

A DECADE OF RENEWAL 2017-2027



**DeKalb County CEO
Michael L. Thurmond**

October 19, 2020

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1. CONTEXT

How did we get here?



DEKALB COUNTY GOVERNMENT
WATER DEPARTMENT
**NOTICE OF A SANITARY
SEWER SPILL**

THE DATE THE SPILL OCCURRED: 02-13-2020

THE SPILL LOCATION: 2711 Foyles Dr

THE CAUSE OF THE SPILL: I & T

THE ESTIMATED VOLUME OF THE SPILL: 2275

RECEIVING STREAM: Shoal Creek

RECOMMENDED ACTION TAKEN: Wiped until cars

“A New Day”

“To comply with the letter and spirit of the Consent Decree and support economic development, I have initiated a full-scale review of all Watershed Department policies, assumptions, maintenance programs and construction schedules.”

“I have no fears or doubts. We will be successful. This is not a one-person job. It’s too big for one person. It’s too complex for one person. It’s too demanding for one person. But by working together, there is nothing that we can’t accomplish.”

State of the County Address
DeKalb County CEO Michael L. Thurmond
March 30, 2017

Management Dysfunction and Poor Communication

Leadership 2013-2015

- ▶ Lack of consistent administrative oversight
- ▶ No consensus among the Governing Authority
- ▶ Over two years to hire program managers

Department of Watershed Management

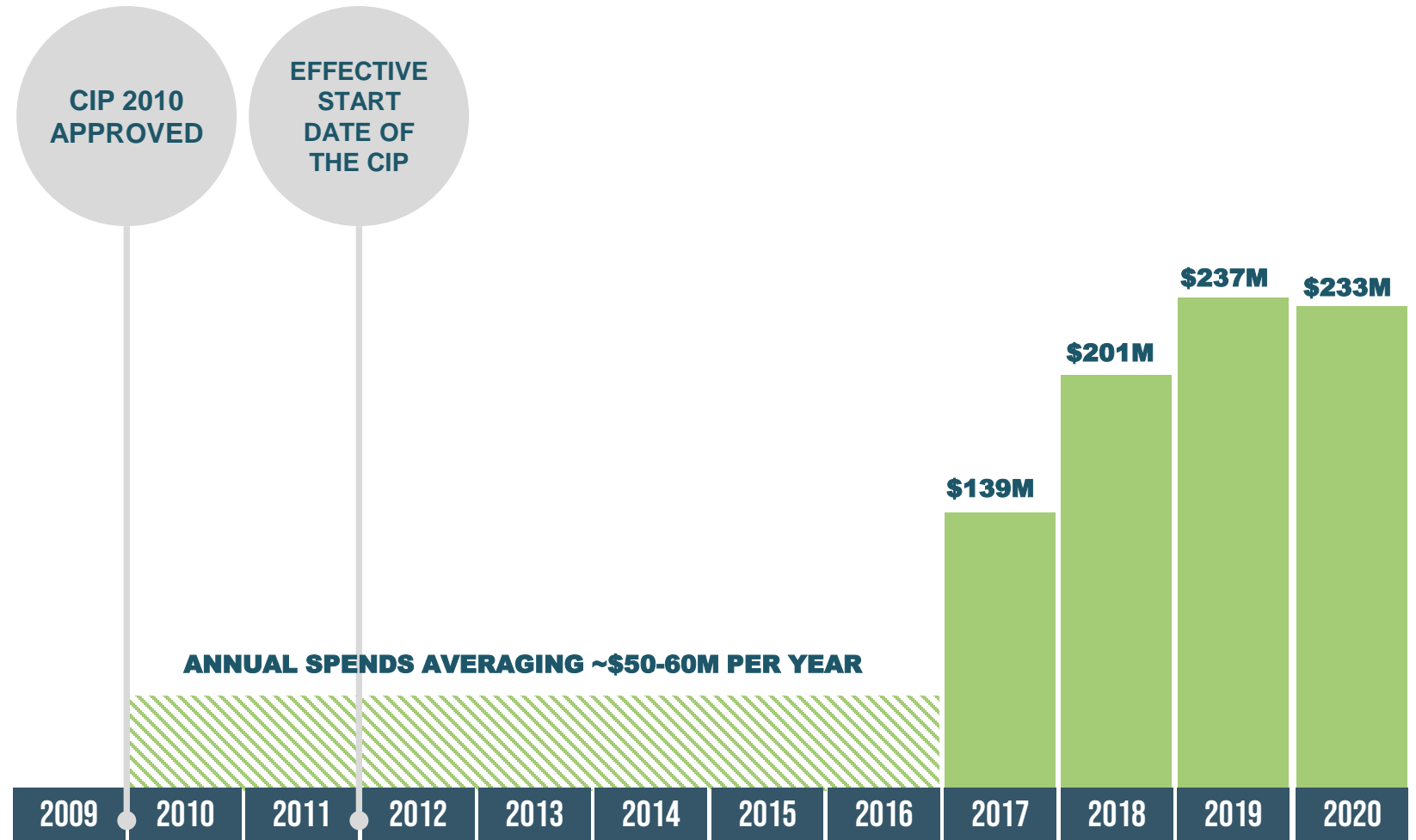
- ▶ Missing key maintenance contracts
- ▶ Key staff losses
- ▶ Insufficient human and material resources
- ▶ Silos between departments, divisions and consultants

