

CIP 2021 - DEFINITION & FUNDING REPORT

# EXECUTIVE SUMMARY

PART B: CAPITAL IMPROVEMENT PLAN (CIP)  
FUNDING



DeKalb County, Georgia  
Department of Watershed Management  
February 2022





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# OVERVIEW

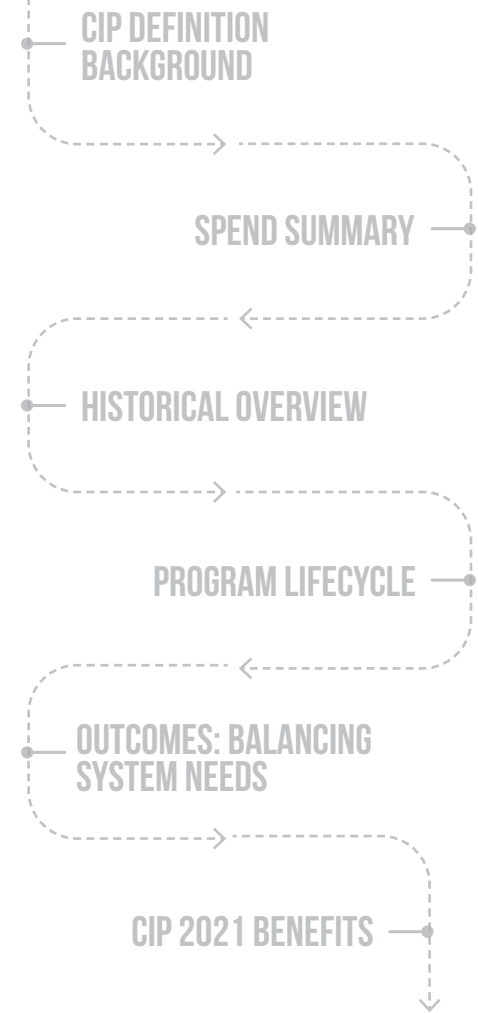
Based on CEO Thurmond's recommendation, on February 23, 2021, the DeKalb County Board of Commissioners approved a new CIP program for 2021-2030 (CIP 2021). This visionary 10-year, \$2.4 billion (in 2021 dollars) program will invest in and maintain the water and wastewater infrastructure vital to all County residents and businesses. CIP 2021 represents a new day for DeKalb County and has been developed using best-practice approaches and state-of-the-art hydraulic modeling, master planning, and project prioritization techniques.

The County developed CIP 2021 through a thorough and transparent process involving frequent reports and presentations to the Board of Commissioners. This Executive Summary highlights key information and decisions from these touchpoints. A full archive of public materials can be accessed using this [link](#).

This two-part Executive Summary defines the spending and funding plans for the program.

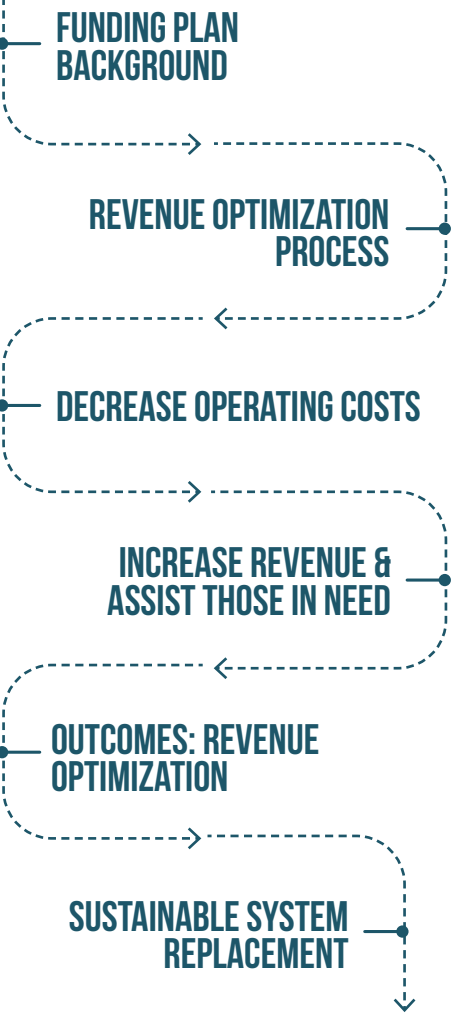
## PART A: CIP DEFINITION

Summarizes the spending plan for CIP 2021 and describes the steps in the program definition and delivery lifecycle, which include identifying, prioritizing, approving, and delivering CIP projects.



## PART B: CIP APPROVAL AND FUNDING

Summarizes the funding plan for CIP 2021 and describes actions to maximize revenues, minimize expenses, support customers in need, and reduce the cost of borrowing.



# FUNDING PLAN BACKGROUND

CIP 2021 represents the next major investment in repairing, maintaining, and improving water and wastewater infrastructure in DeKalb County to better serve the health, safety, and welfare of residents.

The previous capital program, CIP 2010, began to address Consent Decree (CD) requirements. As hydraulic models of the wastewater collection system were not available to properly define the projects required to address system needs, CIP 2010 only included partial funding to meet the CD. With these models now available and capital projects accurately defined, CIP 2021 includes the remaining funding necessary to meet the Modified Consent Decree.

Heeding the call for responsibility and accountability, the County has implemented targeted strategies to reduce expenses, increase revenues, and assist the most vulnerable. It has also developed a financing approach for CIP 2021 that mitigates its borrowing costs significantly. These efforts have yielded exceptional results, including substantially reducing rate increases and delaying them by nearly four years—a real win for all residents of DeKalb County.

