

“The Path Forward”

DeKalb County Water & Sewer Workshop

July 8, 2024

Picture: Scott Candler Plant - main building entrance



Executive Summary

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

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01 **Successes**

Past Capital Program Investment

02 **System Needs**

Water Treatment Plant Challenges and
Other Infrastructure Priorities

03 **Moving Forward**

Water Treatment Plant Project
Funding and Other Revenue Needs

NEW DAY PROJECT
WATER METER
REPLACEMENTS IN
PROGRESS

Questions?

Call (404) 378-4475 or visit www.dekalbcountyga.gov/newdayproject

DEKALB'S WATER AND SEWER INFRASTRUCTURE SUCCESSES

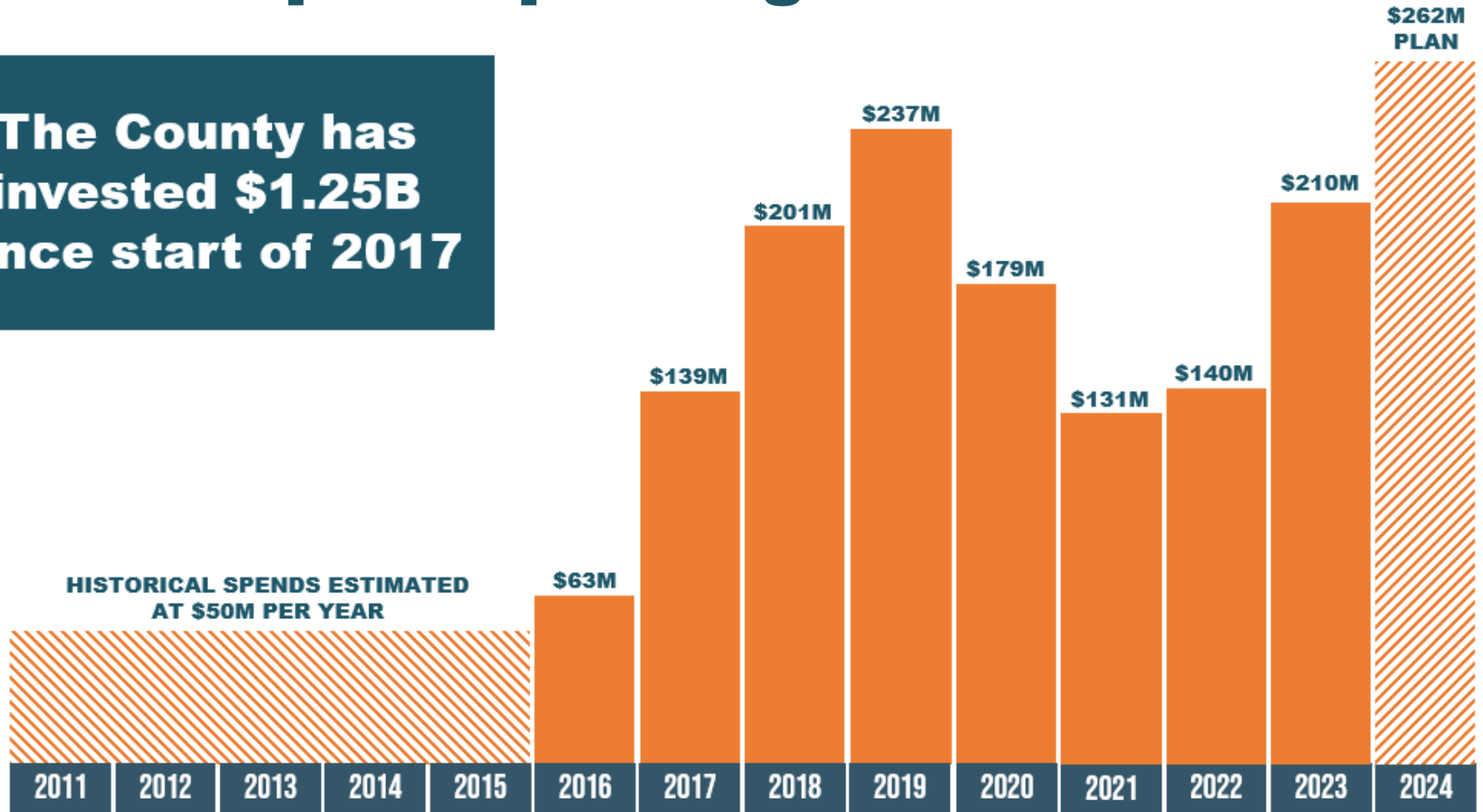
