

GREEN STREET SEWER REPLACEMENT PROJECT

March 10, 2020 Agnes Scott College - Campbell Hall – Frances Graves Auditorium



WATER Matters

Agenda

- Welcome and Overview Michael Thurmond, Chief Executive Officer
- Wastewater System Overview Reginald Wells, Director, DWM
- The Problem Kerry Williams, P.E., PMP, Engineering Manager, DWM
 - Assessment and Findings
 - Work Completed to Date
- Project Overview & Timeline
 - Tiffany Ware, Project Manager, DWM
 - Greg Gutzwiller, Project Manager, AECOM
 - Darren Eastall, Assistant Director, DWM
- Public Safety Response Deputy Chief Scott Richards, City of Decatur, Police
- Communications Strategy Alicia Pennie, Public Relations Manager, DWM
- Questions Zach Williams, Chief Operating Officer



Welcome and Overview

Michael Thurmond
Chief Executive Officer
DeKalb County

How Did We Go Wrong in Prior Years?



Strategic Errors

- Contributing Factors:
 - Focus not originally on inflow and infiltration but rather on FOG
 - Lack of prioritization in addressing repeat spills

Political interference

(Interference in Watershed operations, lack of appropriate oversight, allegations of corruption/favoritism and lack of transparency)

- Contributing Factors:
 - 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 in Prior Years?



Administrative Errors

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
- Absence of Standard Operating Procedures and Protocols

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Getting Back on Track

- CEO Thurmond directly engaged Consent Decree issues via regularly scheduled meetings.
- Prioritized repeat wet weather spill sites
- Focused on identifying the root underlying issues to symptomatic problems in the sewer system
- 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.
- 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.

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Wastewater System Overview

Reginald Wells
Director
DWM

Introductions



DeKalb County Department of Watershed Management Engineering and Construction Management will lead a team of Engineers, Inspectors and Contractor Crews.







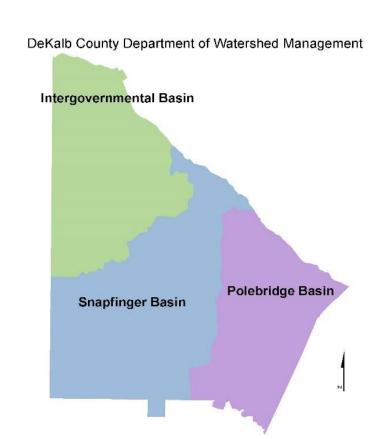




Wastewater System Overview

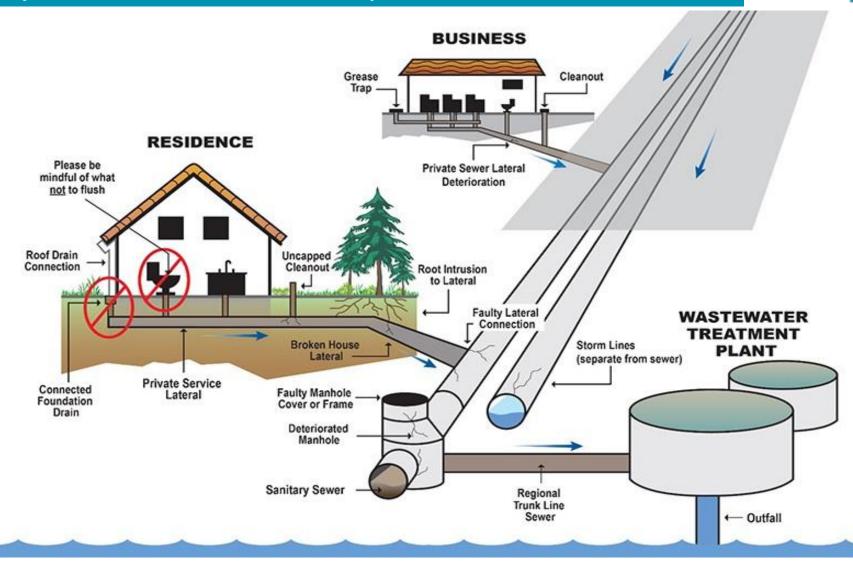
- 2,600 miles of sanitary sewer collection system pipes
- Over 70,000 manholes
- 63 lift stations
- 3 sewer basins
 - Snapfinger Basin sewer is treated at Snapfinger Advanced Wastewater Treatment Plant
 - Pole Bridge Basin sewer is treated at Pole Bridge Advanced Wastewater Treatment Plant
 - Intergovernmental Basin sewer is treated by neighboring utilities (City of Atlanta, Fulton County, Gwinnett County)





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Wastewater System Overview: What's a Gravity Sewer?







