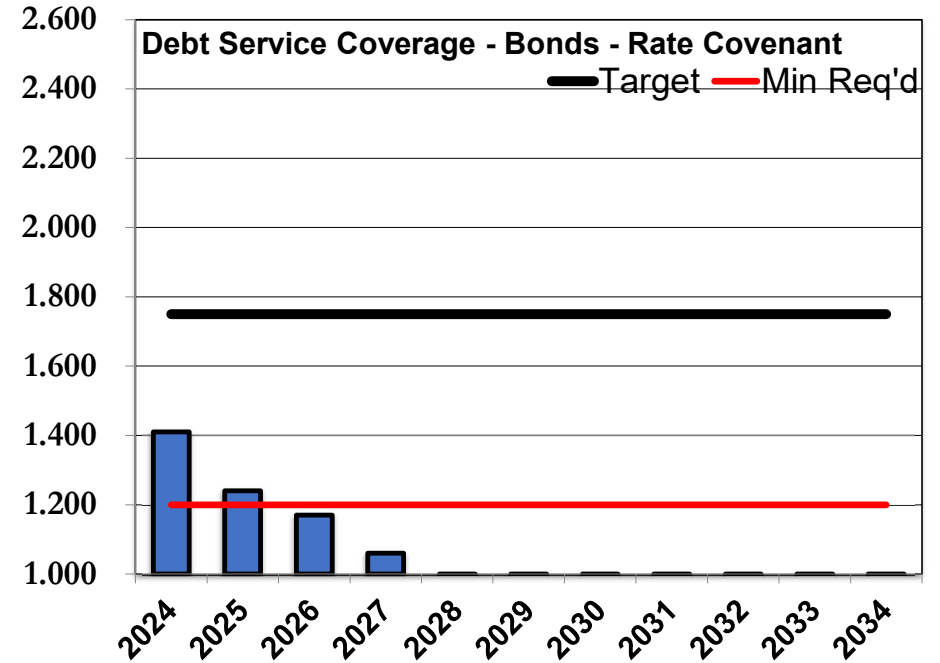
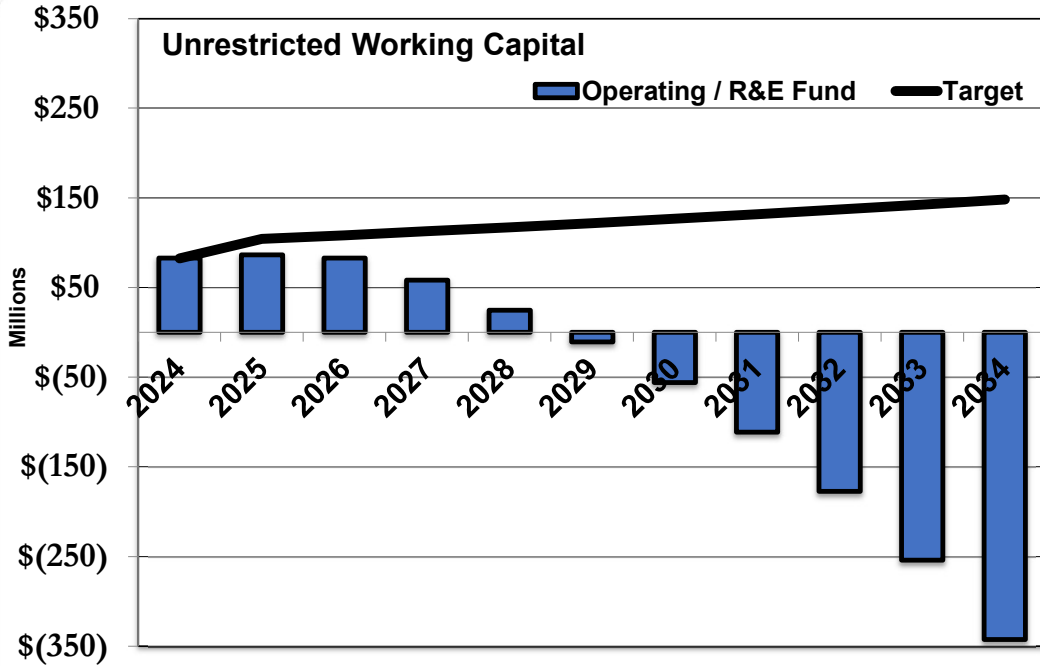