\$1.25B CIP Investment Since 2017

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

Contractor working on New Day Project

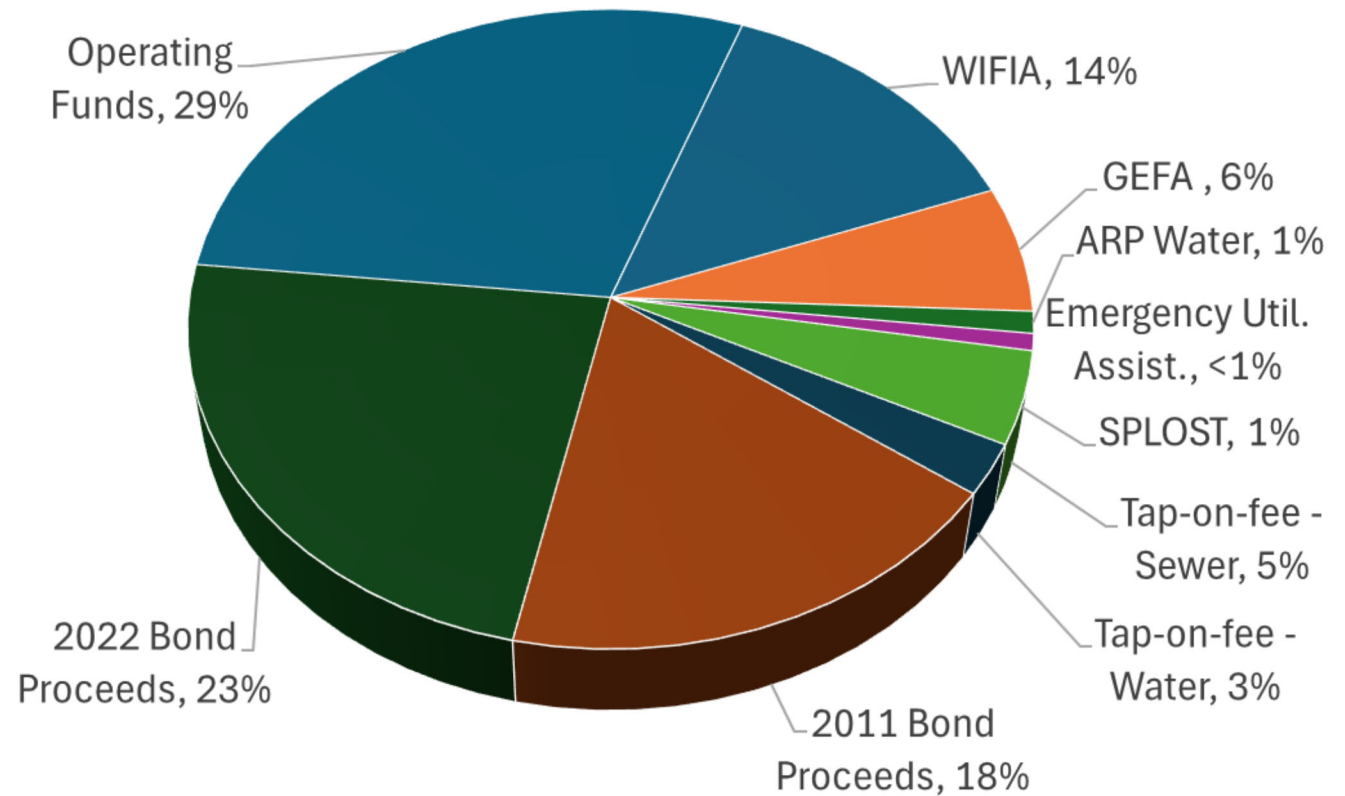
Historic Capital Spending

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



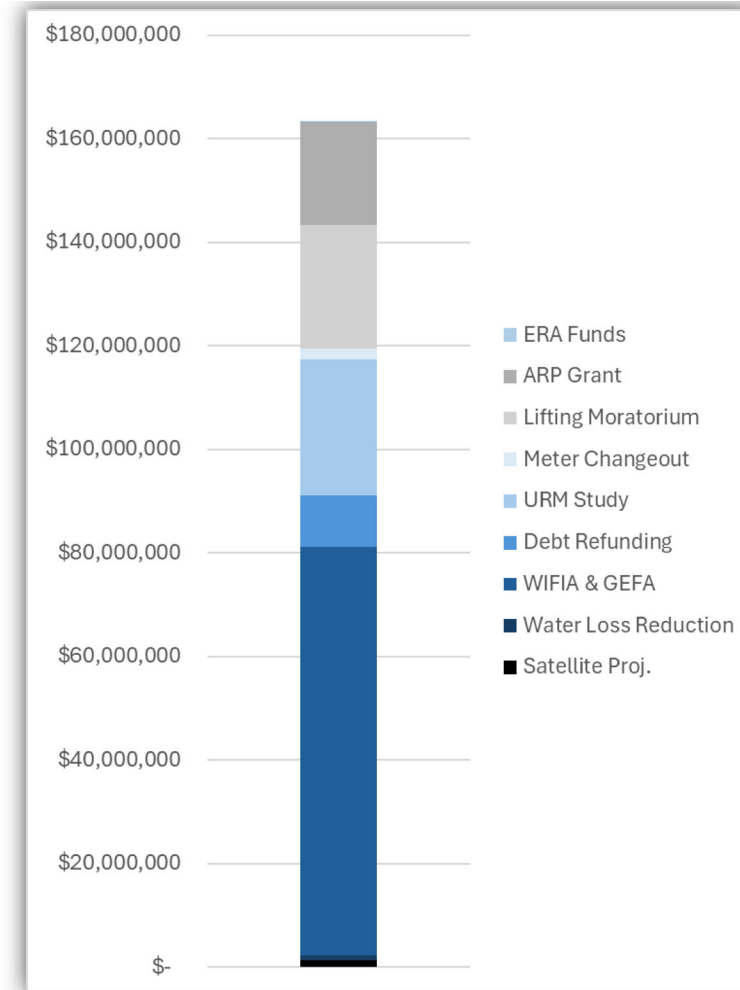
2017-2024 CIP Spend by Funding Source

DWM's 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)



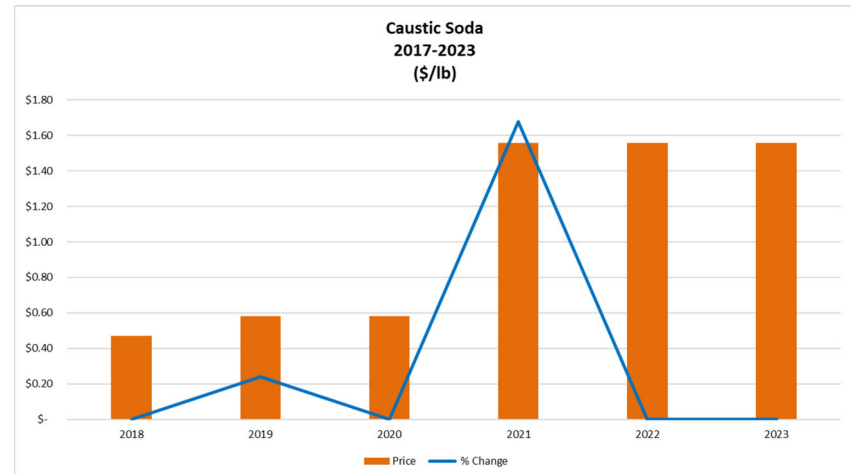
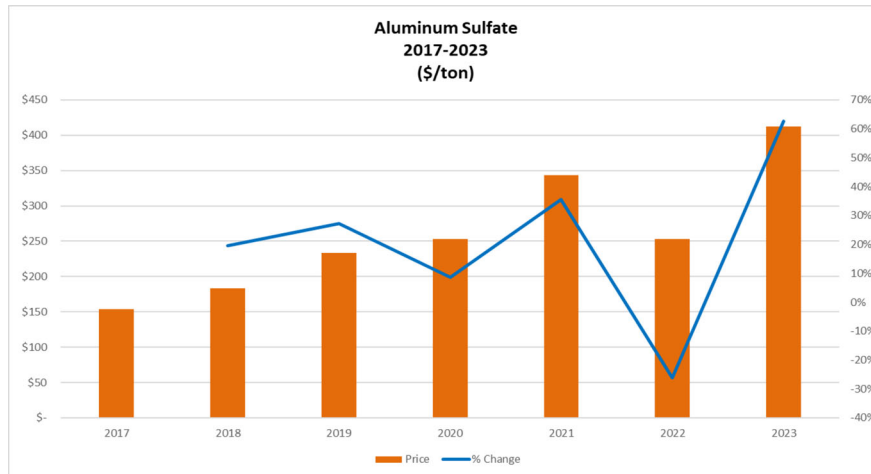
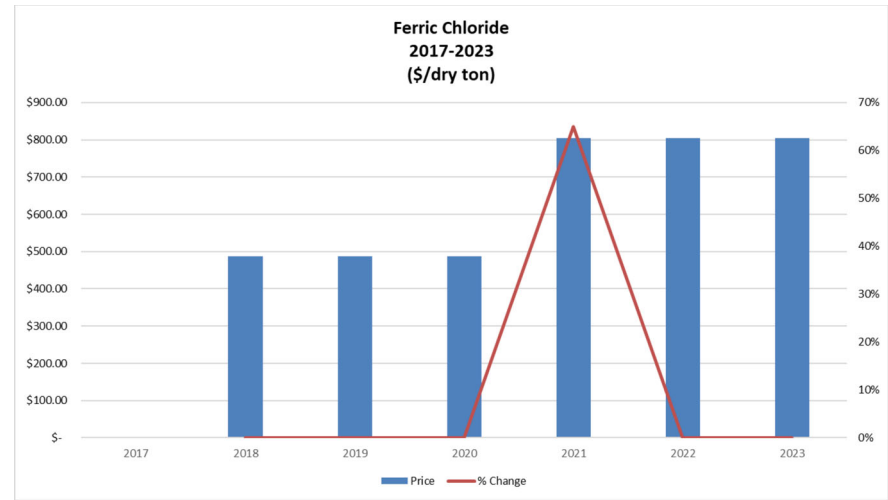
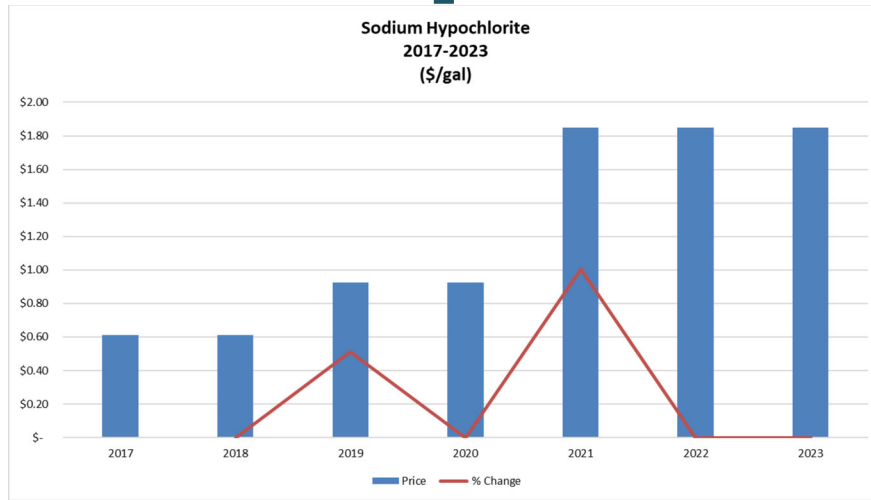
By increasing revenues and reducing cost, DeKalb has optimized over \$164 million in revenue savings from 2021 through 2024. Hence delaying the need for a rate increase.

