



July 30, 2008

Acting Director of the Division of Enforcement  
Department for Environmental Protection  
300 Fair Oaks Lane  
Frankfort, KY 40601

Chief, Environmental Enforcement Section  
Environmental and Natural Resources Division  
U.S. Department of Justice  
601 D street NW  
Washington, DC 20005  
DOJ Case No. 90-5-1-1-08591

Chief, Water Program Enforcement Branch  
Water Management Division  
U.S. Environmental Protection Agency, Region 4  
Atlanta Federal Center  
61 Forsyth Street, S.W.  
Atlanta, Georgia 30303

Re: Consent Decree Case No. 2:05-cv-00199-WOB

Dear Gentlemen:

Pursuant to the above-referenced Consent Decree, Sanitation District No. 1 (District) is required to submit quarterly reports that demonstrate the District's compliance with the Consent Decree:

**42. Quarterly Reports.** The District shall submit to the Cabinet/EPA a quarterly report that describes the District's progress in complying with this Consent Decree for the previous quarter no later than thirty days after the end of each calendar quarter. The first such report shall be submitted to the Cabinet/EPA no later than thirty days after the second full quarter after entry of this Consent Decree.

Information contained within the enclosed Quarterly Report describes the District's compliance with Consent Decree Case No. 2:05-cv-00199-WOB for the period of April 1, 2008 through June 30, 2008. This report also contains an outlook for the upcoming calendar quarter period of July 1, 2008 through September 30, 2008.

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July 30, 2008

A certification as required by the Consent Decree is also enclosed (Consent Decree paragraph 38). The Cabinet and EPA have 90 days from receipt to review submittals unless the District receives notification before the expiration of the 90-day period that review will take longer (Consent Decree paragraph 44).

I am confident in the integrity of the enclosed document, and I am certain that its content not only satisfies regulatory requirements, but also helps further the mission and vision of the District by demonstrating aggressive, proactive, achievable measures underway in Northern Kentucky to protect water resources and enhance the quality of life.

I look forward to receiving your comments in the near future. If you have any questions or concerns, do not hesitate to contact me at 859-578-7465 or by e-mail at [jeger@sd1.org](mailto:jeger@sd1.org).

Best regards,



Jeffery A. Eger  
General Manager

JAE/mm  
Enclosures

# Consent Decree Quarterly Report No. 03

(April 1, 2008 through June 30, 2008)

Sanitation District No. 1  
July 30, 2008



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CERTIFICATION

Consent Decree Quarterly Report No. 03  
Consent Decree Case No. 2:05-cv-00199-WOB

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

  
\_\_\_\_\_  
Jeffery A. Eger  
General Manager

Date July 30, 2008

COMMONWEALTH OF KENTUCKY  
COUNTY OF Kenton

)ss.

The foregoing instrument was acknowledged before me this 30 day of July, 2008 by Jeffrey A. Eger, General Manager of Sanitation District No. 1.

  
\_\_\_\_\_  
NOTARY PUBLIC

State Large County, Kentucky

My commission expires: May 9, 2010

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# **CONSENT DECREE QUARTERLY REPORT NO. 03**

July 30, 2008



**Sanitation District No. 1**  
1045 Eaton Drive  
Ft. Wright, KY 41017

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

Cabinet	Kentucky Energy and Environment Cabinet
CSO	Combined Sewer Overflow
District	Sanitation District No. 1
EPA	U.S. Environmental Protection Agency
gbaMS	GBA Master Series (information tracking system)
SSO	Sanitary Sewer Overflow

## SECTION 1. INTRODUCTION

### 1.1 Purpose

This Quarterly Report is submitted to fulfill the requirements of Sanitation District No. 1's (District) Consent Decree as entered on April 18, 2007. This Consent Decree is a legal agreement with the U.S. Environmental Protection Agency (EPA) and the Kentucky Energy and Environment Cabinet (Cabinet). The purpose of the Consent Decree is to address sanitary sewer overflows (SSOs) in the District's sanitary sewer system and combined sewer overflows (CSOs) in the combined sewer system in an effort to improve water quality throughout the District's service area. Specifically, Section V Reporting Requirements, states that:

**42. Quarterly Reports.** The District shall submit to the Cabinet/EPA a quarterly report that describes the District's progress in complying with this Consent Decree for the previous quarter no later than thirty days after the end of each calendar quarter.

### 1.2 Report Period

Information contained within this report describes the District's compliance with Consent Decree Case No. 2:05-cv-00199-WOB for the period of April 1, 2008 through June 30, 2008. This report also contains an outlook for the upcoming calendar quarter period of July 1, 2008 through September 30, 2008.