# FORECASTED REVENUE NEEDS

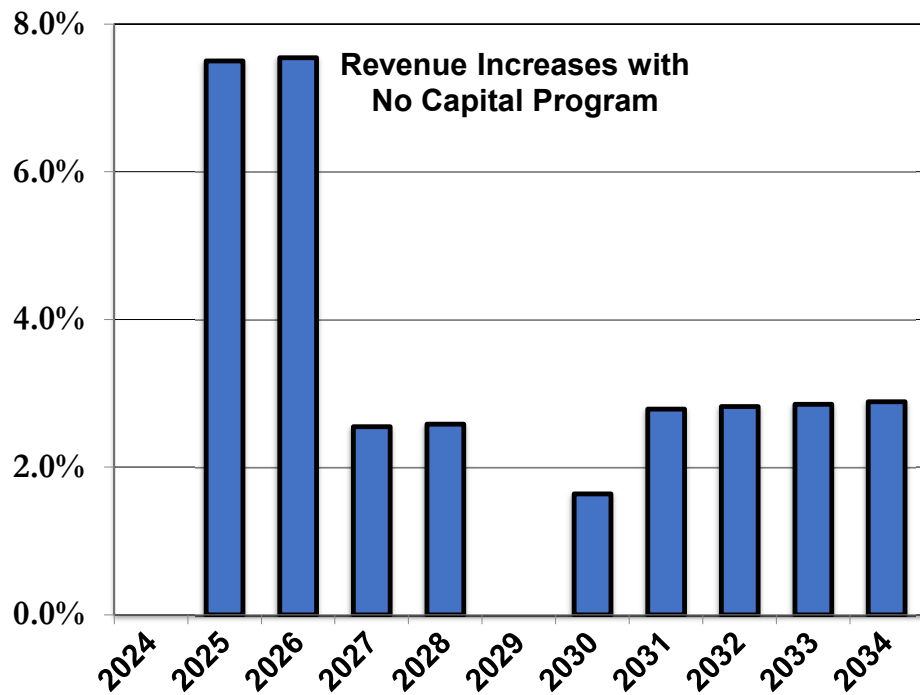
Addressing the impact of  
deteriorating infrastructure

# Forecast With No Rate Increases

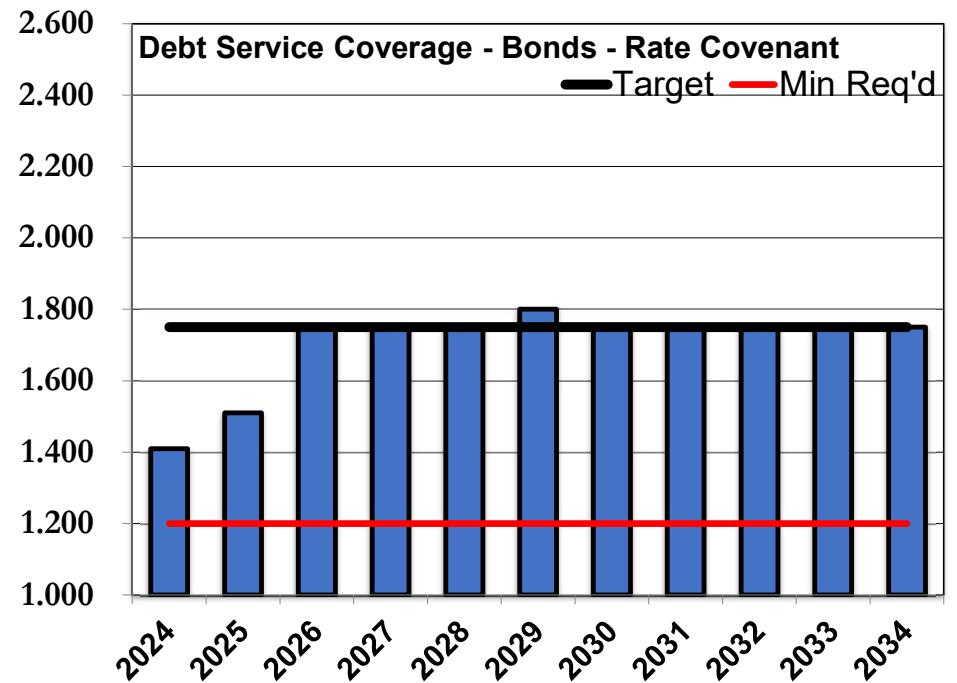
Rate increases are needed to meet Working Capital Reserve and Debt Service Coverage targets (and minimum requirements)