## HOW MUCH DO WE NEED?

\$2.408 BILLION

### CIP 2021 SPENDING PLAN Two major areas of investment:

- > Deliver critical water distribution projects
- > Expand trunk sewer capacity to comply with CD



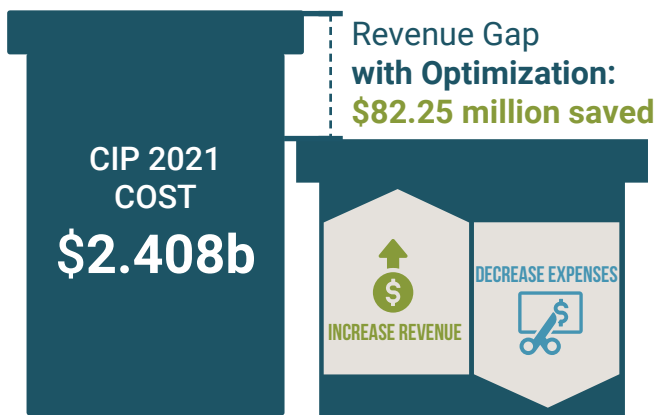
## WILL WE HAVE ENOUGH?

### Revenue Sufficiency Analysis 2021-2030

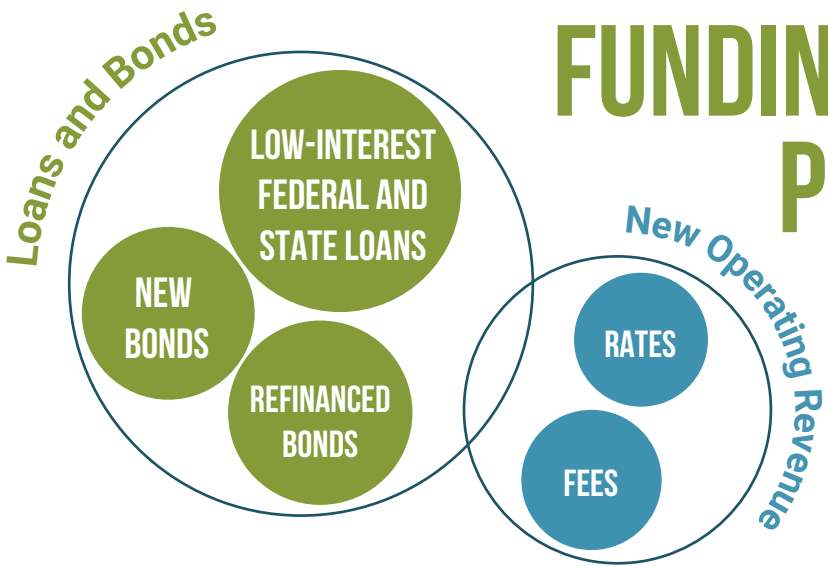


## CAN WE OPTIMIZE OPERATIONS AND REDUCE THE GAP?

### Revenue Optimization Process



## HOW CAN WE BEST BRIDGE THE GAP?

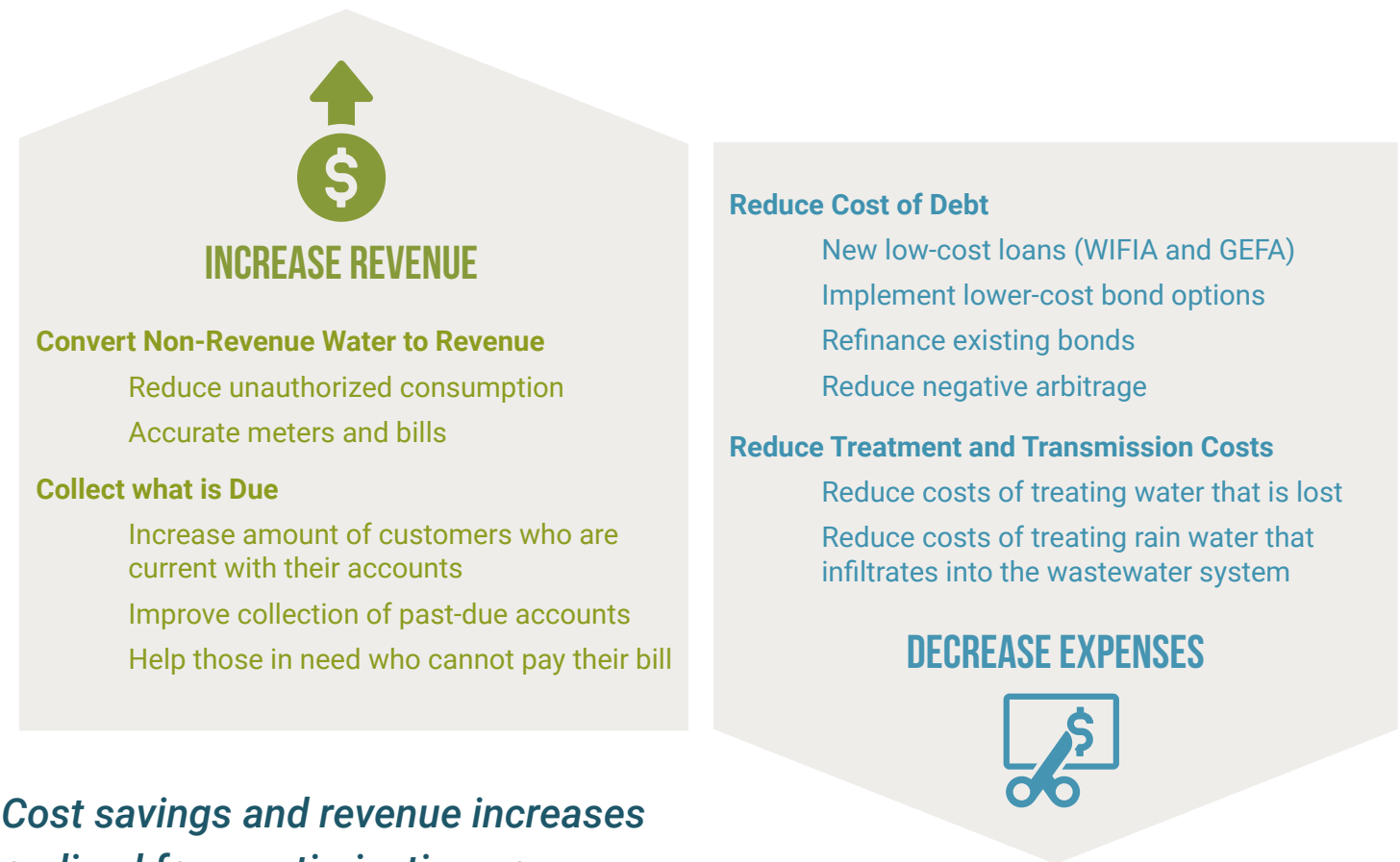


# REVENUE OPTIMIZATION PROCESS

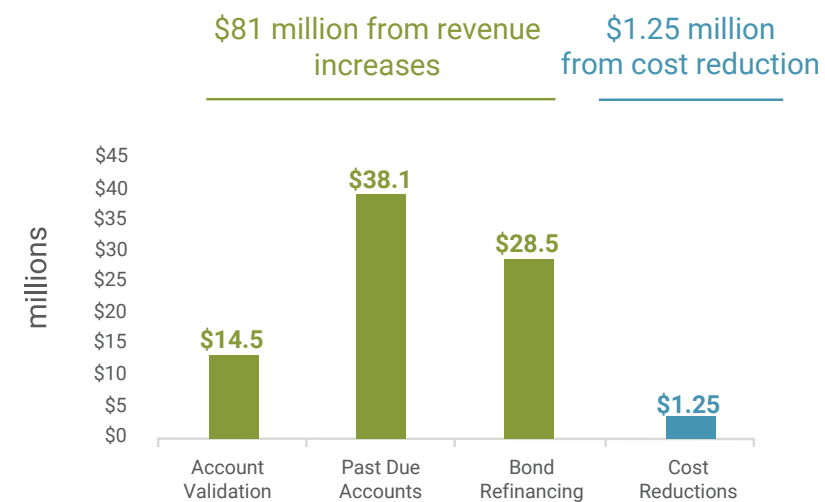
The planned \$2.408 billion (in 2021 dollars) investment in CIP 2021 is a major financial commitment for DeKalb County. The Department of Watershed Management (DWM) has thoroughly examined the revenue needs for the program and put plans in place to minimize costs to its customer base. The County engaged a third-party consultant to prepare a Revenue Sufficiency Analysis for 2021 through 2030, which involved forecasting revenues, expenses, and resulting debt service coverage ratios. This model evaluated anticipated CIP project revenue needs against a mix of potential borrowing sources, including loans from the Georgia Environmental Finance Authority (GEFA) and Water Infrastructure Finance and Innovation Act (WIFIA), as well as traditional revenue bonds.

The Revenue Sufficiency Analysis established the most optimal funding scenario based on probable future revenues and operating costs. The analysis also projected the amount of annual revenue that would need to be generated from rates in combination with other funding sources to meet program fiscal requirements. While the analysis did not determine actual rates or charges for the system, it does provide an estimate of total rate-based revenue needs and projected increases in need for each year of the forecast.

To deliver CIP 2021 with as little financial impact to its customer base as possible, DWM comprehensively reviewed its operations to develop strategies that decrease expenditures and increase revenues.