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
 - DWM vacancy rate is 17% with 138 open positions
- 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)

Chemical price inflation

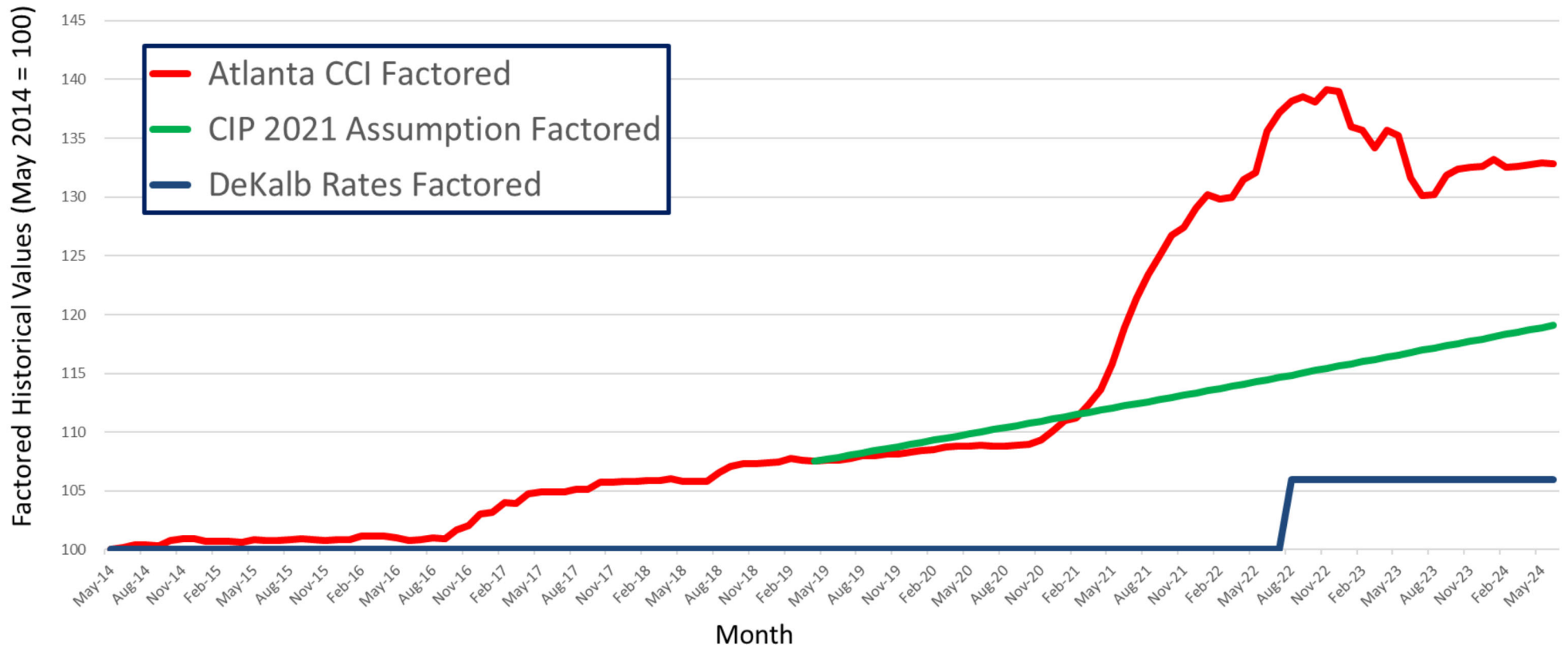
Options were explored to change the types of chemicals being used to reduce costs.



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

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

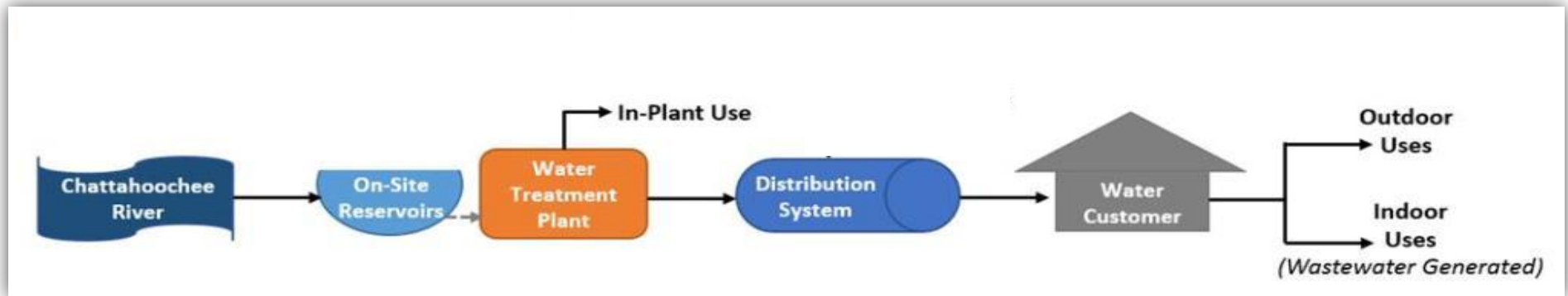


Water System Overview

Components & Gaps



DeKalb County's Single Water Source/Supply



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

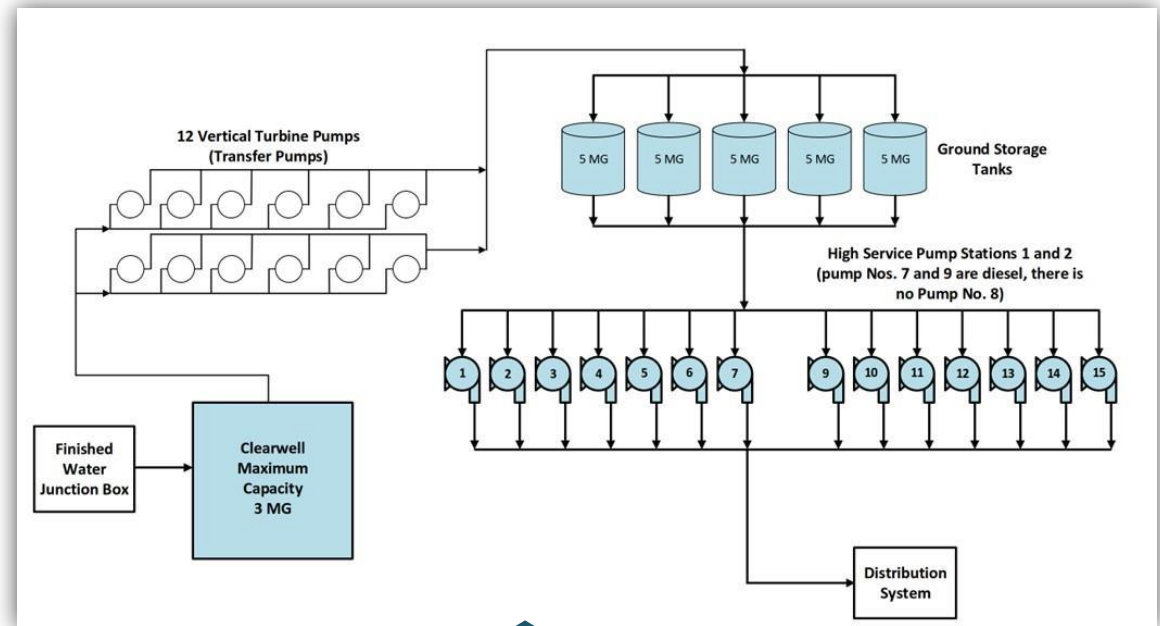
DeKalb County is the only county in the metro Atlanta area of its size (population served) with one water supply source and one Water Treatment Plant (WTP)”

