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# Semi-Annual Report #4

July 1, 2013 to December 31, 2013  
Civil Action No. 1:10cv4039 - WSD

## DeKalb County Department of Watershed Management



DECEMBER, 2013

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## Introduction

The Department of Watershed Management (DWM) submits this fourth Semi-Annual Report in accordance with Section IX, Paragraph 57 of the Consent Decree (Civil Action 1:10cv4039-WSD) to provide:

- a) "A summary description of projects and significant activities completed and deadlines achieved during the previous applicable six (6) month period pursuant to the requirements of this Consent Decree, in Gantt chart or similar format, including a summary of any missed deadline required by this Consent Decree and, if applicable, the reasons for missing such deadline."
- b) "A summary of projects and significant activities anticipated to be performed, and deadlines anticipated to be achieved, in the successive applicable six (6) month period to comply with the requirements of this Consent Decree, in Gantt chart or similar format. The Parties agree that schedules, dates or deadlines reported pursuant to this subparagraph 57.(b) are not intended to be and shall not become enforceable under this Consent Decree, unless any such schedule, date or deadline is otherwise specifically enforceable pursuant to this Consent Decree."

## Executive Summary

There were no missed deadlines under the Consent Decree (CD) within this reporting period.

In overview, DWM developed, documented and submitted the following CD deliverables for review, comment and approval to EPA/EPD during the last half of 2013 as follows. All submittals were on, or ahead of Consent Decree schedule.

7/31/2013	6 <sup>th</sup> Quarterly Report
7/31/2013	3 <sup>rd</sup> Semi-Annual Report
10/31/2013	7 <sup>th</sup> Quarterly Report
12/20/2013	"Ongoing Sewer Assessment and Rehabilitation Program (OSARP)"
12/20/2013	"Maintenance Management System (MMS) Program"

Within the period from January 1, 2014 to June 30, 2014 the County will submit to EPA/EPD the following:

01/31/2014	8 <sup>th</sup> Quarterly Report
01/31/2014	4 <sup>th</sup> Semi-Annual Report
04/30/2014	9 <sup>th</sup> Quarterly Report

Date TBD	OSARP replies based on EPD/EPA comments to be returned to DeKalb County
Date TBD	MMS replies based on EPD/EPA comments to be returned to DeKalb County

# Capacity, Management, Operations and Maintenance (CMOM) Programs Update

## 1. Contingency and Emergency Response Plan (CERP) (CD VI.B.i)

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i) 07/2013 – 12/2013 - Responded to and investigated 50 spills, 19 building backups, and 37 overflows.
- ii) 07/2013 – 12/2013 - Performance Tracking – Average response time from call to spill stop is 2:16 hours for this period.
- iii) 07/2013 – 12/2013 - Continued and added engineering studies and system improvement projects as a result of investigations as noted:
  - (1) Relining – 12
  - (2) Study – 1
  - (3) Upgrade line size – 2
  - (4) Force main replacement – 1
  - (5) Model specific area – 1
  - (6) Projects - 3
  - (7) Ongoing projects from 2012 – 4
- iv) 07/2013 – 12/2013 – Continued coordination of activities with County contractors that are performing work on DeKalb County managed property to assure the coordination of work meets the requirements of the CERP.

### b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.

- i) Conduct a review of the CERP to confirm that programs are up-to-date with current practices and activities (done by the DWM Assistant Directors or Managers along with relevant DWM personnel).
- ii) Update CERP in relevant areas for contact information changes, form updates/changes, and lessons learned during 2013.
- iii) Conduct Annual CERP Training for field staff to review current programs and update on changes from the review process.