**Cost savings and revenue increases realized from optimization process**



# DECREASE OPERATING COSTS

DWM is pursuing two key areas to save costs:

- 1 Improving distribution and collection systems to minimize water loss
- 2 Reducing the cost of debt

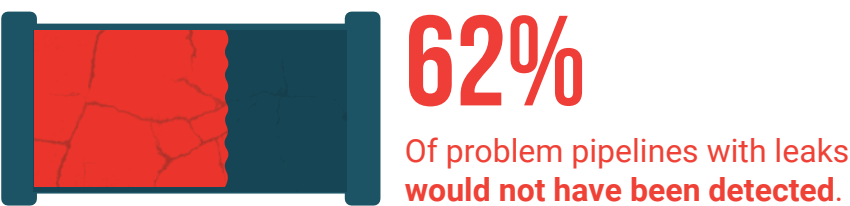
## IMPROVING WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS

The Consent Decree directed the County to address excessive wastewater inflows and infiltration into the system, which DWM must spend resources to treat. After treatment, another costly issue arises: DWM estimates that approximately 29 percent of the water it processes for distribution is lost before it generates revenue for the County, in large part due to leaks. This is substantially greater than industry best practice of 10 percent. CIP 2021 will deliver both short- and long-term investments to directly address these issues, including replacing aging water lines across both distribution and collection systems. These investments will help recover lost water revenues and reduce the cost of treating infiltrated wastewater.

As part of the effort to reduce water losses, DWM initiated a Satellite Leak Detection program in 2020. This state-of-the-art technology enables the County to cost-effectively identify potential leak locations using satellite imagery.

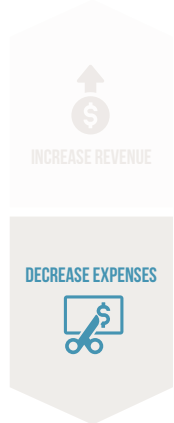
To date, this program has already analyzed over 3,000 miles of pipe in the water distribution system. Based on these findings, DWM physically inspected 49 miles and investigated problem areas using acoustic technology. This investment is proving an essential tool to combat water loss: 62 percent of the leaks identified did not show surface evidence and would not have been detected without this technology.

DWM also engaged a contractor in 2021 to conduct a two-year inspection of the system. The firm is currently evaluating 55,000 water valves and 20,000 fire hydrants to assess their condition and functionality.