### 1.3 Consent Decree Compliance Schedule

A comprehensive Gantt chart outlining the District's project schedule for meeting the requirements of the Consent Decree can be found in Appendix A. This project schedule includes tasks, responsible parties, and deadlines for the first five years of the Consent Decree (2007 through 2012). Additionally, a more detailed listing of the Initial Watershed Projects that were not complete prior to April 1, 2008, including current status, project updates for the current reporting period, and planned activity for the subsequent quarter can be found in Appendix B.

## SECTION 2. OVERFLOW DATA

This section of the Quarterly Report presents the District's estimates of overflow activity in the collection systems. While the District has a long history of comprehensive data collection and inspection programs, our existing programs were implemented to meet pre-Consent Decree needs and must be realigned and optimized to fit into the framework of the quarterly reports. This realignment is taking place as part of the District's wet-weather management activities, and future reports will continue to

incorporate expanded overflow metrics based on more quantitative measures as they become available.

Over the last quarter, we have made further progress with developing standardized reports in the District's computerized maintenance management system, GBA Master Series (gbaMS), to help support the specific reporting needs for these quarterly reports and to better track system performance. We are continuing to fine-tune and improve our tracking and reporting capabilities to increase efficiency in our work. The District has been using gbaMS since 1999 and has added several modules and applications in response to evolving needs over the years. As there are now new uses for this tool after entering into the Consent Decree, the District is undergoing adjustments to both the data input and output processes for gbaMS to generate more precise data for use in these quarterly reports. Because the refinement of gbaMS is ongoing to meet these evolving needs, several numbers generated from this software program will be reported as "approximate." As the District moves forward with structuring its reporting procedures, quality assurance and quality control issues regarding data input and output from gbaMS will be addressed.

#### Overflow Categories

For reporting and system performance measurement purposes, the District has categorized sewer overflows throughout the service area into five distinct categories:

- *Recurring SSOs* – Recurring overflows from the District's sanitary sewer system, typically during wet weather. Overflows are determined to be "recurring" if they have been observed to overflow twice in a 12-month period. This category includes wet-weather discharges at pump stations that may or may not have a constructed bypass.
- *Non-recurring SSOs* – Overflows from the District's sanitary sewer system, including pump stations, that have been observed to overflow less frequently than twice in a 12-month period. Many of these are one-time, dry-weather occurrences caused by temporary system issues that are investigated and corrected as soon as practicable.
- *Wet Weather CSOs* – Wet-weather discharges from the combined sewer system.
- *Dry Weather CSOs* – Dry-weather discharges from the combined sewer system.
- *Building Backups* – The release of raw sewage from a service lateral into a building in the District's service area. Building backups can be caused by several factors, such as constrained capacity during wet weather or a blockage or collapse in the service lateral or main line, and can be determined to be either the District's responsibility or the building owner's responsibility.

### Precipitation Data

Rainfall statistics are an important component of overflow reporting, as rainfall conditions represent an uncontrolled variable impacting the District's CSO and SSO activity. Quarterly CSO and SSO activations and volumes will constantly vary over time, with or without system improvements, due to natural variations in rainfall patterns. Over time, the District expects system improvements to show a clear trend in reduced overflow activity. However, reviewing overflow reports for any individual quarter relative to the previous quarter also requires careful review of the rainfall associated with each quarter, in order to understand the relative impact of rainfall patterns. For this reason, storm event summaries will also be a part of all future overflow reporting submittals. The data in Table 2.1 is from the Cincinnati-Northern Kentucky International Airport rain gauge maintained by the National Weather Service (CVG).

**Table 2.1. Summary of Storm Events**  
(April 1, 2008 – June 30, 2008)

Month	Approximate # of Storm Events	Rainfall (in)
April 2008	9	2.75
May 2008	9	6.32
June 2008	12	5.21
<b>Total</b>	<b>30</b>	<b>14.28</b>

The remainder of this section reports overflows that occurred throughout the District's service area during the period of April 1, 2008 through June 30, 2008.

## 2.1 Recurring SSOs

The District uses three general methods for developing quantitative estimates of recurring SSO activity:

- Field inspections during, or shortly after, wet-weather events to identify activations. This inspection program has been in place since 2005 and will be expanded as warranted for ongoing reporting. The District's wet weather crew continues to perform routine inspections before and after rain events at recurring SSO locations. This is part of the District's ongoing effort to characterize overflows throughout the collection systems and ensure they are categorized accurately. Proper characterization of overflows will help identify the most appropriate and effective solutions to be included in the District's Watershed Plans.
- Simple hydraulic estimating using Manning's Gravity Flow and Pipe Calculation to report overflows from pump stations with constructed bypasses. This method has been used historically for reporting purposes, and its results are included in this Quarterly Report.