Bottom Line

- Numerous communication and management deficiencies resulting in delays in:
- ▶ Execution of needed contracts and rehabilitation work
 - ▶ Completing the models needed for use in capacity determinations

2010 Capital Improvement Plan (CIP) : A Missed Opportunity

- ▶ Consent Decree and CIP Program Managers not contracted until 2014 and 2015, respectively
- ▶ Failed to complete the 2010 CIP during the planned 5 years



A blue-tinted photograph of a construction site. In the foreground, a deep trench is visible with several large pipes laid out along its length. To the left, a large piece of machinery, possibly a CAT excavator, is partially visible. In the middle ground, several workers wearing hard hats and safety vests are engaged in various tasks. One worker is standing near a large pipe, while others are further back near a truck and other equipment. The background shows a residential area with trees and houses. The overall scene depicts an active construction project in a neighborhood.

2. PIVOT

What has been accomplished?

Maintenance Activities Completed

- ▶ 2910 tons of debris removed via cleaning
- ▶ 6,315 creek crossings inspected
- ▶ 435 miles of sewer pipes treated for root control
- ▶ 2,992 vented manhole covers replaced
- ▶ 20 million square feet of easement cleared

Rehabilitation Activities Completed


- ▶ 133 miles of pipe lining
- ▶ Spot repairs on 28 miles
- ▶ 10 miles of pipe replacement
- ▶ 35 miles of small diameter sewer pipe upsizing



3. WHAT IS NEXT?

- **Consent Decree Modification**
- **Funding**
- **Trunk Sewer Lines**





CONSENT DECREE MODIFICATION

Consent Decree Modification Details

KEY CHANGES

- ▶ Increased oversight by and enhanced reporting to EPA/EPD and the federal court
- ▶ 7.5-year extension for completion of rehabilitation in the priority sewer areas—an aggressive but achievable time frame
- ▶ Implementation and use of dynamic models
- ▶ Inclusion of 103 repeat spill sites with a requirement that the majority be addressed within 4 years

Consent Decree Modification Details

KEY CHANGES

- ▶ Flexibility in allowing new connections with the addition of a Capacity Assurance Program
- ▶ Allowing credit for completed project phases means development can occur in Snapfinger basin before the end of the Consent Decree
- ▶ Increased stipulated penalties covering more areas moving forward
- ▶ Payment of a civil penalty of \$1,047,000



LESS EXPENSIVE FUNDING OPTIONS

Less Expensive Funding Options

Water Infrastructure Finance and Innovation Act (WIFIA) loan program through U.S. EPA