# Forecast With No Capital Program



## Rate Increases Options to Meet Debt Service Coverage Target



Note: rate increase implementation January 1 of each year



# **Foundational Funding for Scott Candler Water Treatment Plant and Other Priorities**

- Increase water and wastewater rates beginning on March 1, 2025, and annually through 2027 by 6% each year
- Rate increase implementation on January 1 each year for 2026 and 2027

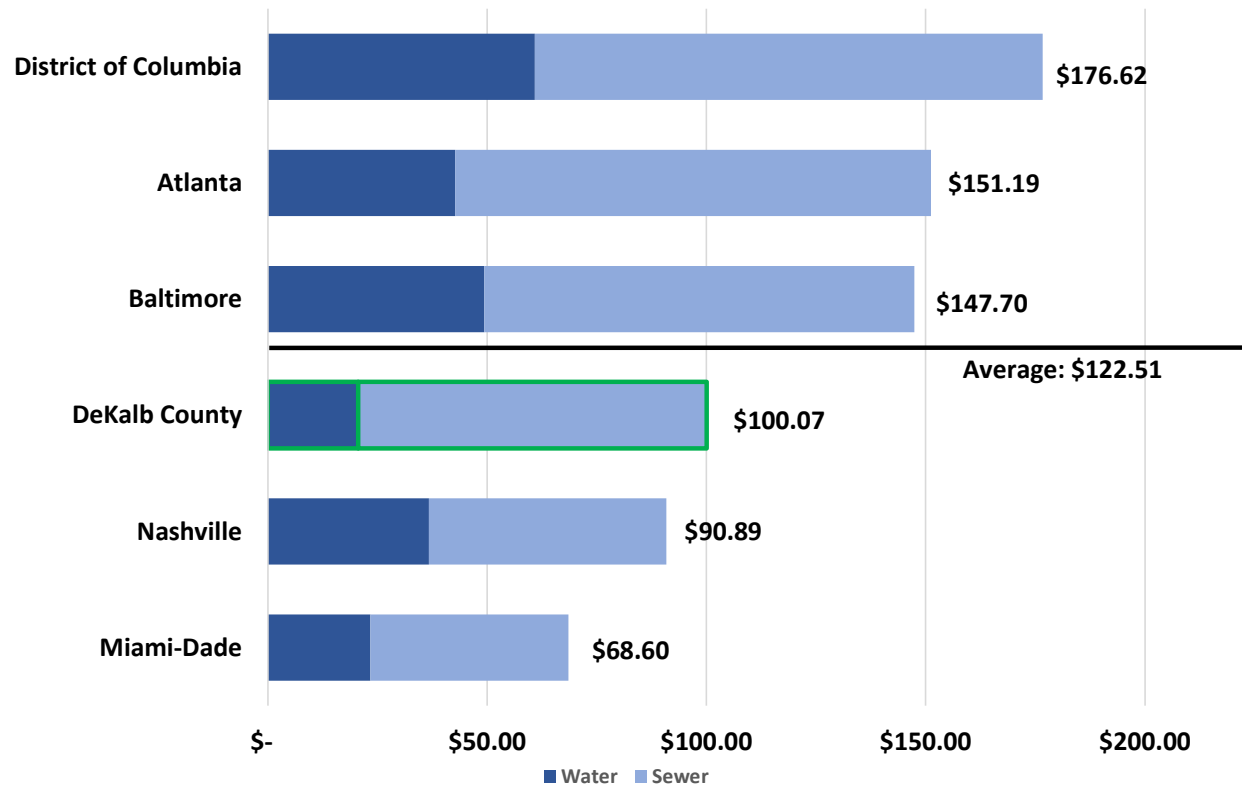