## 2. Fats, Oils, and Grease (FOG) Management Program (CD VI.B.ii)

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i) 07/2013 – 12/2013 - Reviewed 2,908 pump-out manifests as part of the Hauler Company Assessment program.
- ii) 07/2013 – 12/2013 - Continued improving the FOG permitting process to include all new and unpermitted FSEs.
- iii) 07/2013 – 12/2013 - Delivered 274 Warning Notices and 25 Court Summons to non-compliant FSE customers.
- iv) 07/2013 – 12/2013 Performance Measures:
  - (1) Total number of FOG inspections = 3,232
  - (2) Total number of FOG evaluations = 490
  - (3) Average inspections per day = 4.66

- (4) Average permitted active FSEs = 2,274.
- v) 07/2013 – 12/2013 - Mailed 1277 BMP brochures to FSEs with renewed FOG permits under the public education program.
- vi) 07/2013 - 12/2013-Continued to engage with other organizations that have similar water quality messages as part of the public education program (e.g. Metropolitan North Georgia Water Planning District).
- vii) 07/2013 – 12/2013- Initiated the FOG permit renewal payment incorporation into water billing. Pilot stage of FSEs data incorporation into Water billing software C-Pack. Discussed the new FOG invoice format.
- viii) 07/2013-12/2013 Communicating with County customers on a consistent basis in the following ways:
  - 1) Education materials (6,471 pieces including bi-lingual brochures and door hangers) distributed at multi-family apartment complexes that have been identified to be located near major sewer spills.
  - 2) Community and School events, Homeowners Association and other group meetings that had impact on 10,000 plus citizens.
  - 3) Utilizing the Office of Neighborhood Empowerment (ONE DeKalb) office
  - 4) DCTV (DeKalb County Television - Comcast Channel 23)
- ix) 07/2013- 12/2013 Expanded our reach to include Constant Contact, which is an email messaging system.
- x) 07/2013 – 12/2013 Received feedbacks from customers regarding the overall effectiveness of the FOG Program.
- xi) The FOG Pilot Program was finalized in the fourth quarter of 2013, with an expected launch date of January 2014 (contracts have been signed and program is launching). The Atlanta Apartment Association chose Green Grease Recycling, LLC as the company that would be used for the program by all of their members. Seven (7) apartment complexes were selected for the program based on proximity to areas where there's a higher incidence of spills.

**b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 06/30/2014.**

- i) 2014 – 2015 – Continue the FOG permit renewal payment incorporation into water billing.
- ii) 2013 – 2014 – Continue Communicating with all 700,000 County residents and customers on a consistent basis as part of the public education program.
- iii) 2013 – 2014 – Implement statistically relevant surveys to gauge the effectiveness of our messaging (the County is currently working with a consulting firm on conducting a FOG survey during 2014) as part of the public education program.
- iv) 2013 – 2014 – Continue receiving ongoing feedback from customers regarding the overall effectiveness of the FOG Program as part of the public education program.
- v) Launch FOG Pilot Program test period

### **3. Sewer Mapping Program (CD VI.B.iii)**

**a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.**

- i) Began the creation/input to the InfoNet™ database as a first step in the integration of the InfoNet™ and GIS databases. Three sewershed models have been delivered in InfoNet™. As data is delivered it is prepared for upload into InfoNet™.

- ii) Began import of asset ID's into CMMS Database as a starting point for integrating the Computerized Maintenance Management System (CMMS) and GIS.
- iii) Substantially completed the mapping of three sewersheds (Lower Snapfinger, South Fork Peachtree Creek, and Nancy Creek). 14,295 manhole surveys delivered in these three sewersheds to date.
- iv) Develop mobile mapping solution plan for the real-time field laptop map updates through ArcOnline account. Map creation started in 2013 and continues as needs are identified.
- v) Began linking the InfoNet™ database to GIS through sewer hydraulic modeling software.
- vi) Completed the assignment of asset identification numbers for manholes at completion of inventory and mapping program as part of the integration of the CMMS and GIS systems.
- vii) Identified lift station alarms as the first step in adding the alarms to GIS and InfoNet. Added location of lift station alarms to InfoNet™ and GIS.

**b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.**

- i) Complete surveying activities in rest of sewersheds in Sewer Mapping contract.
- ii) Continue activities for other areas if the contract is extended as requested.
- iii) Continue working on mobile mapping solution and implementation.
- iv) Complete asset ID import into CMMS. Import asset ID for force mains and air valves. Integrate CMMS and GIS systems.