(Source: DeKalb Water Master Plan 2020)

Scott Candler WTP Overview

System consists of:

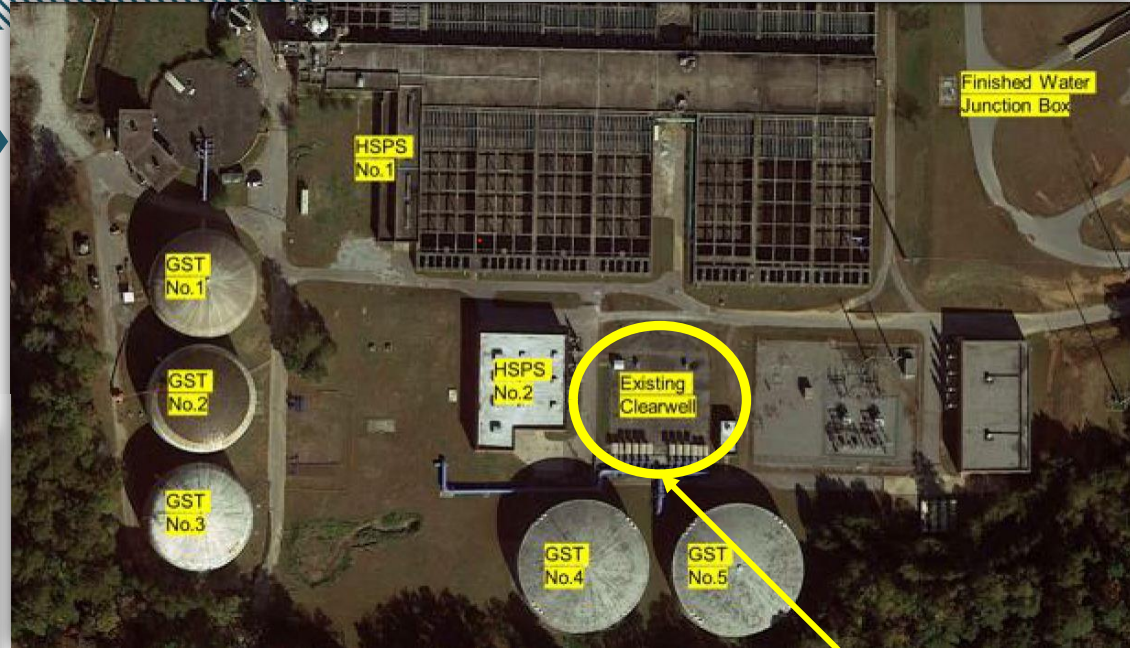
- ▶ Originally built in 1942. New plant was constructed in 2007.
- ▶ Remnants of the old plant remain - especially for components used in pumping to system.



The plant mostly has redundant systems except for the Clearwells.

Remnant aging facilities

Electrical Building – structural issues – project in procurement



Single clearwell



July 08, 2024

Transfer Pump #13 Starter Cabinet

Transfer Pumps



1989 transfer pumps

July 08, 2024

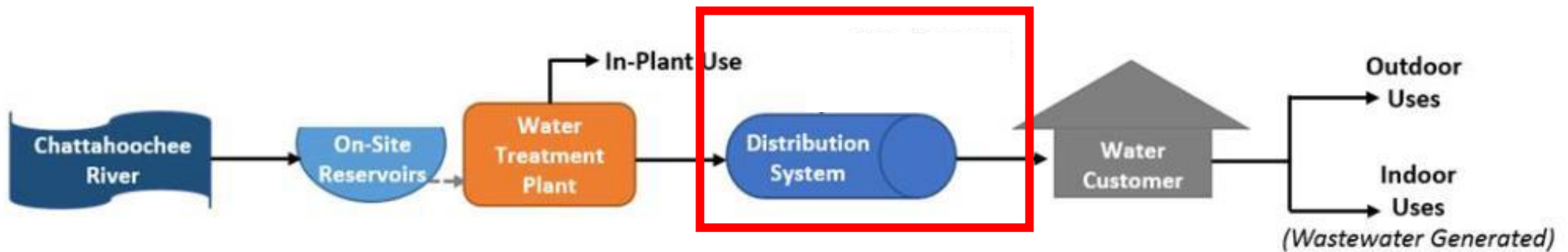
Scott Candler WTP Projects

Recommended Projects (cost estimate \$294M):

- ▶ Replace remnant portions of the old plant
- ▶ Create redundant clearwells
- ▶ Redundant primary power supply
- ▶ Upgrade transfer pumps
- ▶ Upgrade Supervisory Control and Data Acquisition (SCADA) to support remote operations.



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.



**Celia Way
January 2023
Prestressed Concrete**
July 08, 2024



**Buford Highway – 2019
Ductile Iron**



**McLendon Road
42" diameter
Feb/April 2024
Prestressed Concrete**

Impact of a Loss of Water Service

- Life and safety of the DeKalb Community (353+ critical facilities and infrastructure e.g. CDC, hospitals, dialysis centers, senior homes, congregate facilities etc.)
- Small business closures
- Hotels and conferences
- Schools

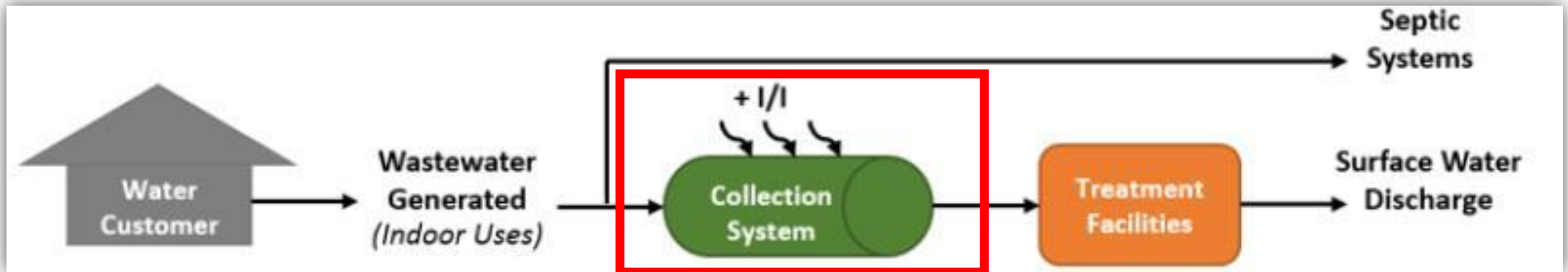
A photograph of a worker in a high-visibility vest and hard hat standing in a wooded area, possibly near a sewer spill site. The worker is wearing a brown long-sleeved shirt, blue jeans, and a yellow hard hat. They are also wearing a bright yellow safety vest with reflective stripes. The worker is standing in a wooded area with many bare branches and some green leaves. The background is a dense thicket of trees and branches. The overall scene is somewhat dimly lit, suggesting an overcast day or a shaded area.