# Customer Bill Impacts and Affordability

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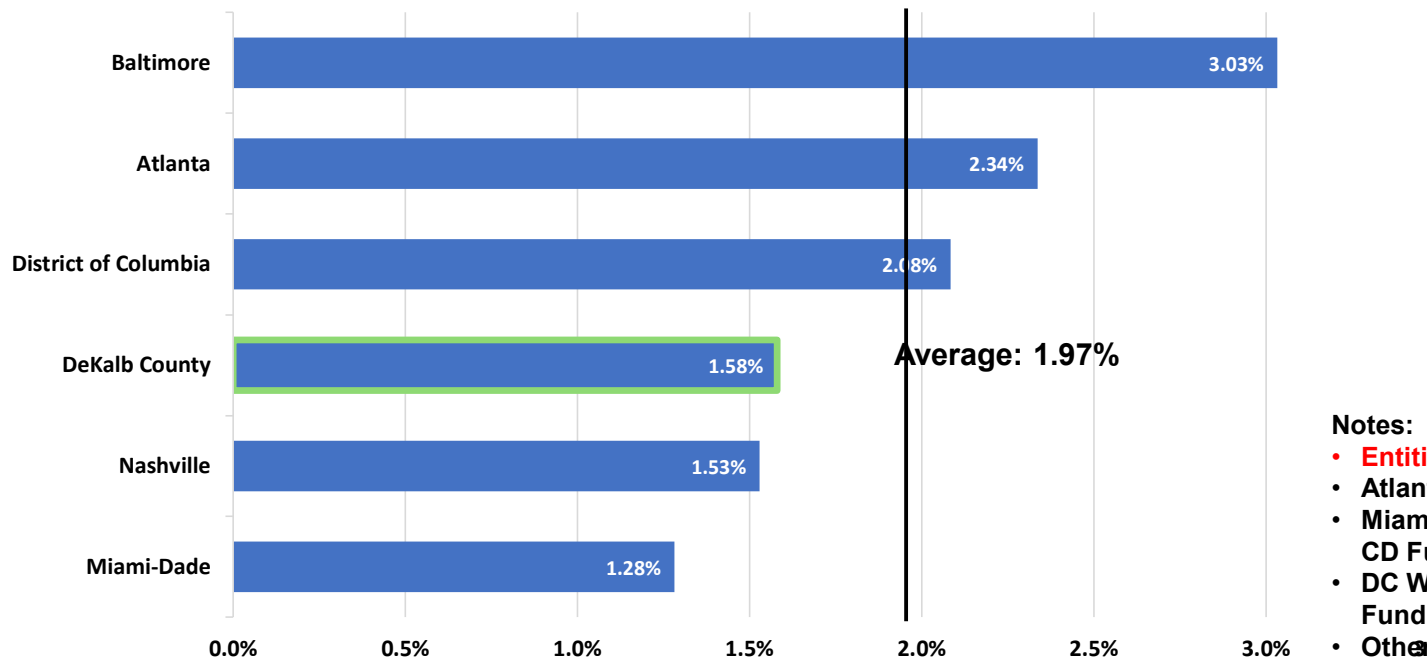
# Residential Water & Sewer Bill - 6,000 gallons of Usage per Month – Current Rates



**Notes:**

- **Entities under a consent decree**
- Atlanta also has access to a MOST
- Miami-Dade does not include specific CD Funding
- DC Water includes CRIAC rate for CD Funding
- Other funding sources for Baltimore and Nashville are currently unknown

