

CONSENT DECREE SECOND PUBLIC UPDATE

Root Cause Analysis

April 10, 2018

Presented by: Michael L. Thurmond
Chief Executive Officer



DeKalb County
G E O R G I A



On Aug. 23, 2017, a record 6.4 million gallons of sewage spilled into Snapfinger Creek. The spill was caused by a 16-inch-diameter tree growing out of a concrete junction box.

The mass turnover of [personnel] exposed the absence of a discreet but critical fail-safe. Written standard operating procedures were all but nonexistent. DeKalb had emerged as an urbanized juggernaut but county departments were mired in post-World War II operational mindsets. Ground zero in this public debacle was the much-maligned Department of Watershed Management.

**Michael L. Thurmond
Chief Executive Officer
Excerpted from
The Atlanta Journal-Constitution, Op-Ed
March 18, 2018**

CONSENT DECREE SECOND PUBLIC UPDATE

Consent Decree Basics

Presented by: Michael L. Thurmond
Chief Executive Officer



DeKalb County
G E O R G I A

What is DeKalb County's Consent Decree?

- DeKalb County's Consent Decree is an enforcement action initiated in 2009 by the Environmental Protection Agency (EPA) and Environmental Protection Division (EPD) against DeKalb County because of its extensive history of sanitary sewer overflows.
- In 2011, the Consent Decree was settled, entered in federal court and is court-enforceable.
- The Consent Decree:
 - Requires the county to clean, repair, enlarge and maintain its sanitary sewer pipes so sewer overflows are reduced and eliminated.
 - Requires that those specified actions be completed during the Consent Decree period which began in December 2011 and runs through June 2020.
- The county is working to implement the required elements of the Consent Decree with oversight and input from the EPA and Georgia EPD.



Consent Decree Progress Delayed

During the three year period between 2011-14, DeKalb County failed to select a Consent Decree program manager. Therefore several programs, maintenance, assessment and rehabilitation projects were not completed.

DeKalb County's Consent Decree Programs

These programs represent an established framework for local governments to identify and incorporate widely-accepted wastewater industry practices to:

- Better manage, operate and maintain the sanitary sewer system
- Investigate capacity limited areas of the system
- Respond to sanitary sewer overflow events

DeKalb County's Consent Decree Programs

1. Fats, Oil and Grease Management Program
2. Financial Analysis Program
3. Sewer Mapping Program
4. Flow and Rainfall Monitoring Program
5. Hydraulic Model Program
6. Infrastructure Acquisitions Program
7. Maintenance Management System Program
8. Ongoing Sewer Assessment and Rehabilitation Program (OSARP)
9. Priority Areas Assessment and Rehabilitation Program (PASARP)
10. System Training Program
11. Contingency and Emergency Response Plan
12. Supplemental Environmental Project (SEP)

Four of the twelve program were developed and approved but not fully implemented.

How Did We Go Wrong?

Political Interference

Political interference in Watershed operations, lack of appropriate oversight, allegations of corruption/favoritism and lack of transparency

Contributing Factors:

- Lost permanent CEO leadership in 2013
- Six member Board of Commissioners from 2013-15
- Political turmoil impeded the development of a governing consensus
- Selection of a consent decree program manager delayed three years; Contract approvals and renewals delayed
- Failed to budget for staff and resources needed to develop and implement several Consent Decree programs

How Did We Go Wrong?

Administrative Errors

Absence of Standard Operating Procedures and Protocols

Contributing Factors:

- Seven different Watershed directors over a ten year period
- Failed to address high personnel turnover
- Failed to develop or keep in place critical maintenance contracts (e.g., root control and easement clearing)
- Bureaucratic silos/ turf guarding between departments, divisions and private consultants
- Misclassification of sanitary sewer overflows
- Misapplication of hydraulic model and no standard operating procedures for new sewer connections

Getting Back on Track – 2017

- CEO Thurmond directly engaged Consent Decree issues via regularly scheduled meetings.
- Enhanced coordination and communication between executive leadership, Watershed, Law, Human Resources, IT, Finance, Purchasing, Communications, and the Planning Department.
- Reorganized Watershed Management to elevate the importance of the Consent Decree within the department. Consent Decree Administrator now reports directly to the Watershed Director.
- Addressed Watershed staffing issues by increasing personnel budget and hiring additional professional engineers, modelers, database analysts, flow monitoring personnel, and maintenance, response and repair crews.
- Expanded the county's sewer cleaning efforts to include major trunk lines for the first time in more than 50 years. Removed 5.1 tons of debris from the sewer system.
- Re-instituted easement clearing and inspection contracts. More than 1,800 creek crossings inspected in 2017. Replaced 3,000 vented manhole covers.
- Held the first Consent Decree public update and hosted 280 other public events.
- Completed \$22 million in sewer maintenance and rehabilitation to address issues within the county's sewer system.