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

Wastewater System Overview

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.

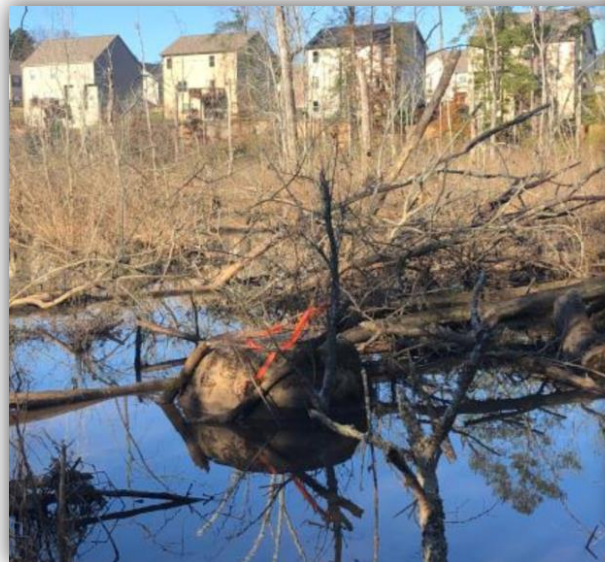
Major Trunks

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).

July 08, 2024



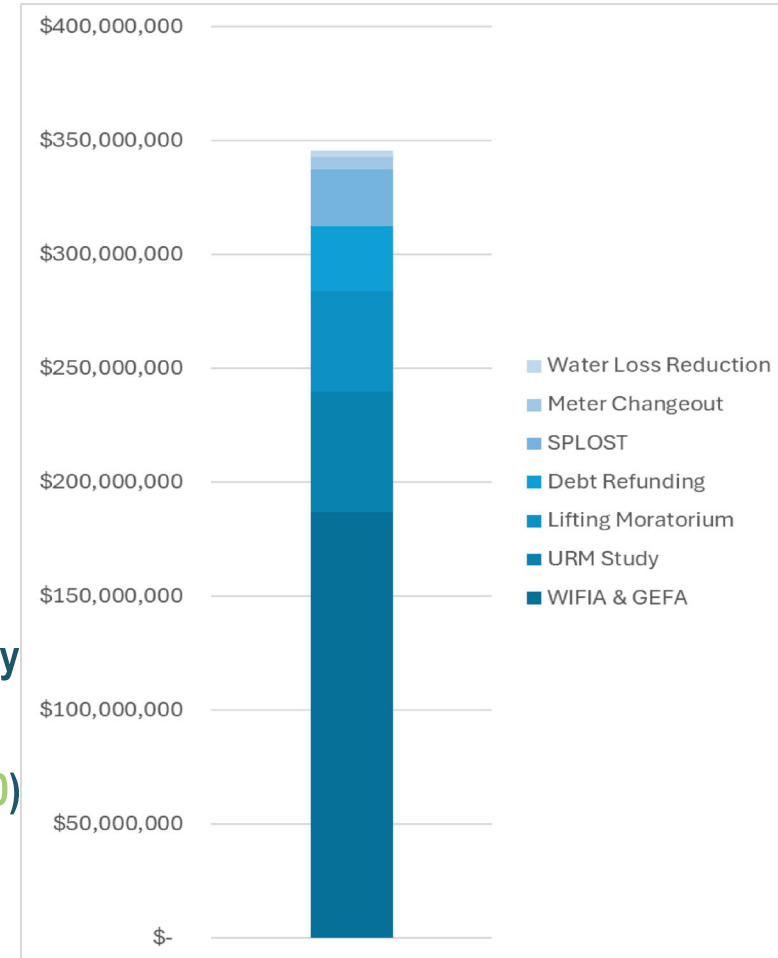
*Stone Mountain/Lithonia Water Project
Completed 2023 – WIFIA 2 Loan*

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
TOTAL	\$ 50,580,160.00

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
TOTAL	\$ 50,582,000.00

To Fill the Remaining Funding Gap Driven by Inflationary Pressures

1. Increase water and wastewater rates beginning on January 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

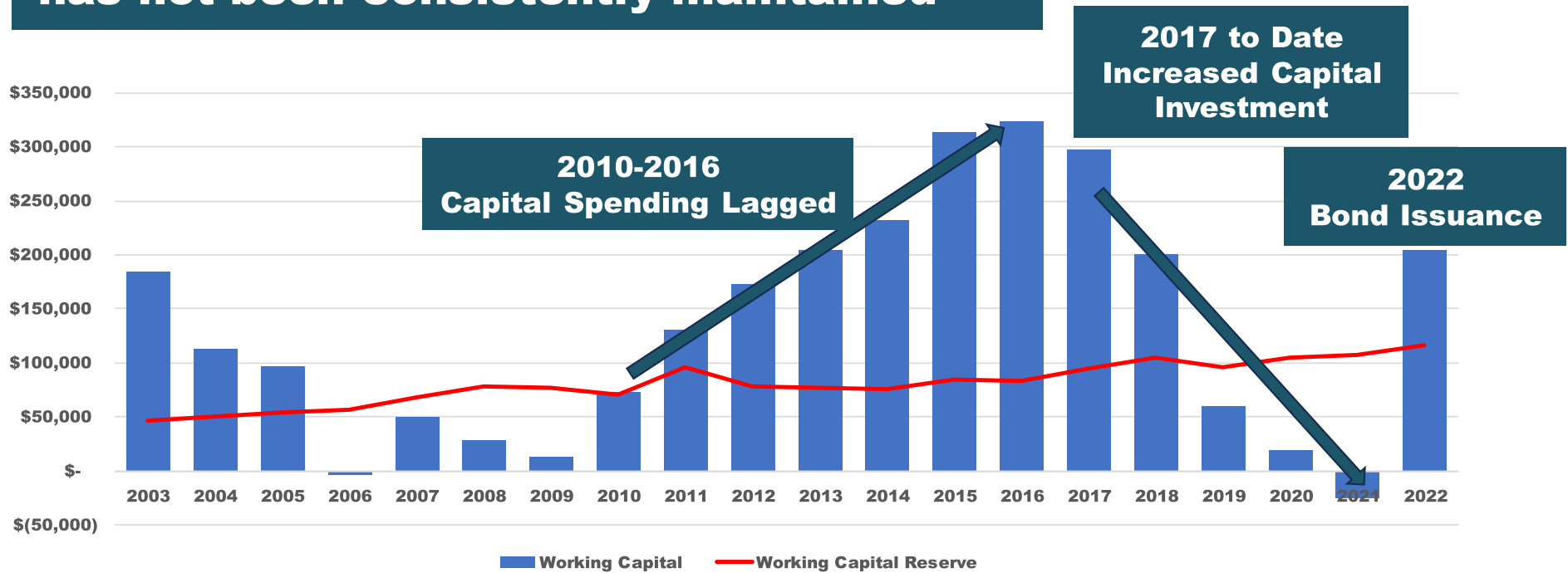
- Section 4.3.12: “an amount as the Director of Finance of the county deems reasonable and prudent”

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:

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

DSC 2023 data (preliminary):

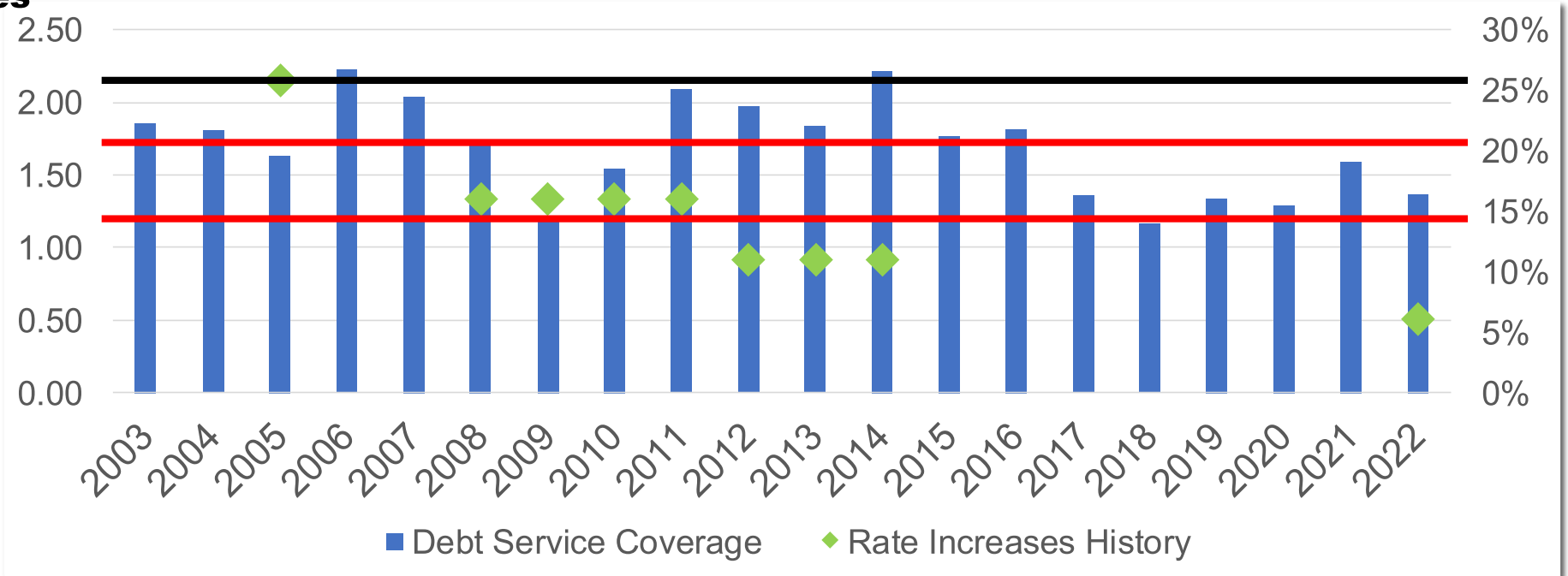
$$\frac{\$325\text{M} - \$204\text{M}}{\$78\text{M}} = 1.55$$