49 MILES  
Inspected by DWM workers.

3,000 MILES  
Inspected by satellite.



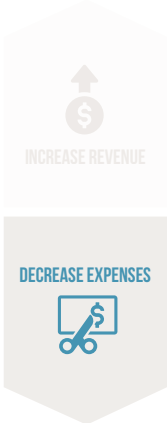
## REDUCING THE COST OF DEBT

CIP 2021 will exceed the cash that the County has on hand and its ability to fund the program through operating income. Following a thorough review of debt options, DWM has identified debt instruments that enable the County to borrow at significantly cheaper borrowing rates. These include:

- WIFIA loans
- GEFA loans
- Issuing new lower cost revenue bonds and refinancing existing debt

The WIFIA and GEFA loan programs—administered through the U.S. Environmental Protection Agency and State of Georgia, respectively—are especially attractive debt instruments that provide significant interest savings. These debt instruments allow for long-term amortization, capitalized interest, and deferred payments; they also eliminate negative arbitrage by delaying interest payments until construction funds are drawn for disbursement.

The County obtained its existing revenue bonds at a time when interest rates were much higher and its debt rating was less attractive. As a result of the current low interest rate environment and successful efforts by the County to improve its bond rating, the County can refinance existing bonds and issue new bonds at much more favorable rates.



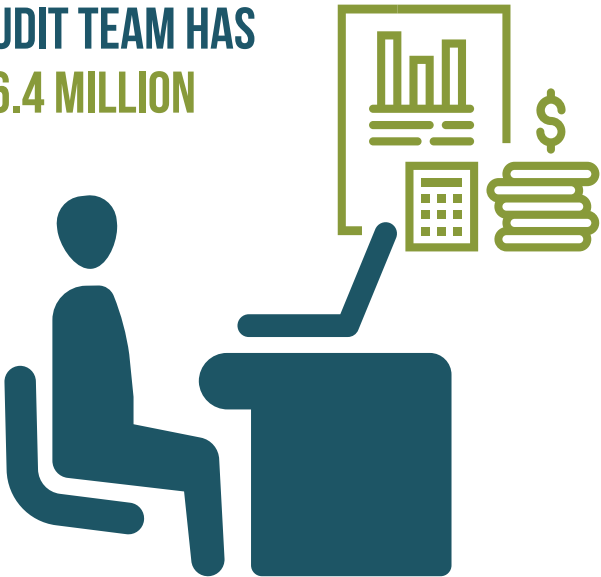
## INCREASE REVENUE WHILE ASSISTING THOSE IN NEED

Mitigating revenue loss presents a complex challenge for the County—a challenge that involves recouping the full costs of water consumption without over-burdening residents who need support. **DWM has identified four strategies that are helping alleviate the root causes of revenue loss and building the capacity of residents to pay their bills.**

### CONVERT UNAUTHORIZED CONSUMPTION INTO REVENUE

The County is contracting with a third-party company to identify commercial users who are underpaying their water bills or not paying at all. The firm is reviewing historical billing information and conducting audits in the field to confirm findings.

**AS OF JANUARY 2022, THE AUDIT TEAM HAS IDENTIFIED AN ESTIMATED \$6.4 MILLION IN ADDITIONAL REVENUE.**



## ASSIST THOSE IN NEED

The County has initiated four initiatives to support residents who need help paying their water bills and repairing leaky plumbing.

### DEKALB CARES PLUMBING REPAIR PROGRAM

Plumbing issues and leaks often result in increased water bills for customers. This is especially burdensome for lower-income customers, who may not have the financial resources to fix leaks or pay increased bills. To put an end to this cycle, the County has created programs to make county grants funded with federal dollars available to those in need and help vulnerable residents obtain repair assistance through the DeKalb Cares Plumbing Repair Program.

### PRIVATE SEWER LATERAL REMEDIATION

Similar to the DeKalb Cares Program, this program provides grants for those in need, allowing for repair assistance to their private sewer systems.

### SEPTIC TO SEWER PROGRAM

This program assists those in need by connecting their home's sewer system to available sewers on nearby streets.

### TENANT-LANDLORD ASSISTANCE PROGRAM

On February 9, 2021, DeKalb County CEO Michael Thurmond announced receipt of a \$21 million federal grant that will provide financial relief to renters threatened by eviction and landlords facing revenue losses due to the Covid-19 pandemic. To fairly and equitably administer the funding, he convened a Tenant-Landlord Assistance Coalition (TLAC) made up of public and non-profit partners. Eligible households will be able to seek financial assistance through this program to pay for rent, rent arrearage, utilities, utility arrearage, and other housing costs related to Covid-19.

## ACCURATE METERS AND BILLS

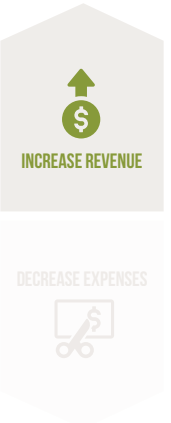
In 2016, there was a dramatic increase in the amount of metering and billing issues that customers escalated to the County, resulting in significant public outrage and negative press. In response, County leadership implemented a disconnection moratorium in 2017 that prohibited DWM from shutting off water and sewer services for customers who did not pay their bills.

Recognizing that the moratorium was not a sustainable solution, the County launched the New Day Project to identify and address the root causes of billing issues. As a part of this initiative, DWM has upgraded or replaced nearly 100,000 meters, modernized the work order management system, researched and corrected multiplier issues, enhanced account verification, and updated all meter information within the billing system to earn back public trust in the accuracy of its water bills.

On September 1, 2021, the DWM CEO and Board of Commissioners lifted the disconnection moratorium and began a process for re-engaging customers who had been disengaged by previous mismanagement.