#### **4. Maintenance Management System (MMS) Program (CD VI.B.iv)**

**a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.**

- i) Continued development of computerized interface between CMMS and GIS.
- ii) 12/20/2013 - Submitted the "MMS Program" to EPA/EPD for review and comment.

**b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.**

- i) Continue the development of written maintenance related procedures and specifications based on the MMS program when approved.
- ii) Roll out and update staff and programs on the MMS program when approved
- iii) Update documents, standards and programs as required when the MMS program is approved.

#### **5. Collection and Transmission Systems Training Program (CD VI.B.v)**

**a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.**

- i) 07/2013 – 12/2013 - Conducted training on 12 subjects for 208 employees totaling 884 training hours.

**b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.**

- i) Finish Year 1 of the Long Term 3-year training cycle and start year 2.
- ii) Organize staffing and program management by securing assistance from CD Program Manager for the Training Program Knowledge Retention Officer and selecting course offerings and frequency for the year based on Infrastructure Career Development Plans when approved by the BOC.

- iii) Provide Seminars, one-time offerings, webcasts, and training from local organizations.

## 6. System-Wide Flow and Rainfall Monitoring Program (CD VI.B.vi)

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i) Installed 3 additional rain gauges to the northern portion of the County. Completed 4<sup>th</sup> quarter 2013.
- ii) Data from WeatherBug stations in DeKalb was downloaded and is ready for use in model for 2013 rain calculations.
- iii) The historical flow and rainfall data currently stored at the Telog Enterprise remote server was transferred to the County's server in the 4<sup>th</sup> quarter 2013.
- iv) The installation of Sprint modems at each permanent site is being studied. A pilot project is underway and the effectiveness and feasibility is being studied for reliability and cost.

### b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.

- i) Review communications methods on all permanent sites and adjust/change as required.
- ii) Add permanent and temporary flow meters based on program needs.
- iii) Addition of wireless connection to portion of temporary flow meters and rain gauges for real time data and QA/QC.
- iv) Begin process of adding five additional USGS rain gauges.

## 7. System-Wide Hydraulic Model (CD VI.B.vii)

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i) Began the integration with GIS and the InfoNet database.

### b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.

- i) Continue implementation of hydraulic model for WCTS as sewer mapping data becomes available.

## 8. Financial Analysis Program (CD VI.B.viii)

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i) Continue to work on the integration of the CMMS, GIS and InfoNet™ system.
- ii) Provided analysis to the County Finance Department regarding recommended revenue projections and recommended budgeted expenditures based on prior years' history and recent trends.
- iii) Completed the 2014 projected revenues and budgeted expenditures for 2014 Operating and Capital budget planning and submitted to Finance in August 2014.
- iv) Ongoing efforts to approximate 2013 operation and maintenance costs (corrective, preventative, and emergency) classification within Oracle Financials and determined need to develop an O&M expenditure custom report in Oracle Financials which maps and tracks costs by activity type.

### b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.

- i) Update cost centers to establish a separate Wastewater Collection System center to better enable cost tracking.
- ii) Continue to monitor, analyze and report on the Department's overall financial performance.
- iii) Serve on the Outcome Base Budgeting Team (OBBT) for the implementation of a new County wide budgeting methodology
- iv) Conduct budget classes for "elected" Department personnel
- v) Continue to collaborate with the team working on integrating the CMMS, GIS and InfoNet™ system.
- vi) Assist with reporting and providing operating and financial data for the \$134,375,000 Water & Sewer Refunding Bonds, Series 2013. The cost saving (estimated at \$9 million) and proceeds will be used to refinance construction acquisitions, fund debt service reserve and issuing bonds.

## 9. Infrastructure Acquisitions Program (CD VI.B.ix)

- a) **Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.**
  - i) 07/2013 – 12/2013 - Evaluated and acquired 7,413 feet of pipe under the new Infrastructure Acquisition program.
  - ii) No lift stations acquired this period.
- b) **Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.**
  - i) Continue to review new and ongoing development projects for sewer line connectivity as submitted during the permitting process.
  - ii) Review lift-station acquisitions if submitted.