- ▶ Amount: \$265 Million
- ▶ Interest Rate: 1.44%

Georgia Environmental Finance Authority (GEFA)

- ▶ 2020 Amount: \$50M Sewer Projects
- ▶ 2021 Amount: \$50M Sewer Projects
- ▶ Interest Rate (blended): 1.55%

A blue-tinted photograph of a construction site for sewer lines. In the foreground, a deep trench is dug into the ground, with several large, dark pipes laid out along its length. To the right, a worker in a hard hat and safety vest stands near a large, horizontal pipe section. In the background, a yellow CAT excavator is visible on the left, and another worker is seen further back. The scene is set outdoors with trees and a street sign visible in the distance.

TRUNK SEWER LINES INITIATIVES 2020-2027

What is a trunk sewer?

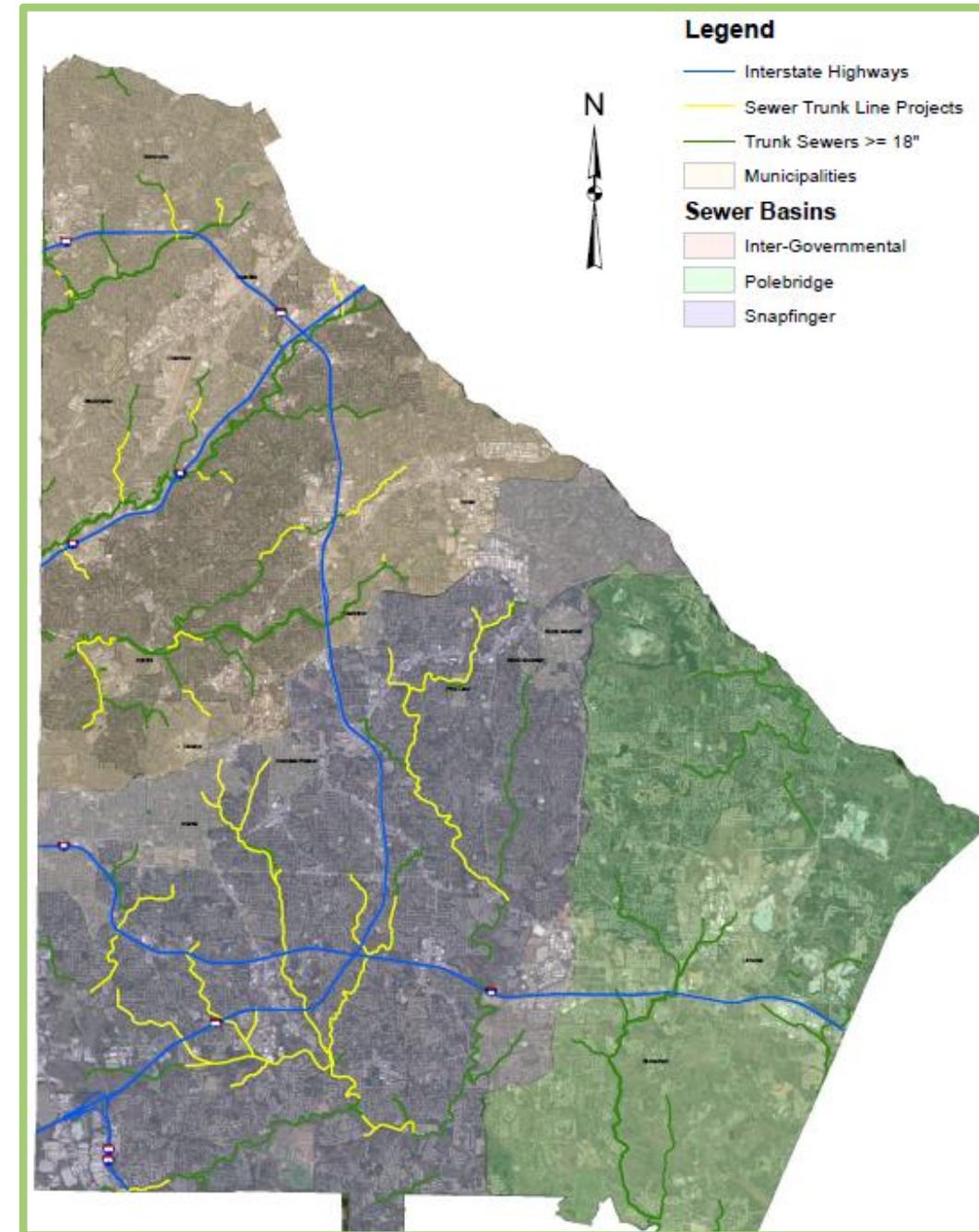
- ▶ The county's trunk sewer lines range from 30 inches to 72 inches in diameter.
- ▶ Trunk sewers receive wastewater from many tributary feeder branch sewer lines.
- ▶ They convey the combined flows to the treatment plants.



