
Semi-Annual Report #5

January 1, 2014 to June 30, 2014
Civil Action No. 1:10cv4039 - WSD

DeKalb County Department of Watershed Management



JULY 30, 2014

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Introduction

The Department of Watershed Management (DWM) submits this fifth 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

In overview, DWM developed, documented, and submitted the following Consent Decree deliverables for review, comment and approval to EPA/EPD during the first half of 2014 as follows. All submittals were on, or ahead of the schedule outlined in the Consent Decree.

01/31/2014	8 th Quarterly Report
01/30/2014	4 th Semi-Annual Report
03/03/2014	2 nd Annual Report
04/30/2014	9 th Quarterly Report

Within the period from July 1, 2014 to December 31, 2014 the County will submit or submitted to EPA/EPD the following:

07/02/2014	Addendum to the 2 nd Annual Report
07/30/2014	10 th Quarterly Report
07/30/2014	This 5 th Semi-Annual Report
09/30/2014	11 th Quarterly Report

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 1/1/2014 – 6/30/2014.

- i) Responded to and investigated 74 spills, 23 building backups, and 45 overflows.
- ii) Average response time from call to spill stop was 1:53 hours for this period.
- iii) Continued and added engineering studies and system improvement projects as a result of investigations as noted:
 - (1) Study – 1
 - (2) Model specific area – 1
 - (3) Projects – 1
 - (4) Ongoing projects from 2012 – 4
- iv) 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.
- v) Updated the CERP program in relevant areas for contact information changes, form updates/changes, and lessons learned during 2013.
- vi) Conducted annual CERP Training for field staff (60 employees).

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- 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) Conduct additional CERP Training for field staff to review current programs and update on changes from the review process as needed.
- iii) Continue to review data and integrate the Program Manager into processes.

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) Reviewed 1,298 pump-out manifests as part of the Hauler Company Assessment program.
- ii) Continued improving the FOG permitting process to include all new and unpermitted FSEs from city incorporated establishments.
- iii) Created an educational brochure for commercial establishments to explain the FOG permitting process and technical installation requirements.
- iv) Delivered 283 Warning Notices and 12 Court Summons to non-compliant FSE customers.
- v) The County achieved and exceeded the established performance measures:
 - (1) Total number of FOG inspections = 3,428
 - (2) Total number of FOG evaluations = 635
 - (3) Average inspections per day = 5.11
 - (4) Average permitted active FSEs = 2,335.
- vi) Mailed 1010 Best Management Practices brochures to FSEs with renewed FOG permits under the public education program.

- vii) 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).
- viii) Continued the FOG permit renewal payment incorporation into water billing.
- ix) Communicating with County customers on a consistent basis in the following ways:
 - 1) Education materials distributed at multi-family apartment complexes and residential neighborhoods that have been identified to be located near sewer spills.
 - 2) Community and School events participation
 - 3) Homeowners Association and other group meetings
 - 4) Utilizing the Office of Neighborhood Empowerment (ONE DeKalb) office
 - 5) DCTV (DeKalb County Television - Comcast Channel 23)
- x) Incorporated potential sources of FOG discharges such as hand sinks located in the food preparation area to improve the FOG evaluation process.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Continue the FOG permit renewal payment incorporation into water billing.
- ii) Continue communicating with all 700,000 County residents and customers on a consistent basis as part of the public education program.
- iii) 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) as part of the public education program.
- iv) Continue generating FOG educational brochures for residential and commercial establishments to minimize the FOG discharges and potential sewer spills.