Process to support lifting moratorium.



JULY 2021

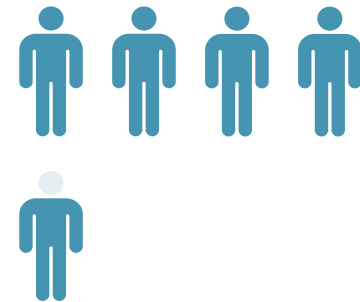


13,325 CUSTOMERS  
Did not make payments for  
six or more billing cycles

1 icon = 1,000 customers

CUSTOMER  
RE-ENGAGEMENT  
INITIATIVES

DECEMBER 2021



4,900 CUSTOMERS  
Did not make payments for  
six or more billing cycles

## INCREASE CURRENT ACCOUNTS

Stemming from the disconnection moratorium, the County had seen a substantial rise in the number of customers who were not current on their water bills. In early 2021, the rate of customers who were up-to-date on their accounts was 86 percent—well below industry best practice (98%) and median peers (90%), as well as DWM's pre-moratorium level (95%). As of July 2021, 13,325 customers had not made any payments to the County for at least six billing cycles.

In 2021, DWM began a comprehensive effort to re-engage customers who had fallen behind. Initiatives included offering repayment plans and providing special considerations for those adversely affected by Covid-19. The County also added more call center staff and began proactively calling customers with past due balances. These efforts have yielded exceptional outcomes—as of December 2021, the number of customers who had not made any payments for at least six billing cycles dropped to 4,900.

DEKALB COUNTY  
DWM CIP 2021



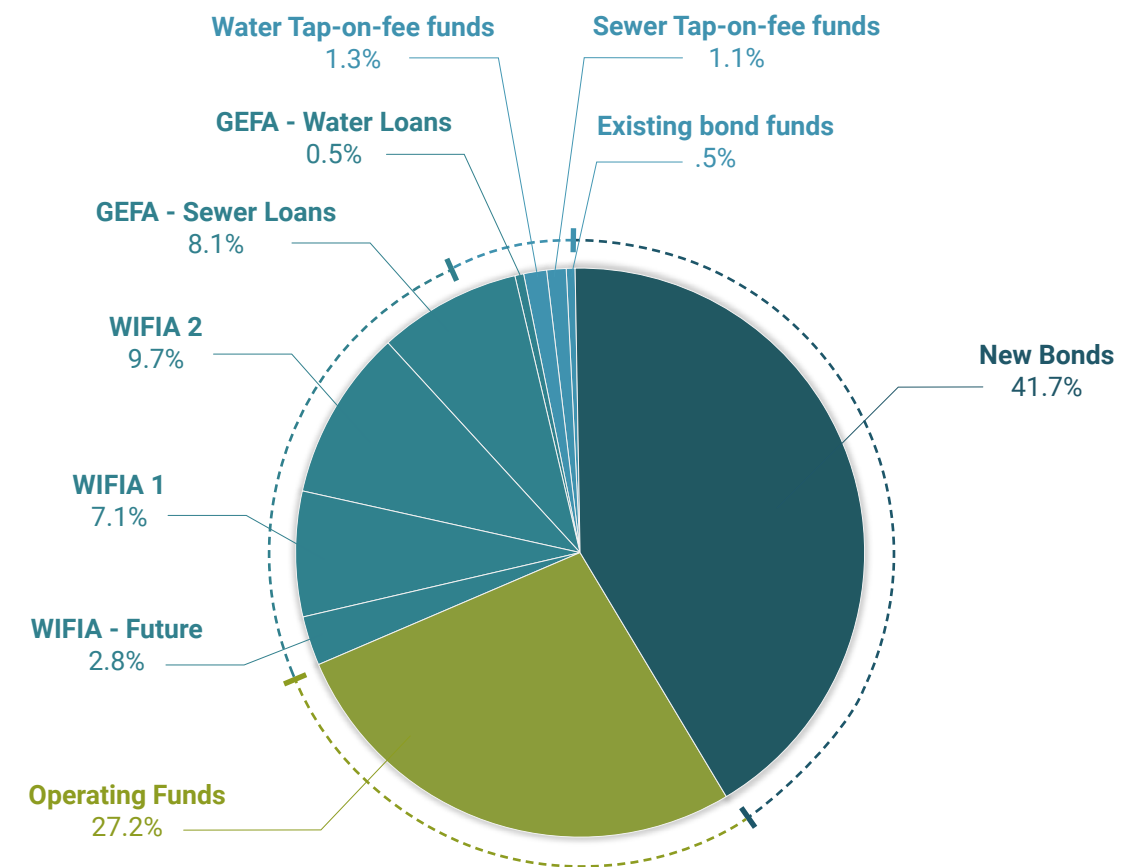
INCREASE REVENUE

DECREASE EXPENSES



## OUTCOMES OF REVENUE OPTIMIZATION

As a result of actions to reduce expenses, increase revenues, and re-engage customers, the County has been able to assemble a funding plan for CIP 2021 that requires lower rate increases than originally anticipated and takes advantage of low-cost government loans. As illustrated below, the funding stack for the program will include County bonds, federal debt, water and sewer tap-on fees, and proceeds from rates.



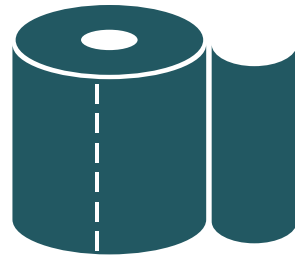
Funding for CIP 2021 will be made up of operating revenues and fees; low-cost debt instruments from state and federal programs; and new and refinanced county debt.