DeKalb County Department of Watershed Management's Engineering and Construction Management Division is leading the effort to repair and replace the county's aging infrastructure.

These repairs will:

- Reduce sewer system overflows
- Improve customer service
- Upgrade our communities for future generations

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The Problem

Kerry Williams, P.E., PMP Engineering Manager DWM

The Problem



Aging infrastructure and operational system inefficiencies

- Stormwater intrusion into the sanitary sewer system (I&I)
 - 2nd largest number of spills in the Green Street area
 - 22 spills since 2012 in this area

The Problem: Assessment

- Smoke testing
 - 84 cleanout caps that needed to be replaced
 - 7 laterals need rehabilitation
- Closed circuit TV
 - Identified over 20 pipes in upstream area with notable defects including holes, cracks, and fractures
 - These defects can allow groundwater/stormwater to enter the sewer using capacity
 - Rehabilitation of these defects (example on the right was lined Nov 2019) will reduce flow in the pipes
 - 2 vented manhole lids for replacement with solid lids
- Structural condition assessment and inspection
- Hydraulic modeling
- Acoustics









Project Overview & Timeline

Tiffany Ware
Project Manager
DWM

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Project Overview



November 2018- December 2019

Survey & Assessment Stage Planning

- Closed Circuit TV (CCTV)
- Smoke testing
- Field survey



Preconstruction

- Design
- Permitting

Land disturbance permit Stream Buffer Variance (30 day notice)



Wetlands Survey Work is a review of the ecological changes in a habitat. This is done before construction to ensure the habitats are restored after the work is complete.

Spring 2020-Fall 2020

Project preparation and Community Engagement



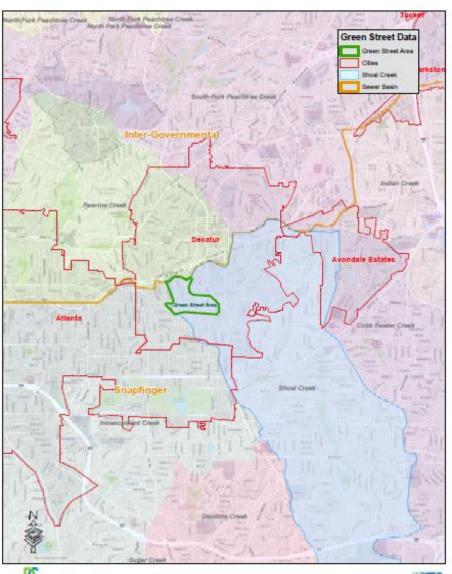
Construction
Groundbreaking and pipe repairs and replacement installation



Completion and Restoration Road and street repair and paving Landscape and right of way restoration

Project Overview





Project Overview

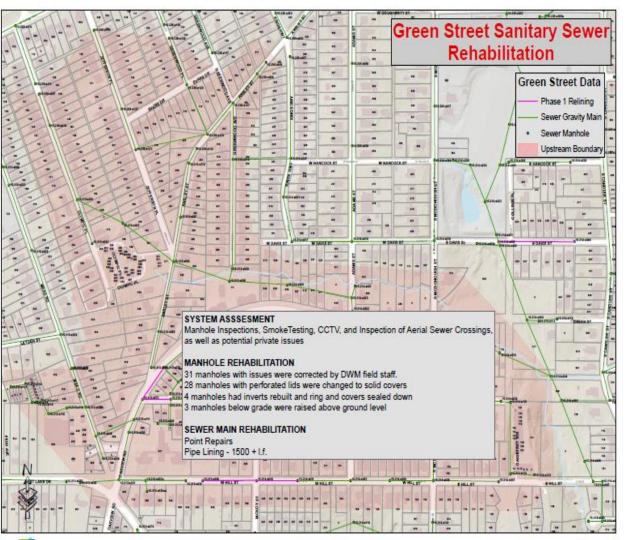


Scope of Work – Phase I

- Manhole rehabilitation
 - 31 manholes with issues were corrected by DWM field staff. This consisted of the following:
 - 28 manholes with perforated lids were changed to solid covers
 - · 4 manholes had inverts reconstructed and ring and covers resealed
 - 3 manholes below grade were raised above ground level
- Point repairs
- Pipe lining