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) Substantially completed the sanitary sewer manhole surveying of Peavine Creek, Ball Mill Creek, Marsh Creek, Northeast Creek, Lucky Shoals Creek, Camp Creek, Upper Snapfinger Creek, and Barbashela Creek sewersheds.
- ii) Began the surveying of Blue Creek, Corn Creek, Constitution Area, Swift Creek, Yellow River, Pine Mountain, Johnson Creek, and Crooked Creek sewersheds. These were areas that have seen development since the original mapping project and needed updating and reassessment.
- iii) A total of 9,161 sanitary sewer manhole surveys have been submitted during this period.
- iv) Mobile maps were updated as data was accepted and made available.
- v) Evaluated best practices for databases to determine the functionality of InfoNet™.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) After the evaluation process, the County concluded that InfoMaster™ is a significant improvement over InfoNet™ and the County is in the process of switching from InfoNet™ to the InfoMaster™ application. InfoMaster™ will be implemented and the relevant sections of the CD Program documents amended before the end of 2014.
- ii) The majority of the data attributes required by the Consent Decree have been added to the Sewer Mapping Program. The following three attributes are in progress and are expected to be completed before the end of 2014:

- (1) Age – the data submitted to the County is being reviewed to determine its completeness or adequacy.
- (2) Calculated slope – Pipe slope calculations will be performed using physical mapping data and other supporting attribute information.
- (3) Date of rehabilitation – the County has started management of this activity as per the sewer mapping program requirements for current projects. Information regarding rehabilitation projects, concluded within the past few years, will then be added.
- iii) Complete surveying activities in the unmapped sewersheds.
- iv) Continue working on mobile mapping solution and improvement.
- v) Complete asset ID import into CMMS – as a first step the County will complete the standardization process of assigning unique asset IDs in GIS. Second, the County's Information Systems Department will facilitate the integration between GIS and CMMS.

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) 03/20/2014 – Received comments from EPA/EPD regarding the MMS.
- ii) 05/15/2014 – Submitted the revised MMS for approval to EPA/EPD.
- iii) 06/05/2014 – Received approval of the MMS from EPA/EPD.
- iv) Implemented the new Push-to-Talk system.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Continue the development of written maintenance related procedures and specifications based on the MMS program.
- ii) Roll out and update staff and programs on the MMS program.
- iii) Update documents, standards and programs as required under the MMS.
- iv) Implement the inventory bar coding system.
- v) Implement inventory component tracking.

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) Conducted training on 15 subjects for 231 employees totaling 507 training hours.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Finish Year 2 of the Long Term 3-Year training cycle and start Year 3.
- ii) Organize staffing and program management by incorporating a Training Program Knowledge Retention Officer and selecting course offerings and frequency for the year based on Infrastructure Career Development Plans.
- 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 1/1/2014 – 6/30/2014.

- i) 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.
- ii) Reviewed communications methods on all permanent sites and adjust/change as required.
- iii) Began the process of adding five additional USGS rain gauges.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Weatherbug rain gauge data was compiled by the County in 2013; however, the data was not analyzed. That analytical process has begun and will be completed in 2014.
- ii) Concurrent with the optimization of flow monitors and rain gauges described in the PASARP section below, the County will relocate or install additional flow monitors and rain gauges to meet the program requirements.
- iii) Addition of wireless connection to a portion of temporary flow meters and rain gauges for real time data and QA/QC.

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) Reviewed its modeling approach for ways to improve efficiency.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Revise the Hydraulic Modeling Program and related program documents based on the revised modeling approach.
- ii) Continue implementation of hydraulic model for WCTS as sewer mapping data becomes available.
- iii) Verification of the existing models for the Pole Bridge, Shoal Creek and Cobb Fowler sewersheds.
- iv) Update the modeling protocols used to build and calibrate the hydraulic model.

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) Conducted budget classes for “elected” Department personnel
- ii) Assisted 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.
- iii) Used an alternative method to approximate the 2014 1st quarter operation and maintenance costs classification by corrective, preventative and emergency while working on the improved methodology and reporting.
- iv) Continue to monitor, analyze and report on the Department’s overall financial performance.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Continue to collaborate with the team on how best to integrate the various programs (CMMS, GIS and InfoMaster) necessary execute the Financial Analysis Program required activities.
- ii) Continue to work on the plan and implementation process for tracking maintenance costs and the separation of the drinking water budget from wastewater budget.
- iii) Continue to monitor, analyze and report on the Department's overall financial performance.
- iv) Ongoing efforts to approximate 2014 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.
- v) Complete the 2015 projected revenue and expenditures for 2015 Operating and Capital budget planning to be submitted August 2014

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) Evaluated and acquired 4,591 feet of pipe under the new Infrastructure Acquisition program.
- ii) No lift stations acquired this period.
- iii) Hired new Engineer to conduct plan reviews.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- 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 1/1/2014 – 6/30/2014.