DEKALB COUNTY  
DWM CIP 2021

### REASONABLE RATE INCREASES

Visionary revenue optimization measures have enabled DWM to defer and reduce anticipated rate increases to fund needed investments. In 2018, necessary rate increases were projected at 6 to 10 percent beginning in 2019; now, these increases are forecast at 6 percent beginning in 2022. These would be the first rate increases since January 2014.

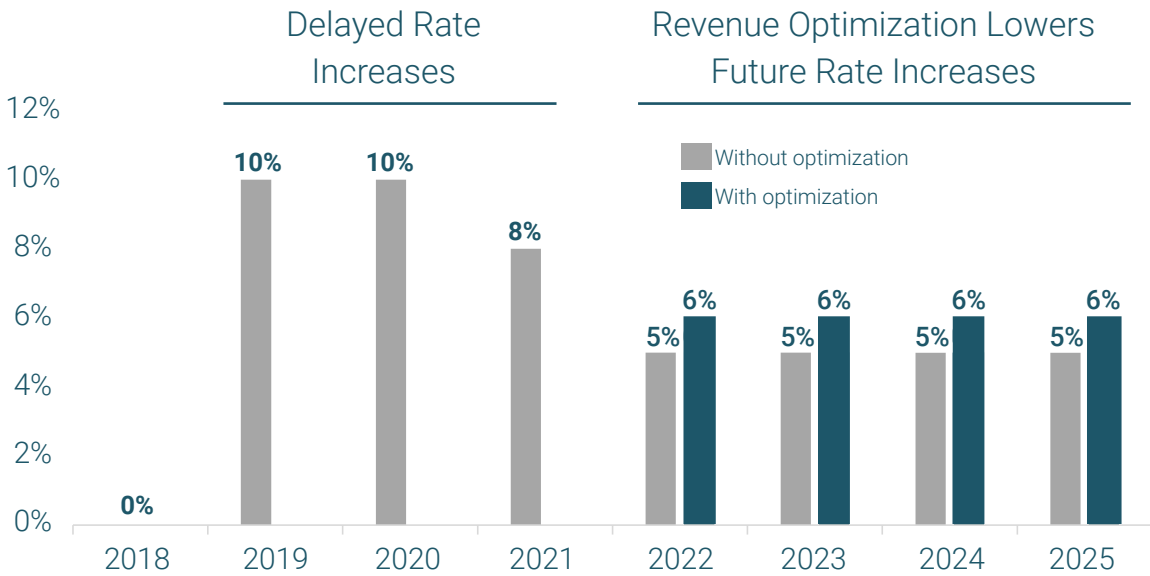
THE AVERAGE  
MONTHLY BILL  
WILL INCREASE  
BY \$6-\$7 —  
LESS THAN A  
6-PACK OF  
TOILET PAPER



EVEN WITH  
INCREASES, \$1  
WILL BUY 50  
GALLONS OF WATER  
IN 2025. THIS IS  
EQUAL TO 400  
16-OZ WATER  
BOTTLES.



