The Challenge/Opportunity December 19, 2017

Presented by: Michael L. Thurmond Chief Executive Officer





A record 6.4 million gallons of sewage spilled at Snapfinger Creek on Aug. 23, 2017.

How Did This Happen?

Management dysfunction

Lack of oversight

Lack of communication





Our Response

"In order 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 oneperson 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."

> Michael L. Thurmond Chief Executive Officer State of the County March 31, 2017



Why is This Important?

- Public health and safety
- Protecting environmental resources
- Economic growth



DeKalb County crews work to remove a large tree that caused the Snapfinger Creek spill in August 2017.

Consent Decree Overview

Presented by: Ted Rhinehart Deputy Chief Operating Officer, Infrastructure Group





Consent Decree Overview

- In 2011, DeKalb County reached a Clean Water Act settlement in the form of a Consent Decree with the U.S. Environmental Protection Agency and the Georgia Environmental Protection Division.
- The primary focus of the Consent Decree is to do our collective best effort to eliminate sanitary sewer overflows.
- The 8.5-year Consent Decree began in December 2011 and ends June 2020.
- The Consent Decree calls for <u>significant levels</u> of sewer system inspection, assessment, rehabilitation and repair, along with relief sewers for some known areas with capacity issues.
- The Consent Decree also calls for development of a hydraulic model:
 - **1.** To plan capital projects to ensure adequate capacity.
 - 2. To evaluate new connections to the system to ensure adequate capacity for customers.

Hydraulic Model Update

Presented by: Matthew Welch Supervising County Attorney





Hydraulic Model Update

- <u>Past</u>: <u>Preliminary hydraulic model</u> for capital project planning was used inappropriately for development plan review.
- <u>Present</u>: Interim procedures for evaluating capacity requests adopted August 15, 2017.
 - Interim procedures are approved for use until December 20, 2017.
 - Interim procedures utilize the dynamic dry weather model, real world conditions and site-specific flow monitoring.
 - Interim procedures resulted in the reduction of capacity backlog requests and GIS updates to the model.



Hydraulic Model Update

DeKalb County will meet the December 20, 2017 deadline to begin certification of new connections and use of a fully developed hydraulic model in the certification process.



- <u>Short-term Solution</u>: Revised interim procedures for evaluating capacity requests to be implemented December 20, 2017.
 - Approved for use until either a formal Capacity Assurance
 Program is added to the Consent Decree or the system-wide
 dynamic wet weather model is finalized.
 - The revised interim program for review of capacity requests was submitted to EPA/EPD on December 18, 2017.



- <u>Short-term Solution</u>: Revised interim procedures for evaluating capacity requests to be implemented December 20, 2017.
 - Key features include:
 - All new and increased connections will be certified by a professional engineer licensed in Georgia.
 - Use of the fully developed dynamic dry weather and steady state (static) wet weather models.
 - Real world conditions are the primary consideration.
 - Historical Spill Data
 - Flow Monitoring Data



- <u>Short-term Solution</u>: Revised interim procedures for evaluating capacity requests to be implemented December 20, 2017.
 - Allows for alternative sewer action plans where necessary.
 - Examples include:
 - Collaboration between developers within same sewershed
 - Private sector financing of onsite and offsite improvements



- Long-term Solution: Final procedures for evaluating capacity requests to be developed.
 - Requires development of a system-wide dynamic wet weather model (18-24 month process):
 - Data collection (1 year)
 - Perform site investigations for flow meter and rain gauge installations
 - Deploy flow meters and rain gauges
 - Collect flow and rainfall data
 - Data analysis and model development (6 months 1 year)
 - More closely aligned with the original intent of the Consent Decree



- Long-term Solution: Final procedures for evaluating capacity requests to be developed.
 - Potential amendment to the Consent Decree to include a formal Capacity Assurance Program in 2018.
 - To be developed simultaneously with the dynamic wet weather model.
 - County and its consultants will work cooperatively with EPA/EPD to develop the program and to ensure it meets best practices.

Progress to Date

Presented by: Darren Eastall Consent Decree Program Administrator





Progress to Date

Cleaning and Repairs

- Sewer cleaning and inspections
 - Cleaned 220 miles of sewers. The large diameter mains are being cleaned through priority areas and Major Capacity Restoration contracts.
 - Removed 5.1 tons of debris.
 - Completed 1,821 stream crossing inspections.



Progress to Date

Cleaning and Repairs

- Projects:
 - Lift Stations completed in 2015 & 2016
 - Fairington
 - Scarborough
 - Pepperwood
 - Hammermill 3
 - Royal Atlanta 1
 - Mountain Industrial
 - Perimeter Park
 - Columbia
 - Sewer Upgrades completed in 2015 & 2016
 - Superior Avenue
 - Stonecrest Sewers



Progress to Date (continued)

Cleaning and Repairs

- Replacing manhole covers
 - Replaced 1,448 vented manhole covers to reduce the amount of rainfall inflow into the sewer system

Improving Transparency and Communication

- Renewed an emphasis on transparency and communication with citizens regarding progress on the Consent Decree.
- Initiated regular meetings with county leadership and expanded Consent Decree team to enhance communication between the administration and watershed management, law, human resources, IT, finance and planning departments.



Progress to Date (continued)

Economic Development

- New construction and capacity
 - County started two-year project with AECOM to complete water and sewer master plans. Project will provide longer-term predictability and clarity for economic development and planning purposes and water and sewer system capacity.
- Status of pending applications
 - As of August 2017, we had 481 total applications; 314 have been approved and 167 are pending final review.
 - Since August 2017, we have had 177 additional applications; 57 have been approved and 120 are pending final review.

Sanitary Sewer Overflows

Presented by: Darren Eastall Consent Decree Program Administrator







Sanitary Sewer Overflows

What is a sanitary sewer overflow?

A <u>building backup</u> is any discharge of wastewater from the county sewer system that occurs inside and does not leave the building. This backup is caused by a sewer system blockage and enters the building through a connection (toilet, shower drain, sink).

An <u>overflow</u> is any discharge of wastewater from the sewer system that does not enter into a waterway or drainage system.

A <u>spill</u> is any discharge of wastewater from the sewer system that enters into a waterway (creek, river, stream, pond, lake) or into the stormwater drainage system (catch basin, grate). The discharge can exit the system from a manhole, cleanout, lift station, broken pipe, or drain attached to the sewer system.

We Need Your Help

Presented by: Darren Eastall Consent Decree Program Administrator





We Need Your Help

Prevent FOG

- FOG (fats, oils and grease) is one of the leading causes of sewer overflows.
- 60 percent of sewer overflows in DeKalb County are caused by residents and businesses pouring FOG down sinks and drains.

Keeping DeKalb Pipes Clean

- Never pour FOG down drains.
- Pour cooled fats, oils and grease into a sealed container and place it in the garbage.
- Use a paper towel to clean excess grease and place greasy towels in trash.
- Residents and businesses with garbage disposals should also place food scraps into the trash.

Report Spills

Immediately report spills Department of Watershed Management 770-270-6243

Dekalbwaterops@dekalbcountyga.gov









Our Promise

Presented by: Michael L. Thurmond Chief Executive Officer





Our Promise

- Former practices are unacceptable and will not be allowed to continue.
- The county has learned from past mistakes but won't dwell on them.



Questions?