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

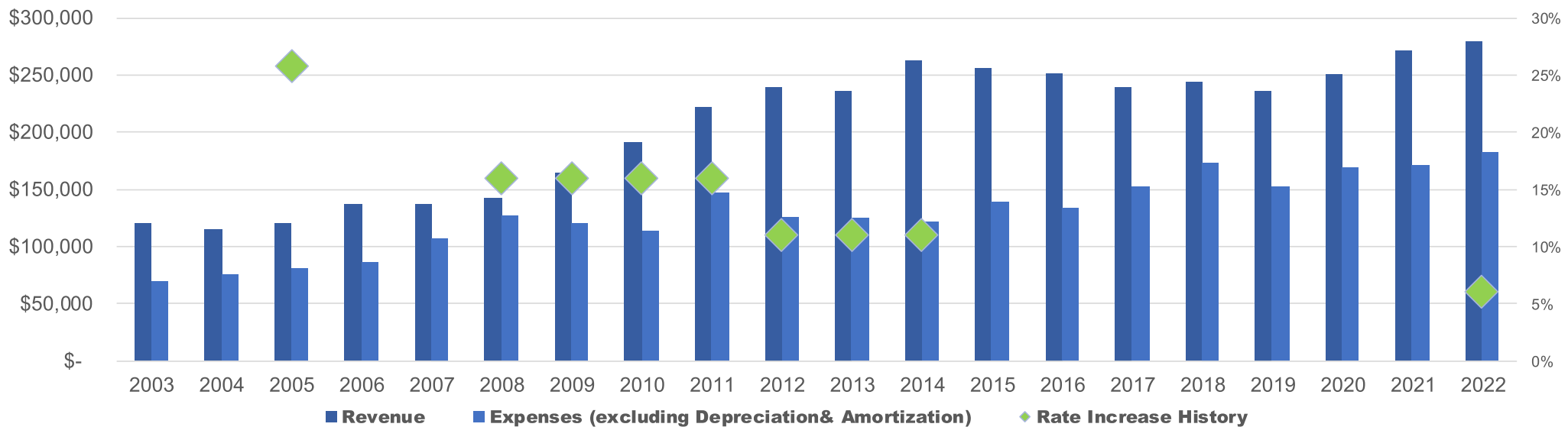
220%
175%
120%



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

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

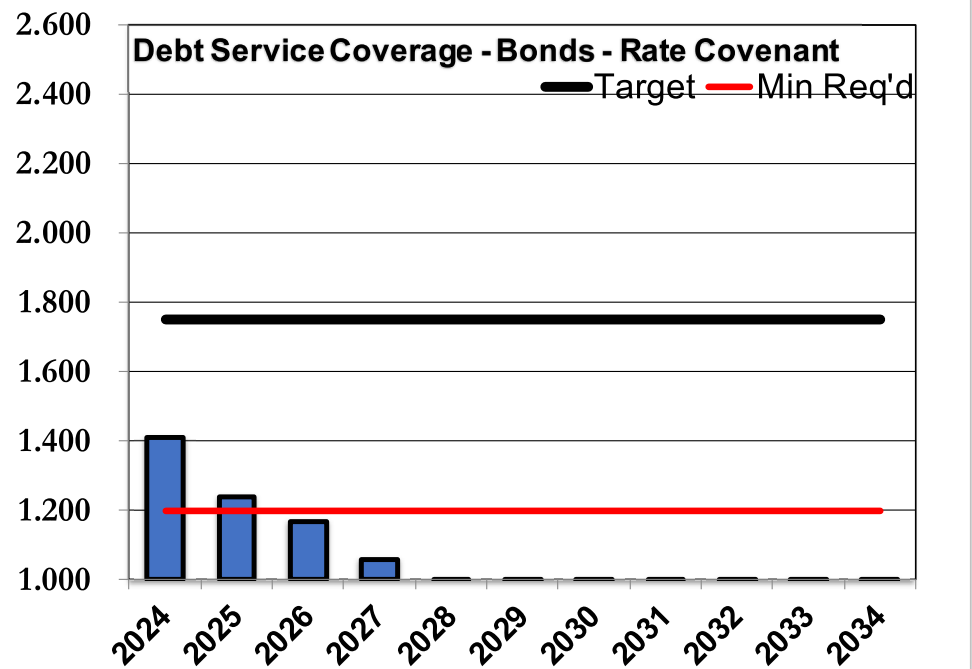
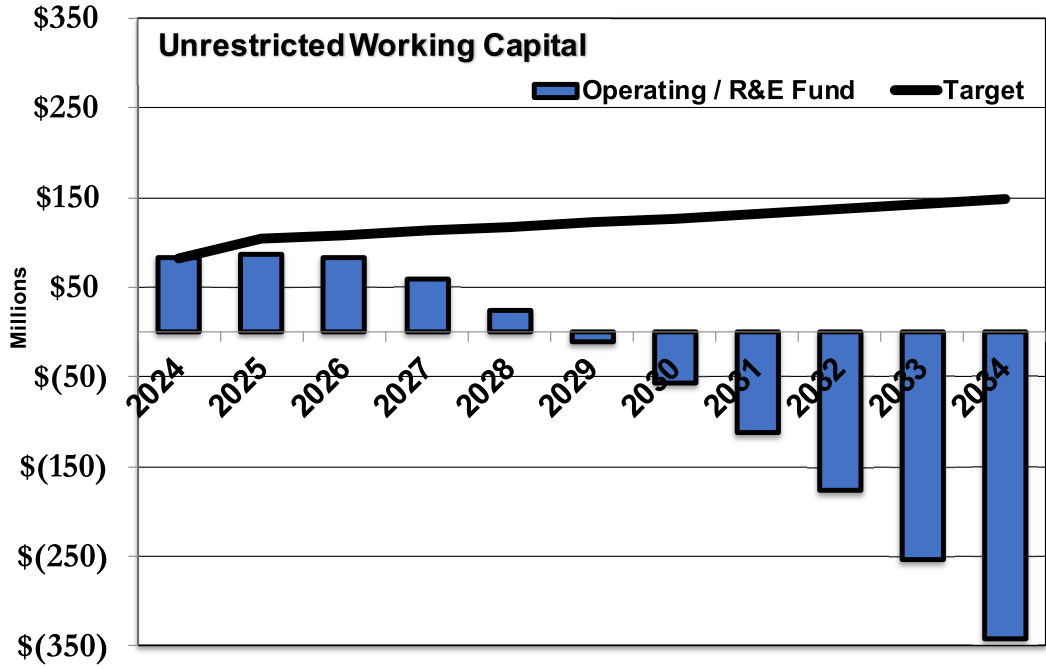
A background image showing a business meeting. Several people are seated around a table, looking at documents and laptops. One person is writing on a document with a pen. The image is overlaid with a semi-transparent blue filter.

FORECASTED REVENUE NEEDS

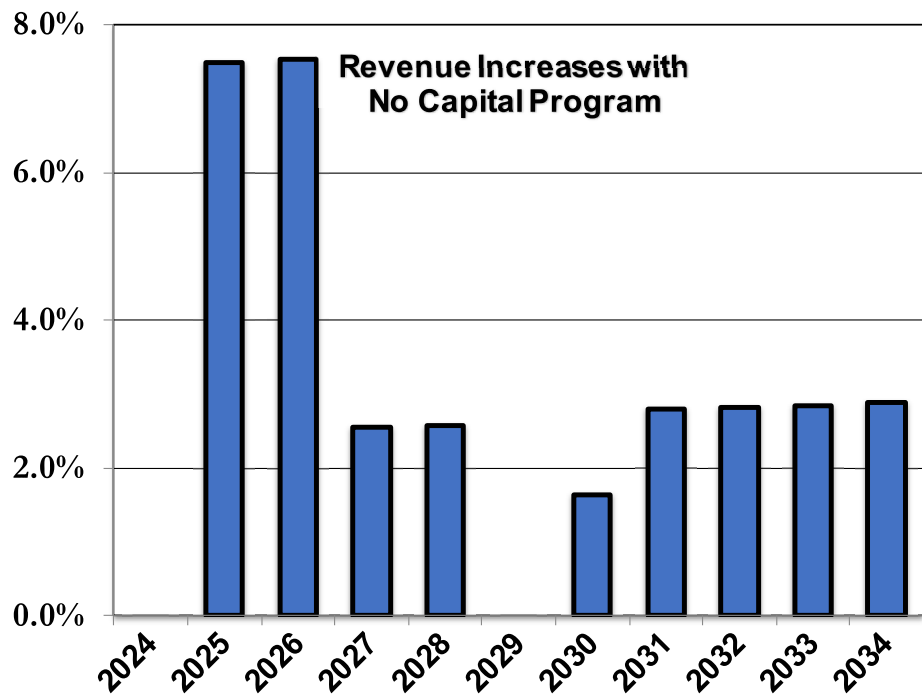
**Addressing the impact of
deteriorating infrastructure**

Forecast With No Rate Increases

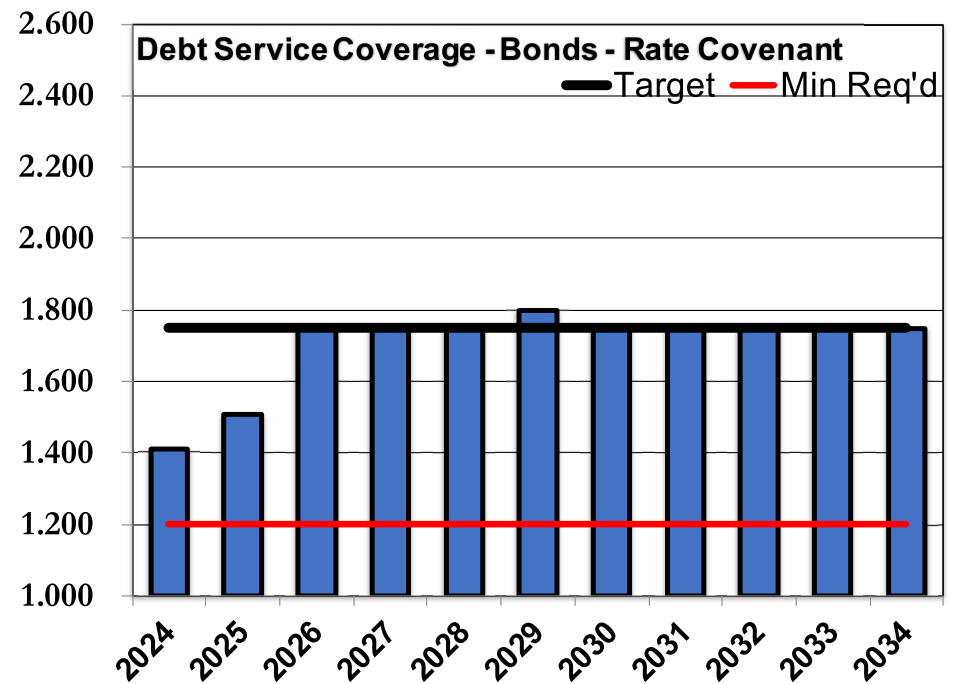
Rate increases are needed to meet Working Capital Reserve and Debt Service Coverage targets (and minimum requirements)