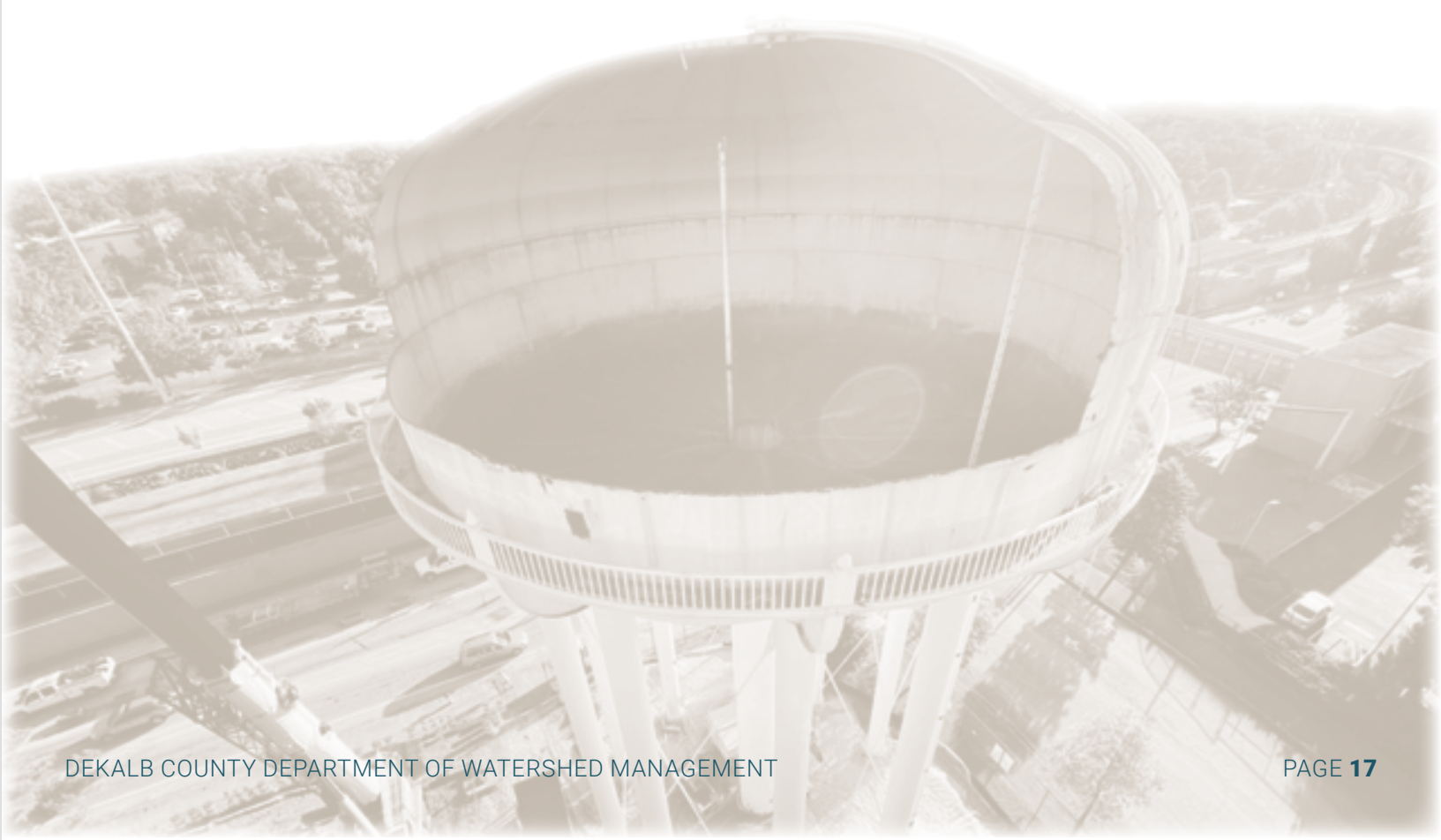
Proposed Rate Increases



### NEW DEBT VEHICLES

The Revenue Sufficiency Analysis indicated that income from rates and fees will be able to fund an estimated 29 percent of capital needs. The remaining 71 percent will come from new and refinanced debt. The majority of future debt for CIP 2021 will draw from two WIFIA loan programs and GEFA sources. The County has secured as much of these debt instruments as possible to take advantage of their especially attractive lending terms and low interest rates.

The balance of debt funding will come from new bonds. In 2022, the County will need to issue the first round of these bonds, totaling approximately \$250 million, and refinance its existing Series 2021 Bonds at much more favorable rates.



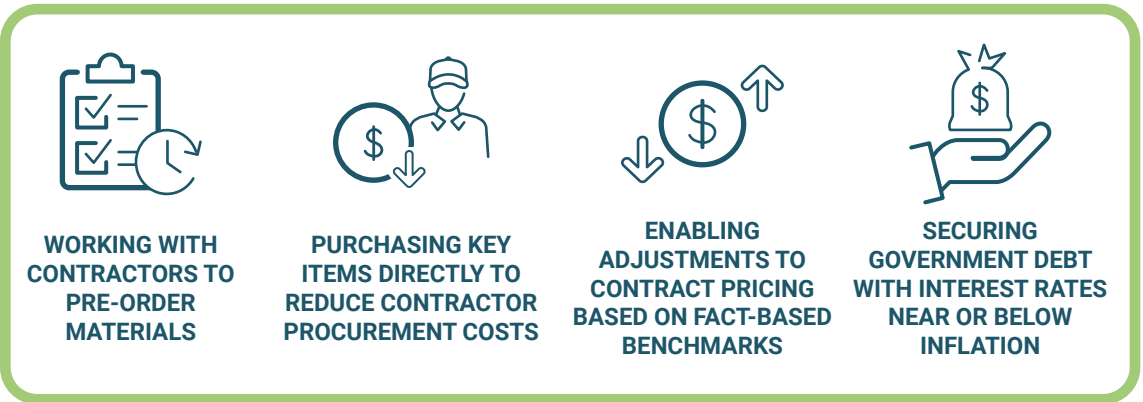
## PROACTIVELY ADDRESSING INFLATION AND SUPPLY CHAIN CONSTRAINTS

Inflationary pressures and supply chain constraints are adversely affecting capital improvement programs around the country. DWM is taking proactive steps to reduce these risks and enable CIP 2021 projects to move forward with limited impacts to schedules and budgets.

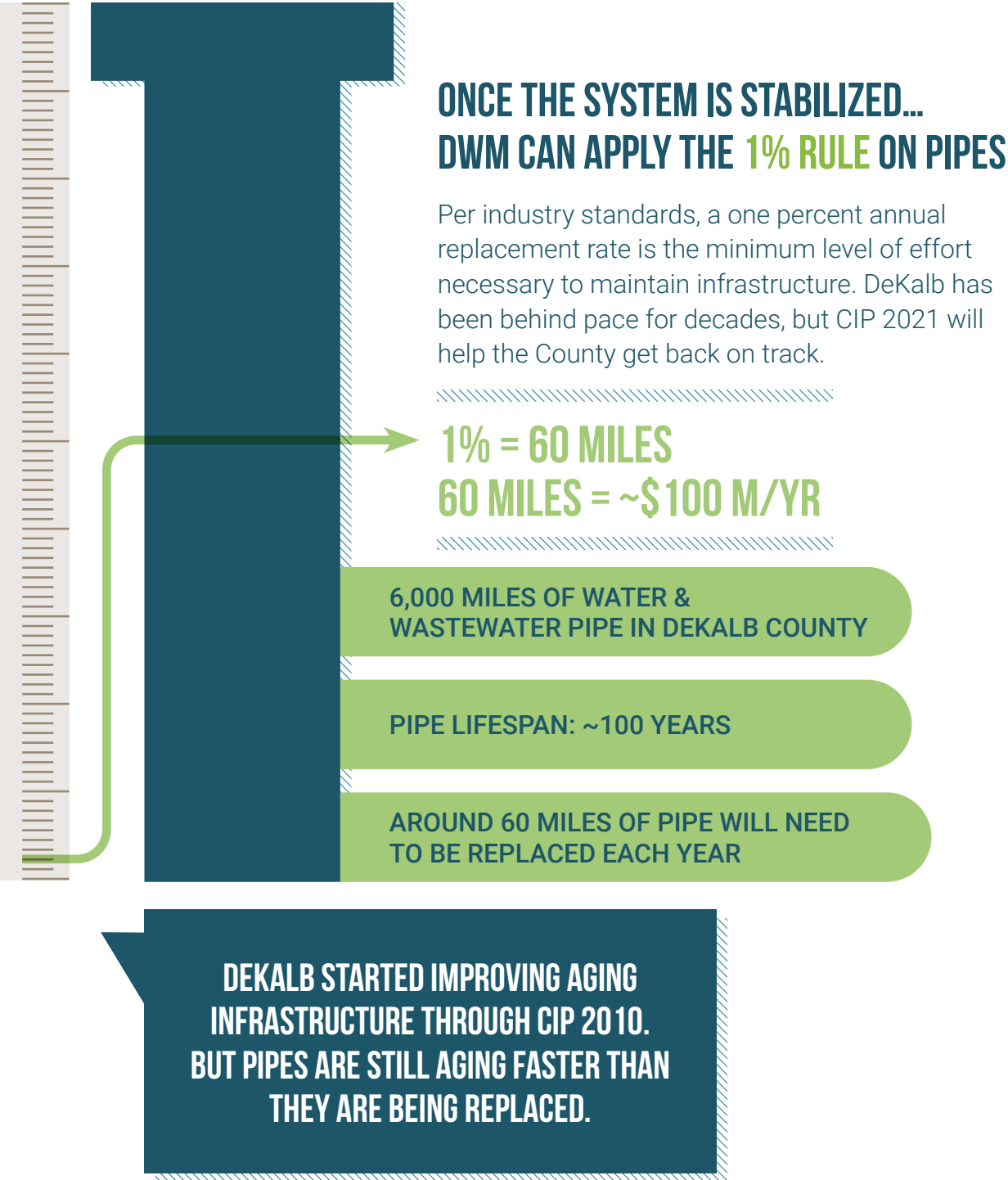
### *Inflationary and Supply Chain Impacts*