Project Overview





Phase I map

Project Overview



Scope of Work – Phase II (Cost of \$1.2 Million)

- Sewer Main Replacement
 - Replacing 8-inch sanitary sewer to 12-inch sanitary sewer by means of open cut and pipe bursting methods:
 - 500 feet of 8-inch will be pipe burst to 12-inch
 - 500 feet of 12-inch will be open cut replaced
 - 800 feet of 8-inch will be open cut replaced
 - 7 manholes replaced
 - One creek crossing replaced
- Within the Green Street area external point repairs, internal point repairs and Cured in Place Lining will be performed
 - 12 external repairs
 - 4 external point repairs then Cured in Place Pipe
 - 2 Cured in Place Pipe repairs

Project Overview





Phase II map



Project Overview & Methodology

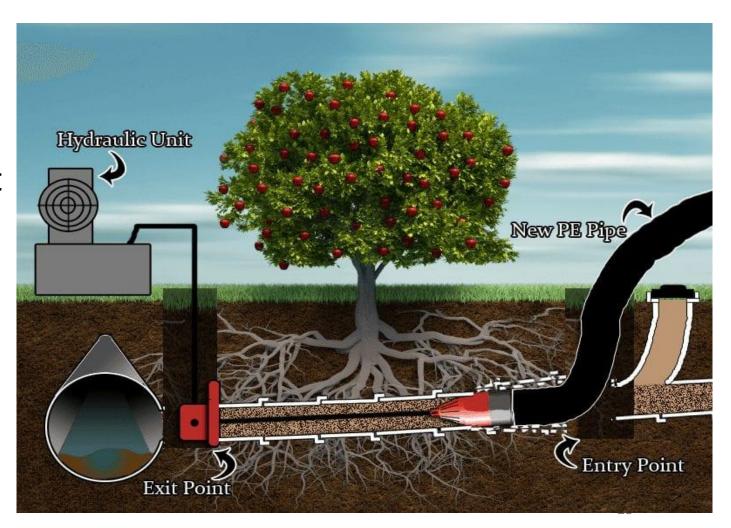
Greg Gutzwiller
Project Manager
AECOM

Project Overview



Pipe Bursting Method

- Pipe bursting
 - Trenchless method
 - Protecting the environment and preserving trees



Project Overview



Duration of the Project:

- By-pass pumps will be in operation mode 24 hours a day/7 days a week once the construction begins. The sewer flows will dictate how often the by-pass pumps will cycle on and off.
 - 4 months main work
 - 2 months restoration work



Project – Phase III

Darren Eastall Assistant Director DWM

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Project Overview



Scope of Work – Phase III

- Being developed and will focus on I&I (Inflow & Infiltration) reduction
- Will continue assessment of the area
- Will work to identify problems on the private system

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Public Safety Response

Deputy Chief Scott Richards
Police Department
City of Decatur

Public Safety Response



- City of Decatur coordinating with DWM on this project
- Intermittent lane closures
- Minimal impact to the public
- City of Decatur point of contact:

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Sgt. John Bender
678-553-6684
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John.bender@decaturga.com



Communications Strategy

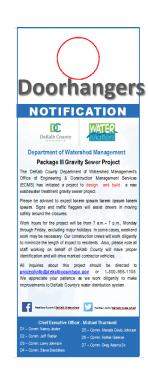
Alicia Pennie
Public Relations Manager
DWM

Communications Strategy



How will we keep in touch?







Text Messages

Communications & Outreach



Touchpoints:

- Project Hotline
- Website
- Social Media
- News Release
- County Newsletter, The Relay

- DCTV
- Next Door
- Yard Signs
- Contractors
- FAQ

Communications & Outreach



Customer questions?

• Project Information Line: 1-800-986-1108

• Email Queries: Projectinfo@dekalbcountyga.gov

• Website: www.dekalbcountyga.gov/greenstreetproject

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Questions?

Zach Williams
Chief Operating Officer
DeKalb County



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