## 10. Priority Areas Sewer Assessment and Rehabilitation Program (CD VI.B.x)

- a) **Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.**
  - i) 6/30/2013 9/1/2013– Completed 1,543,180 LF of Engineering study of Southfork Peachtree Creek Basin with 422,704 LF in IPA (I-IG13, I-IG16, I-IG17). This study also includes Clarkston-Tucker Outfall and Millwood Way project areas.
  - ii) 07/2013 – 12/2013 Design phase of 1,400 LF of Sewer Replacement and Relocation project in APA, A-SF3 (Kensington Road Project)
  - iii) 01/2013 – 12/2013 – Completed Manhole Assessment for 2,343 MHs with 1,808 MHs in IPA (I-IG1, I-IG2, I-IG13, I-IG16, I-IG17) and 535 MHs in APA (A-IG6)
  - iv) 07/2013 – 12/2013 – Completed 18 Manhole Rehabilitation in IPA (I-SF1, I-SF4) and APA (A-SF3, A-PB1, A-PB6, A-PB7)
  - v) 01/2013 – 12/2013 – Construction phase for Pump Station and Pipeline Improvements for 2,200 LF of gravity sewer and 6,600 LF of force main with 6,600 LF of force main in APA (Lower Crooked Creek Project, A-PB4)
- b) **Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.**
  - i) Expect to complete the remaining activities (approximately 2,000 LF of sewer) for Johnson Ferry Cleaning and CCTV project (I-IG6)
  - ii) Start the new project for approximately 303,600 LF of CCTV for Northfork Peachtree Creek Basin with 156,517 LF of sewer in IPA and APA (I-IG10, I-IG11, I-IG14, I-IG15, A-IG5)



- iii) Relining of sanitary sewer due to spill at various location in IPA and APA: 5139 N. Peachtree Road (I-IG6, A-IG3), 4089 Lindsey Drive (I-SF2), 2438 Kings Court (I-IG12), Caladium Drive (A-IG5, A-IG6), 2737 Winding Lane (A-IG5)
- iv) Proposed cleaning and CCTV at 1676 Frazier Road (I-IG13) due to sewer spill
- v) Sanitary sewer replacement and relocation project under bidding process: Interstate 85 and Oakcliff Industrial Court project. Approximately 5,000 LF of sewer in IPA (I-IG5)
- vi) Expect to complete the design phase for Kensington Road Sanitary Sewer Replacement and Relocation project. Approximately 1,400 LF of sewer in APA (A-SF3)
- vii) Manhole Rehabilitation of approximately 140 MHs in IPA and APA (A-SF3, A-SF7, A-SF8, A-SF10, A-PB1, A-PB2, A-PB6)
- viii) Lift Station project under bidding process: Columbia Drive (I-SF2) and Fairington (A-PB6)
- ix) Expect to complete the construction for Pump Station and Pipeline Improvements for 2,200 LF of gravity sewer and 6,600 LF of force main with 6,600 LF of force main in APA (Lower Crooked Creek Project, A-PB4)
- x) New Annual Engineering Contracts (County wide) in process:
  - (1) Sanitary Sewer Television-Sonar Inspections
  - (2) Sanitary Sewer Rehabilitation by Cured-in-Place-Pipe (CIPP)
  - (3) Sanitary Sewer Rehabilitation by Ultraviolet Light Fiberglass Cured-In-Place Pipe
  - (4) Pipebursting and Pipe Relocation
  - (5) Manhole Rehabilitation Services