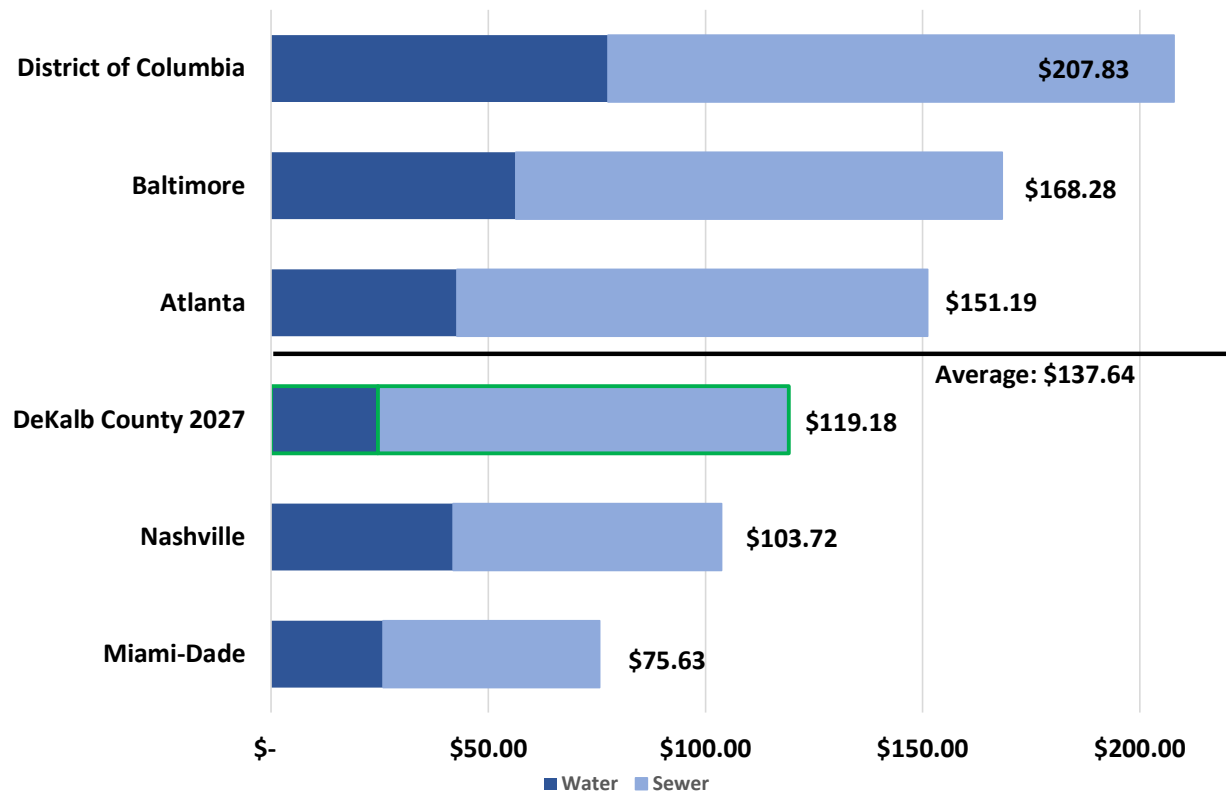
# Affordability Measure – Bill as a percentage of Median Household Income – 2024 Rates