- i) Design phase for Southfork Peachtree Creek reverse slope pipe correction with 784 LF in Initial Priority Areas (IPA) (I-IG17) and 4,912 LF in Additional Priority Areas (APA) (A-IG6, A-IG7)
- ii) Design in progress for 1,400 LF of Sewer Replacement and Relocation project in APA, A-SF3 (Kensington Road Project)
- iii) Completed Manhole Assessment for 3,081 MHs with 320 MHs in IPA (I-IG1, I-IG2, I-IG4, I-IG6, I-IG9, I-IG16, I-IG18) and 695 MHs in APA (A-IG3, A-IG4, A-IG6, A-SF2, A-SF3)
- iv) Completed 244 Manhole Rehabilitation in APA (A-PB1, A-PB2, A-SF6, A-SF7, A-SF8)
- v) 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)
- vi) Completed 80,786.2 LF of cleaning and CCTV in Northfork Peachtree Creek Basin in IPA and APA (I-IG10, I-IG11, I-IG14, I-IG15, A-IG5)
- vii) Received all required permits to continue with the remaining activities (approximately 2,000 LF of sewer) for Johnson Ferry Cleaning and CCTV project (I-IG6)

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Establish the physical boundaries of the Priority Areas - the County assembled physical markers in 2013; however, the final step of overlaying the physical markers with updated GIS maps and performing field verification will be completed in 2014.
- ii) Determine the optimization of flow monitors and rain gauges as needed.
- iii) Expect to complete the remaining activities (approximately 2,000 LF of sewer) for Johnson Ferry Cleaning and CCTV project (I-IG6)
- iv) Continue with the remaining work for CCTV at Northfork Peachtree Creek Basin (Total of approximately 303,600 LF of CCTV) with 156,517 LF of sewer in IPA and APA (I-IG10, I-IG11, I-IG14, I-IG15, A-IG5)
- v) Proposed cleaning and CCTV at 1676 Frazier Road (I-IG13) due to sewer spill
- vi) Expect to complete the design for Kensington Road Sanitary Sewer Replacement and Relocation project. Approximately 1,400 LF of sewer in APA (A-SF3)
- vii) Expect to complete the design for Southfork Peachtree Creek reverse slope pipe correction with 784 LF in IPA (I-IG17) and 4,912 LF in APA (A-IG6, A-IG7)
- viii) Manhole Rehabilitation of approximately 250 MHs in IPA and APA Manhole Condition Assessment in IPA and APA
- ix) Lift Station project under bidding process: Columbia Drive (I-SF2)
- x) 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)
- xi) Construction phase for Stonecrest Sanitary Sewer and Force Main Improvements (Gravity: 15,400 LF Force Main: 5,900 LF) in APA (A-PB4)
- xii) Expect to start the new Annual Engineering Contract for Sanitary Sewer Television-Sonar Inspections with approximately 138,000 LF of CCTV and Sonar Inspection for the first year (undefined areas)
- xiii) New Annual Engineering Contracts (County wide) in process:
 - (1) Sanitary Sewer Rehabilitation by Cured-in-Place-Pipe (CIPP)
 - (2) Sanitary Sewer Rehabilitation by Ultraviolet Light Fiberglass Cured-In-Place Pipe
 - (3) Pipebursting and Pipe Relocation
 - (4) Manhole Rehabilitation Services
 - (5) Point Repair
- xiv) Master Rehabilitation Specifications Development in process

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

a) Projects and Activities Accomplished for the Reporting Period 1/1/2014 – 6/30/2014.