## 11. Ongoing Sewer Assessment and Rehabilitation Program (CD VI.B.x)

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i) 07/2013 – 12/2013 – Completed 28,177.9 LF of cleaning and CCTV outside priority area (Peachtree Industrial Boulevard Project)
- ii) 01/2013 – 12/2013 – Completed Manhole Assessment for 6,042 MHs outside priority area
- iii) 07/2013 – 12/2013 – Construction phase for 2 Lift Station projects outside priority area (Perimeter Park and Royal Atlanta 1 Projects)
- iv) 01/2013 – 12/2013 – Construction phase for Pump Station and Pipeline Improvements for 2,200 LF of gravity sewer and 6,600 LF of force main with 2,200 LF of gravity sewer outside priority area (Lower Crooked Creek Project)
- v) 9/1/2013 – Completed 1,543,180 LF of Engineering study of Southfork Peachtree Creek Basin with 1,120,476 LF of sewer outside priority area. This study also includes Clarkston-Tucker Outfall and Millwood Way project areas.
- vi) 7/2013 – 12/2013 Started the design phase for sewer replacement project outside priority area at Valley View Road (approximately 770 LF)
- vii) 12-20-2013 - Submitted the "Ongoing Sewer Assessment and Rehabilitation Program (OSARP)" to EPA/EPD for review and comment.

### b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.

- i) Expect to complete the remaining CCTV and point repair for Roman Court Phase 2 project
- ii) Expect to complete the remaining cleaning and CCTV (approximately 10,000 LF) for Peachtree Industrial Boulevard Project
- iii) Start the new project for 303,600 LF of CCTV for Northfork Peachtree Creek Basin with 147,083 LF of sewer outside priority area

- iv) Relining of sanitary sewer due to spill at various location outside priority area: 1853 Forest Spring Court, 2860 Buford Highway, 2650 Mill Court, 1736 Jerico Court, 2012 Glenwood Avenue, 4367 Buford Highway, 410 W. Ponce de Leon, 108 E. Ponce de Leon
- v) Proposed cleaning and CCTV outside priority area at 3261 Buford Highway due to sewer spill
- vi) Expect to complete the remaining sanitary sewer replacement and relocation for Superior Avenue project (approximately 900 LF)
- vii) Start the design phase for gravity sewer installation for Heritage Height Sewer Crossing project (approximately 1,200 LF)
- viii) Continue with the design phase for sewer replacement project outside priority area at Valley View Road (approximately 770 LF)
- ix) Lift station and force main installation project under bidding process: Mountain Industrial project (approximately 2,900 LF of force main)
- x) Continue with the construction for 2 Lift Station projects: Perimeter Park and Royal Atlanta 1 Projects
- xi) Expect to start the construction for 3 Lift Station projects: Pepperwood, Scarborough, and Hammermill 3 Projects
- xii) Expect to complete the construction for Pump Station and Pipeline Improvements for 2,200 LF of gravity sewer and 6,600 LF of force main with 2,200 LF of gravity sewer outside priority area (Lower Crooked Creek Project)
- xiii) New Annual Engineering Contracts (County wide) in process:
  - (1) Sanitary Sewer Television-Sonar Inspections
  - (2) Sanitary Sewer Rehabilitation by Cured-in-Place-Pipe (CIPP)
  - (3) Sanitary Sewer Rehabilitation by Ultraviolet Light Fiberglass Cured-In-Place Pipe
  - (4) Pipebursting and Pipe Relocation
  - (5) Manhole Rehabilitation Services

## Supplemental Environmental Project (CD VIII.) Update

### a) Projects and Activities Accomplished for the Reporting Period 7/1/2013 – 12/31/2013.

- i. The Supplemental Environmental Project Stream Clean-Up Plan was submitted to and approved by EPA/EPD.
- ii. Notice of intent to accept public bids for the SEP projects was published.
- iii. Bid materials, including contract specifications, scopes of work, along with field maps illustrating logistical information, were developed.
- iv. Invitations to Bid were published and distributed; the bidding process was concluded.
- v. Bid responses were evaluated and a potential vendor selected for award. This recommendation was forwarded to the Purchasing/Contracting Department for presentation to the BOC.
- vi. A volunteer public stream cleanup was held for each of the 3 streams. A total of 26 volunteers participated in the cleanups, and 1500 cubic yards/tons of debris was collected.

### b) Projects and Activities Anticipated for the Reporting period 1/1/2014 – 6/30/2014.

- i. Award Contract after BOC approval 01/21/2014
- ii. Publicize Stream Cleanup Projects through press releases to local media
- iii. Contractor initiate Cleanup Operation