Repair, Replace, or Install 59 miles of New Trunk Sewer Lines

SEWER BASIN	LENGTH (MILES)
Snapfinger	41
Pole Bridge	3
South Fork Peachtree Creek	10
North Fork Peachtree Creek	4
Nancy Creek	1
TOTAL	59

Greatest needs in the Snapfinger Basin (~41 miles)

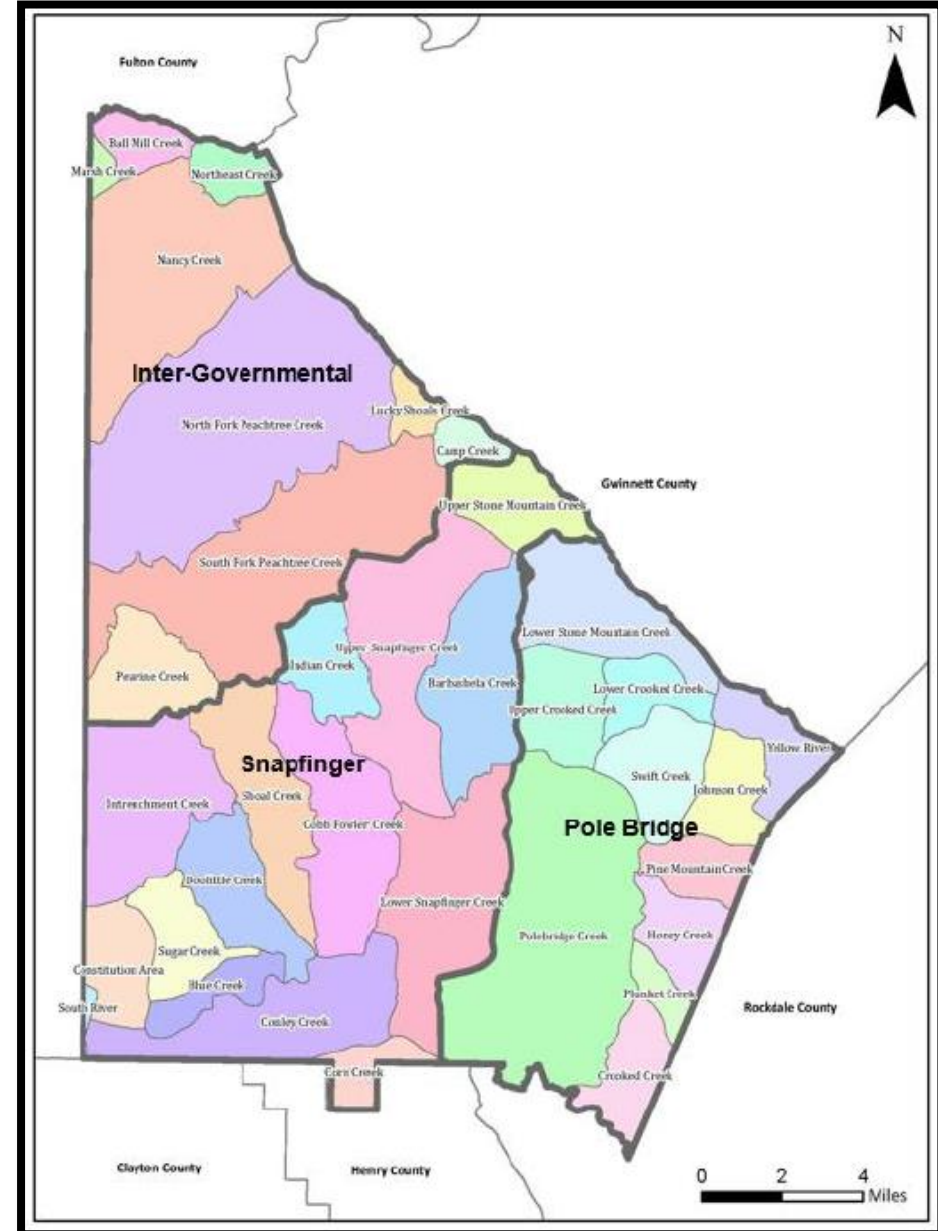




SNAPPINGER SEWER LINES INITIATIVES 2020-2027

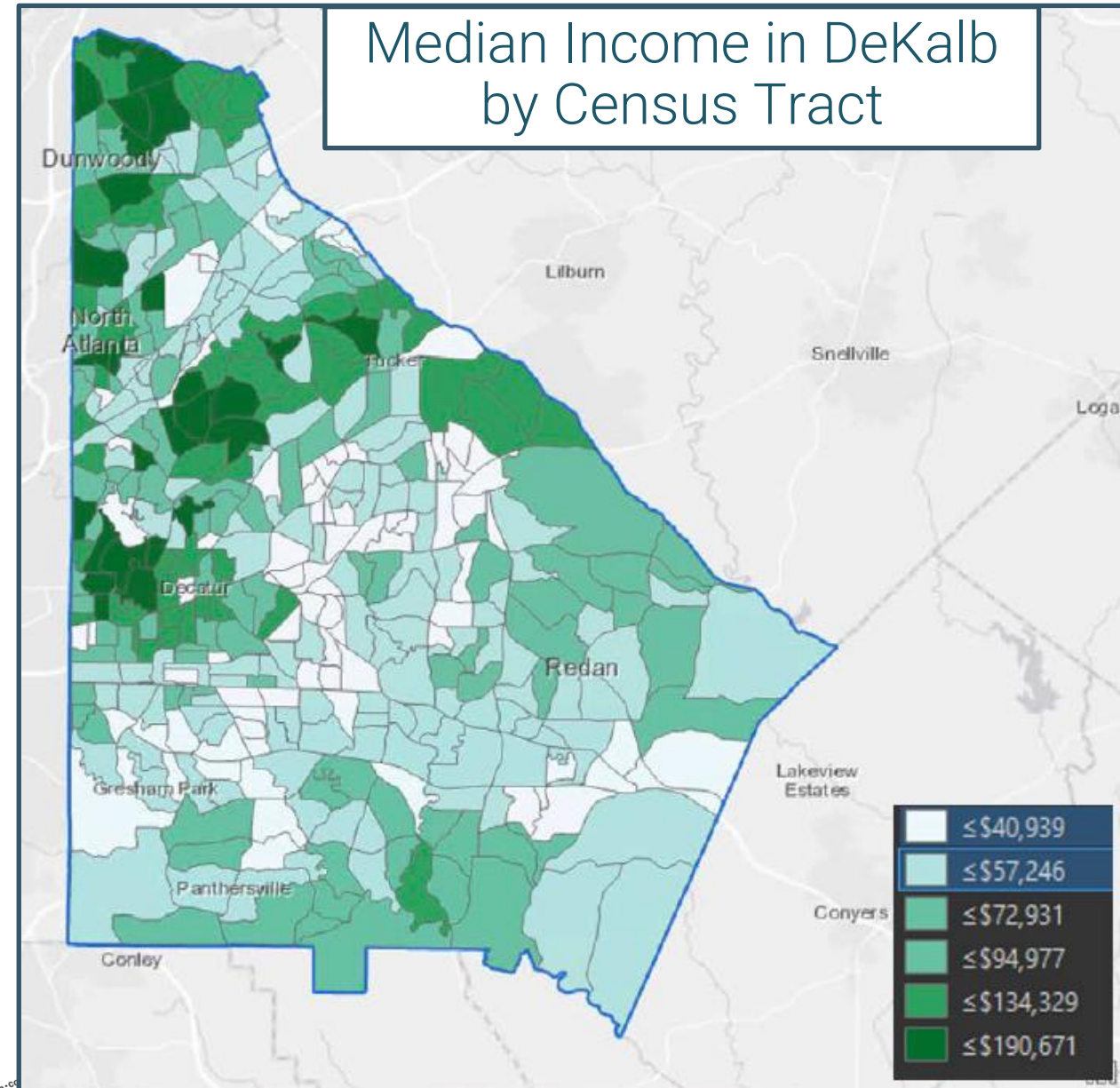
DeKalb County Has 3 Sewer Basins

- ▶ Intergovernmental
- ▶ Snapfinger
- ▶ Pole Bridge



Snapfinger Basin Characteristics

- ▶ The oldest sewers in the Snapfinger Basin date back to the 1930s
- ▶ Lower median income
- ▶ The majority of the county's 12 Opportunity Zones (per Federal Opportunity Zone Program)



Snapfinger Basin

- ▶ Remnants of Hurricane Delta led to:
 - ▶ 30 total spills countywide
 - ▶ 22 of the county's 30 spills in the occurring in the Snapfinger Basin (73%)
 - ▶ 6.6 million gallons of the county's 7.3 million gallons (91%) of total spills occurring in the Snapfinger Basin