2018-2020 Consent Decree Investments



- DeKalb County will invest \$79 million for significant sewer maintenance and repairs that will begin June 2018.
- The first project, Package 1, will focus on reducing sanitary sewer overflows.
- Two additional packages will extend rehabilitation work through 2020.
- In addition to infrastructure improvements, the county has added additional staff to proactively report, source and respond to sanitary sewer overflows.



Before and after pictures of the Eagles Beek stream crossing, the site of the largest sewer spill since the Consent Decree in DeKalb County.

CONSENT DECREE SECOND PUBLIC UPDATE

Reporting, Reducing and Eliminating Sanitary Sewer Overflows

Presented by: Reggie Wells
Director of Watershed Operations



DeKalb County
G E O R G I A

Reporting Sanitary Sewer Overflows

2016

Began review and re-reporting process to correct historic errors

- Examination of approximately 206,000 documents (of which 50,000 were service requests) as far back as 2012 revealed misclassification of spills due to lack of written protocols, improper training, and inconsistent reporting
- Wrote protocols, streamlined the process and conducted re-training of over 400 employees and contractors and added levels of accountability including review by multiple supervisors
- Self-reported to EPA in November 2016, accepted responsibility and fine

2017

NEW BASELINE

First full year of improved standardized forms and reporting processes

- County improved spill detection by having employees conduct more field inspections (ie. inspecting manholes), creek crossing inspections, source tracking and water quality sampling
- Increased FOG education by conducting 280 events and distributing more than 60,000 flyers after grease related spills
- Added large diameter cleaning for first time in 50 years

2018

- Added easement clearing and root control to decrease root related spills and overflows
- Improved access to manholes for proactive maintenance
- County employees proactively finding and addressing spills
- **According to Q1 reporting, spills declined by 31 percent from 64 in 2017 to 44 in 2018**

Reducing Sanitary Sewer Overflows - 2018

- Package 1 includes \$26 million in improvements to reduce future sanitary sewer overflows and increase system capacity.
- Package 1 focuses on high priority areas with more than 40 past sanitary sewer overflows.
- Includes 3.9 miles of capacity improvement projects and upgrades such as:
 - Replacement of 2,000 feet of defective pipe and 1,000 feet of lining
 - 42 pipe repairs
 - Additional assessment of 4.3 miles of pipe
 - Capacity will increase up to an estimated 28 million gallons per day.

Future Investments – 2020

- Packages 2 and 3 will extend rehabilitation efforts through 2020 and focus on repairing structurally defective pipes.
- Projects include:
 - Package 2 - \$28 million investment that addresses 20 past sewer overflows, 7 miles of rehabilitation work and 59 pipe repairs.
 - Package 3 - An estimated \$25 million investment addressing 30 past sewer overflows, 5 miles of rehabilitation work and 108 pipe repairs.

CONSENT DECREE SECOND PUBLIC UPDATE

Protecting the Environment and Supporting Economic Growth

Presented by: Matt Welch
Supervising County Attorney



DeKalb County
G E O R G I A

Standardizing Processes, Increasing Accountability and Emphasizing Transparency

- Prior to August 2017, DeKalb County did not have a standard operating procedure to review new sewer connections.
- From 2011 – 2016, inconsistent criteria were applied to approve sewer connections.
- New policy is a consistent roadmap to review requests for sewer connections.
- New policy is evolving and will be updated as circumstances dictate.
- New policy reduces arbitrary decision making, enhances transparency and provides the public with more access to new sewer connection data.

DeKalb County informed the EPA on December 20, 2017 it would begin certification of new connections or increased capacity using a fully developed hydraulic model upon certification by a Georgia licensed professional engineer.

The hydraulic model is a tool used by a Georgia certified professional engineer *together* with sound engineering judgment and real world conditions to review sewer connections.

CONSENT DECREE SECOND PUBLIC UPDATE

We Need Your Help

Presented by: Alicia Pennie
Watershed Public Relations Manager



DeKalb County
G E O R G I A

We Need Your Help

Preventing 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.



Reporting Spills

Immediately report sanitary sewer overflows:

Department of Watershed Management

770-270-6243

Dekalbwaterops@dekalbcountyga.gov





Questions?