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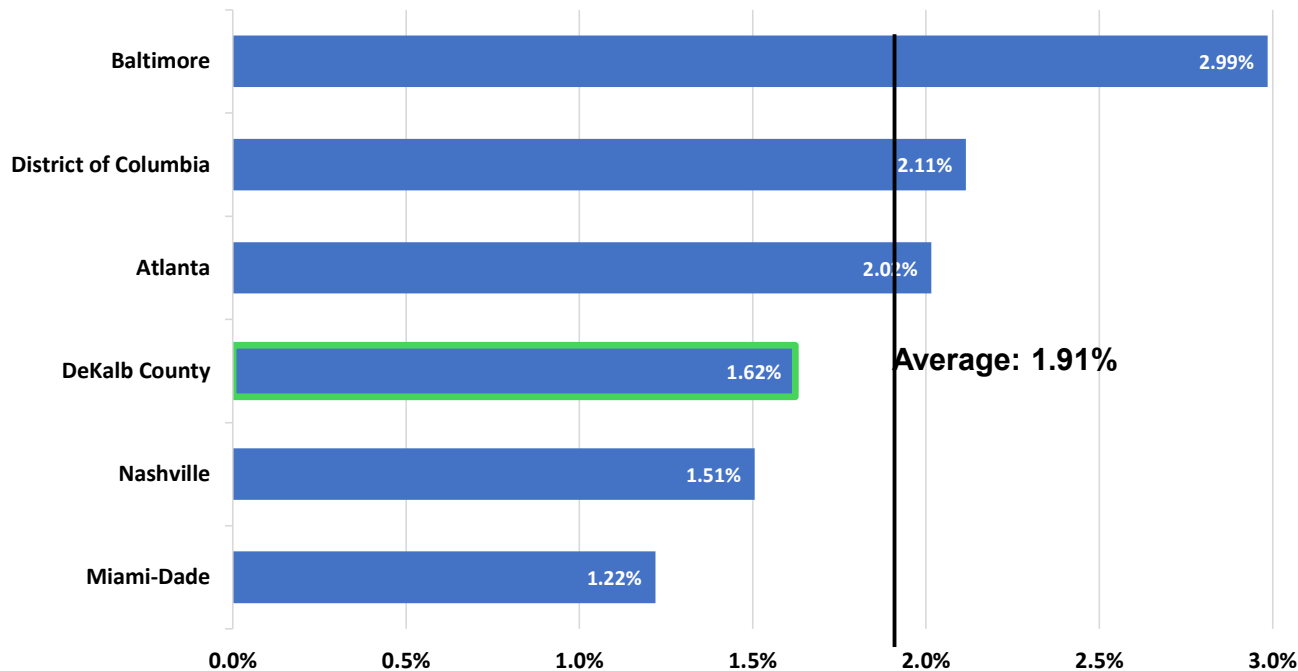
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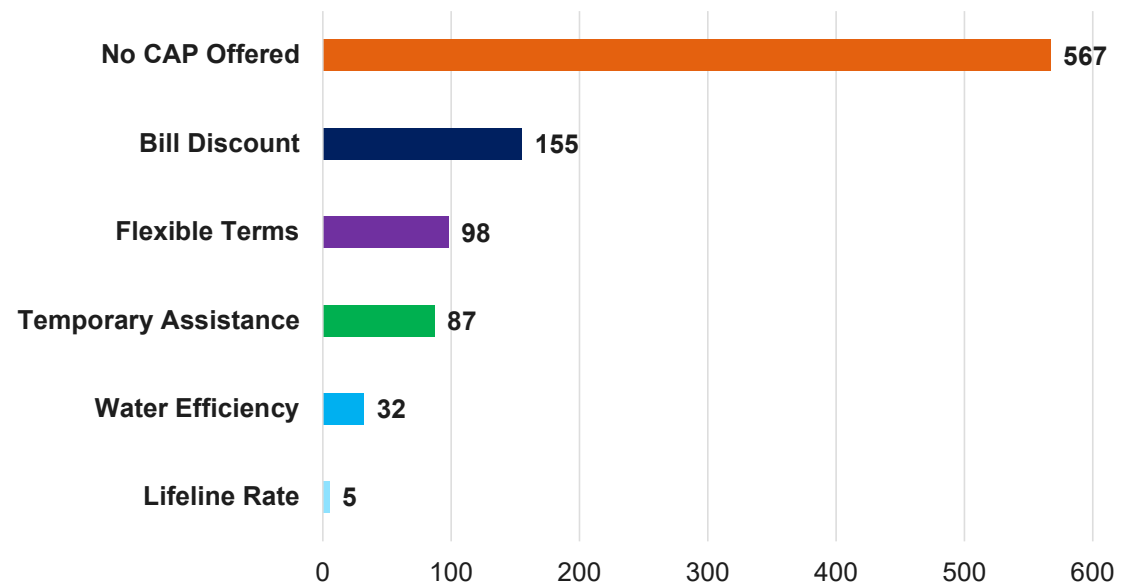
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# EPA Water and Wastewater Utility Customer Assistance Program (CAP) Study

- EPA reviewed 795 utilities across the United States
- The study shows that approximately 30 percent of surveyed utilities offer one or more CAPs
- The most common CAP is a bill discount
- DeKalb offers four CAPs

Types of Customer Assistance Programs



Note: Of the 795 utilities reviewed, 228 utilities offer a total of 365 CAPs. Several programs fit under more than one program type.

Source: EPA report, "Drinking Water and Wastewater Utility Customer Assistance Programs" – April 2016





# Options for Customer Assistance Programs

- ✓ ARP – DeKalb Cares Program
  - Help customers identify and fix the source of leaks and associated high usage
- ✓ ERA – Utility Assistance
  - Provide one-time assistance to rental customers impacted by COVID
- ✓ Extended Payment Plans (with incentives for maintaining plan and current bill)\*
- ✓ Toilet Rebate Program (reduce water usage)
- ✓ One Time deferral without fees
- ✓ One-time assistance fund for those facing disconnection\*
  - Round-up bill program
  - \$1 or \$2 donation option on bills
- ✓ Governing Authority Could Allocate \$200K - \$300K annually (adjust at mid-year)\*
  - Customer Assistance Program (emergency discounts for income eligible fixed-income residential customers)

*Deep blue text and \* indicates a proposed new program  
Have had meetings with community advocates*

# QUESTIONS?

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