- ▶ Of the 24 million gallons spilled in the county from January through September 2020, the Snapfinger Basin experienced 21.8 million gallons, or 91%, of the total spill volume.
- ▶ The Snapfinger basin includes 47 of the 103 repeat spill sites included in the Consent Decree Modification.



Snapfinger Basin Project Example

Part of the Snapfinger Basin Project includes the Shoal Creek Trunk Sewer Upgrade

Initial studies and procurement started

Size

- 10 miles of major trunk sewer capacity projects
- Up to equivalent of 72-inch main
- Storage tanks up to 20 million gallons

Permit Challenges

- 3 highway crossings (Memorial Dr., Glenwood Rd., Flat Shoals Pkwy.)
- 2 interstate crossings (I-20 and I-285)
- Mostly adjacent to Shoal Creek and South River

126 properties on main Shoal Creek trunk alone

Major Projects



- ▶ Major projects with new pipe sizes potentially up to 72-inch diameter
- ▶ Two new sewer storage tanks totaling 25 million gallons



COSTS

Trunk Sewer Project Cost Estimates

Project Type	Snapfinger Basin	Whole County
Trunk Sewer Pipe Capacity	\$193 million	\$268 million
Sewer Tank Storage	\$170 million	\$170 million
TOTAL	\$363 million	\$438 million



BENEFITS

Environmental Benefits

- ▶ The county understands the connection between a high quality sanitary sewer system and a healthy environment.
- ▶ Eliminating repeat sewer spills from entering the county's rivers and streams is key to improving our environment.
- ▶ The ecological health of our water resources benefits the environment and our citizens.



BENEFITS

JOB CREATION

Priority Area Rehab and Trunk Sewer Projects will:

- ▶ Create an estimated 1,891 jobs from 2021 through 2026.

GROWTH AND DEVELOPMENT

New Connections

- ▶ Since 2017, there have been 1,551 requests to connect to the sewer system
- ▶ 379 are pending approval
- ▶ These represent delays to new commercial developments.

PLANNED GROWTH

By 2050:

- ▶ Population is expected to grow from 750,000 in 2020 to 900,000.
- ▶ Workforce is expected to grow from 425,000 in 2020 to 640,000.

QUESTIONS?