- i) 03/20/2014 – The Ongoing Sewer Assessment and Rehabilitation Program (OSARP) was approved by EPA/EPD.
- ii) Completed Manhole Assessment for 2,066 MHs outside priority area
- iii) Completed 14 Manhole Rehabilitation outside priority area
- iv) Completed 40,362.1 LF of cleaning and CCTV at Northfork Peachtree Creek Basin outside priority area
- v) 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)

- vi) Design phase for Southfork Peachtree Creek reverse slope pipe correction with 1,384 LF outside priority area
- vii) Design phase for sewer replacement project outside priority area at Valley View Road (approximately 770 LF)
- viii) Bidding process for Superior Avenue Sanitary Sewer Improvements – Phase 2 (approximately 860 LF)
- ix) Design phase for gravity sewer installation for Heritage Height Sewer Crossing project (approximately 1,200 LF)
- x) Design phase for stream crossing replacement at Snapfinger Wood Drive (approximately 100 LF)
- xi) Project under bidding process: Mountain Industrial project (approximately 2,900 LF of force main)

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014.

- i) Continue with the remaining work for CCTV at Northfork Peachtree Creek Basin (Total of approximately 303,600 LF of CCTV) with 147,083 LF of sewer outside priority area
- ii) Proposed cleaning and CCTV outside priority area at 3261 Buford Highway due to sewer spill
- iii) Construction phase for Superior Avenue Sanitary Sewer Improvements – Phase 2 (approximately 860 LF)
- iv) Expect to complete the design for Southfork Peachtree Creek reverse slope pipe correction with 1,384 LF outside priority area
- v) Expect to complete the design for gravity sewer installation for Heritage Height Sewer Crossing project (approximately 1,200 LF)
- vi) Expect to complete the design for stream crossing replacement at Snapfinger Wood Drive (approximately 100 LF)
- vii) Expect to complete the design for sewer replacement project outside priority area at Valley View Road (approximately 770 LF)
- viii) Manhole Rehabilitation outside priority area
- ix) Manhole Condition Assessment outside priority area
- x) Lift station and force main installation project under bidding process: Mountain Industrial project (approximately 2,900 LF of force main)
- xi) 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)
- xii) Expect to start the new Annual Engineering Contract for Sanitary Sewer Television-Sonar Inspections with approximately 138,000 LF of CCTV and Sonar Inspection for the first year (undefined areas)
- xiii) New Annual Engineering Contracts (County-wide) in process:
 - (1) Sanitary Sewer Rehabilitation by Cured-in-Place-Pipe (CIPP)
 - (2) Sanitary Sewer Rehabilitation by Ultraviolet Light Fiberglass Cured-In-Place Pipe
 - (3) Pipebursting and Pipe Relocation
 - (4) Manhole Rehabilitation Services
 - (5) Point Repair
- xiv) Master Rehabilitation Specifications Development in process

Supplemental Environmental Project (CD VIII.) Update

a) Projects and Activities Accomplished for the Reporting period 1/1/2014 – 6/30/2014.

- i. Contractor was given the Notice to Proceed on 03/24/2014.
- ii. The Stream Cleanup Project was publicized in local media through press releases.
- iii. The Project Kick-Off was held and Contractor began notifying residents in the immediate area where the removal operation was to begin. Both letters and door hangers describing the Project, along with contact names and addresses, were distributed.
- iv. The Contractor mobilized on the first stream, Snapfinger Creek, during the week of April 7, and initiated cleanup operations.
- v. To date, the Contractor has completed removal operations on Snapfinger Creek, and began operations on South Fork Peachtree Creek.

b) Projects and Activities Anticipated for the Reporting Period 7/1/2014 – 12/31/2014

- i. Contractor is scheduled to complete cleanup operation and submit After Action Report. The planned end of Contract period is 08/30/2014.
- ii. The Department will submit an After Action Report to EPA/EPD.