Forecast With No Capital Program



Rate Increases Options to Meet Debt Service Coverage Target



Note: rate increase implementation January 1 of each year

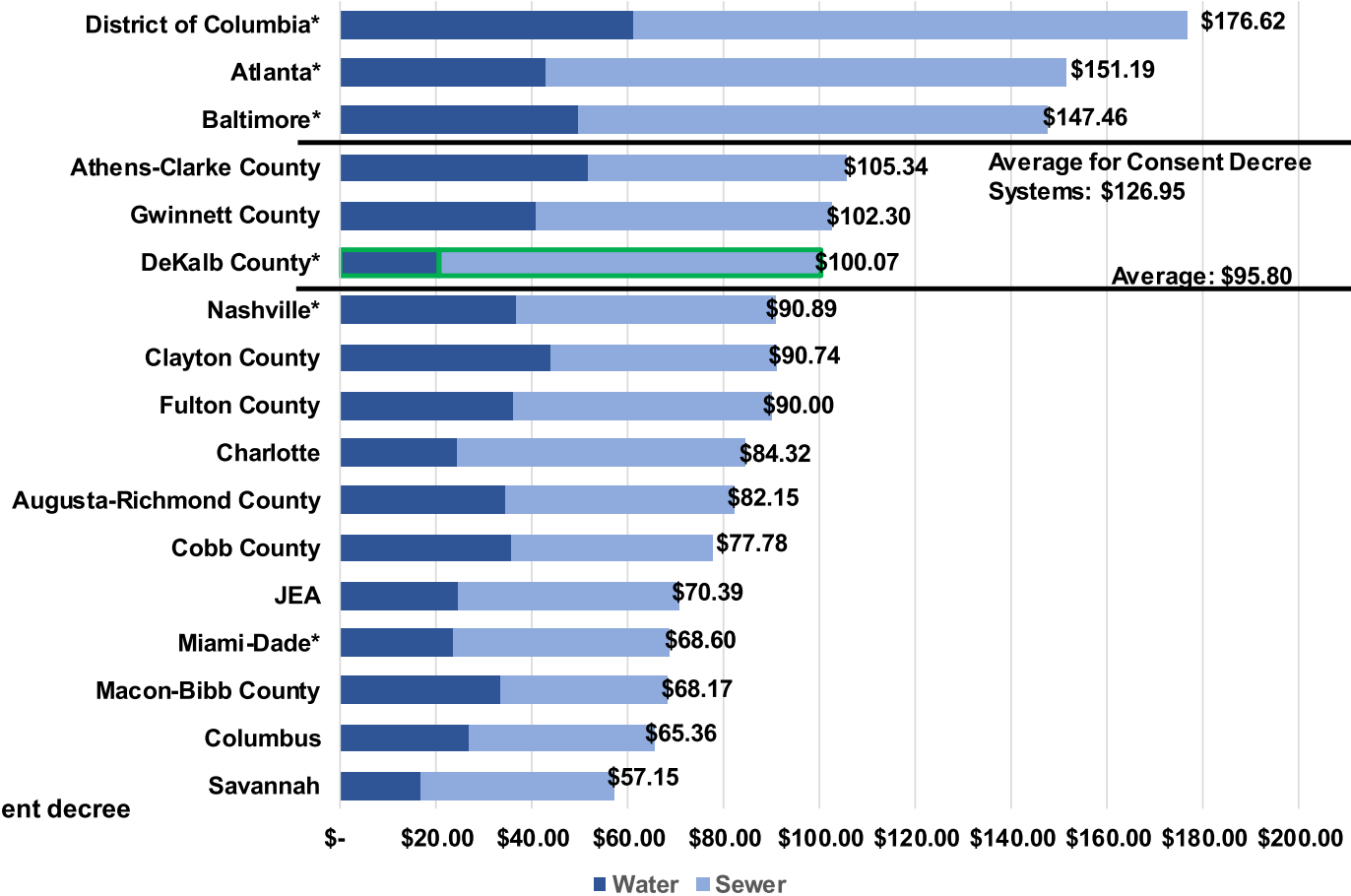
Foundational Funding for Scott Candler Water Treatment Plant and Other Priorities

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

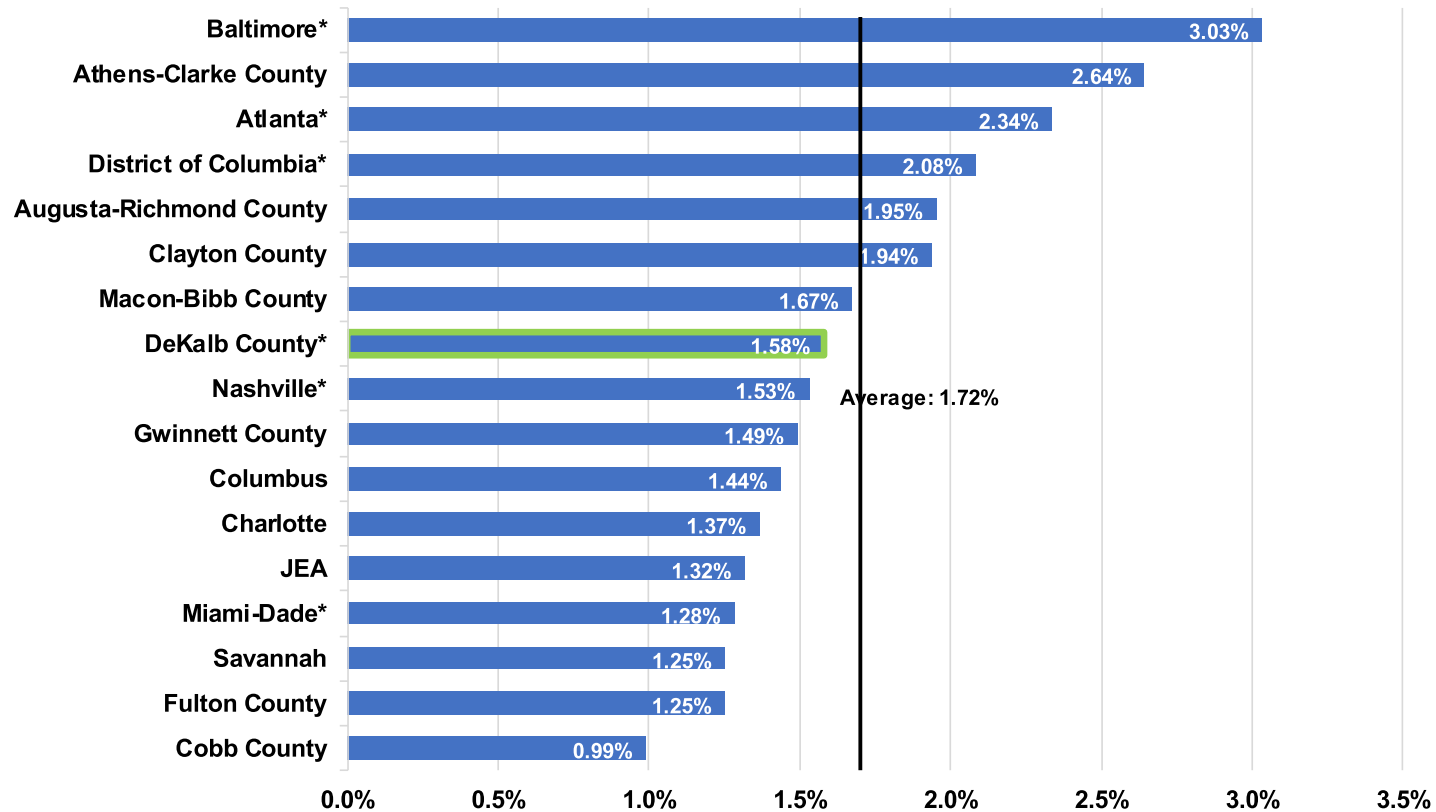


Customer Bill Impacts and Affordability

Residential Water & Sewer Bill of 6,000 Gallons of Usage per Month – Current Rates



Affordability Measure – Bill as a percentage of Median Household Income



*Entities under a consent decree

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 incentive 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
- ✓ Allocate \$200K - \$300K annually (adjust at mid-year)*
 - Customer Assistance Program (monthly discounts for income eligible fixed-income residential customers)
 - Relief for Income Eligible Nonprofit Organizations one time per year

*Deep blue text and * indicates a proposed new program*

QUESTIONS?