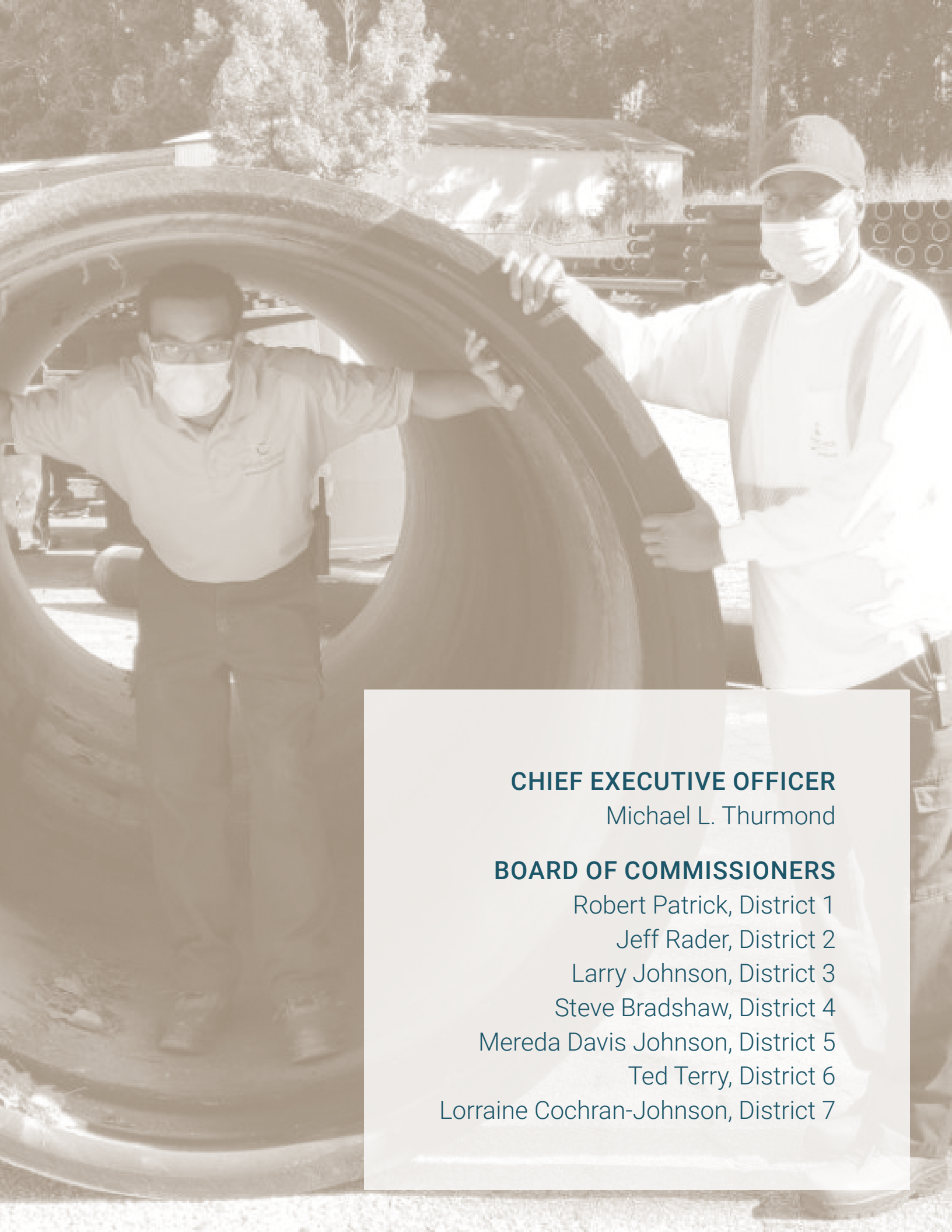


### *Proactive County Response*



## MOVING TO SUSTAINABLE SYSTEM REPLACEMENT





## **CHIEF EXECUTIVE OFFICER**

Michael L. Thurmond

## **BOARD OF COMMISSIONERS**

Robert Patrick, District 1

Jeff Rader, District 2

Larry Johnson, District 3

Steve Bradshaw, District 4

Mereda Davis Johnson, District 5

Ted Terry, District 6

Lorraine Cochran-Johnson, District 7