- Estimates developed from the District's system-wide collection system models. The District has recently completed a year-long flow monitoring program, consisting of more than 245 flow meters and 45 rain gauges installed throughout the combined and separate sewer systems, that was utilized to update the calibration and validation of the system-wide hydraulic models. This calibration was undertaken to provide a model network that could confidently be used as a planning level tool in preparing the Watershed Plans for June 2009. In addition to the use of the models for planning future capital improvements, the models can also be used to provide information about the current performance of the District's system. Given the system-wide extent of the model, the District has elected to use the models to provide estimates of the overflow locations within the system for quarterly reporting purposes. This approach is consistent with the District's commitment to provide the best available information on overflow activity within these reports.

For this submittal, the District has collected rainfall data from a series of rain gauges located across the system and simulated the rainfall which occurred between April 1, 2008 and June 30, 2008 within the hydraulic models. The results of the model simulations have been summarized and included as an estimate of the frequency and total volume of the overflow locations within the District's system for this period. For the modeled locations, these results are not a summary of observed or confirmed activations but are an estimate of the overflow statistics based on the calibrated model. The presented statistics should be viewed with the knowledge that the data provided is only estimated and could differ from actual field conditions due not only to the inherent potential error in any model but also specific local conditions (maintenance issues, localized rainfall, etc.). However, we do not anticipate these estimates to be significantly different than field conditions. As noted in earlier quarterly reports, the District is actively realigning and optimizing their field activities to support the framework of Consent Decree requirements, and this process includes constantly working to verify the model results against actual field conditions through monitoring and observation. Over time, these field verifications will continue to improve the model as appropriate to better reflect any discrepancies found with observed conditions. It is an ongoing and continual process to refine the modeling tools to provide the most accurate information possible about overflow locations, including future model updates to incorporate system improvements.

Modeled activation and volume statistics for the District's 99 recurring SSO locations for the current reporting period can be found in Appendix C. It should be noted that for the two largest SSO locations, the data provided is based on flow meters that were present during the monitoring period; the remainder of the SSO locations are estimated based on the model results. Also, the rain gauge data used to generate the overflow estimates was based on the network of 45 rain gauges that were in-place during the system-wide monitoring program. In future submittals, the level of rain gauge data used may vary depending on the available rain gauge network for that quarter.

Updates to the locations of the District's recurring SSOs will be reported on an annual basis to include any revisions based upon the field inspection and hydraulic modeling programs. Appendix D of the District's April 2008 Quarterly Report, titled "Recurring SSO Revisions – Transaction Database," included revisions to the recurring SSO list. Therefore, any revisions to the SSO list documented after April 2008 will be published in the April 2009 Quarterly Report.

In addition to the 99 recurring SSOs, there are also 14 pump stations identified in the Consent Decree that have historically documented recurring wet weather capacity issues. The District submitted a Pump Station Overflow Elimination Plan to the EPA and the Cabinet on September 18, 2007 that provides the plan to identify watershed projects to eliminate overflows at these stations. Table 2.2 lists each of the 14 pump stations identified in Exhibit E of the Consent Decree and demonstrates their SSO occurrences during the current reporting period. The 14 pump stations listed in the Consent Decree discharged a total of 52 times during the current reporting period, with an estimated overflow volume of 10,532,000 gallons, of which 89% can be attributed to the Lakeview Pump Station. As previously mentioned, the District uses Manning's Gravity Flow and Pipe Calculation to estimate discharge volume from pump stations. The only exception to this calculation methodology is at the Lakeview Pump Station, which has a metered bypass pipe.

**Table 2.2 Discharges from Consent Decree Pump Stations**  
(April 1, 2008 – June 30, 2008)

Name of Pump Station	Number of Discharge Occurrences	Total Estimated Volume (gallons)
Alex-Licking	4	144,000
Allen-Fork	0	0
Crestview	0	0
Harrison Harbor	0	0
Highland Acres	5	31,000
Kentucky Aire	7	216,000
Lakeview	8	9,425,000
Reilly Road	8	256,000
Ripple Creek <sup>1</sup>	6	61,000
South Hampton	4	64,000
South Park	0	0
Sunset <sup>2</sup>	6	250,000
Taylorport	3	84,000
Union	1	1,000
<b>TOTAL</b>	<b>52</b>	<b>10,532,000</b>

<sup>1</sup> One of the bypasses at the Ripple Creek Pump Station was caused by a power failure during dry weather.

<sup>2</sup> One of the bypasses at the Sunset Pump Station was caused by a power failure during dry weather.

In addition to tracking bypasses at the pump stations listed in the Consent Decree, the District continuously monitors all pump stations throughout the service area for wet weather capacity issues. During the current reporting period, there were eleven pump stations not listed in the Consent Decree that discharged during wet weather due to lack of capacity. Table 2.3 provides detailed information for these occurrences. As the District moves forward with developing the Watershed Plans required under the Consent Decree, priorities will be established based on severity and known wet weather issues will be addressed.

**Table 2.3 Discharges from Pump Stations Not Listed in the Consent Decree Due to Lack of Capacity (April 1, 2008 – June 30, 2008)**

<b>Name of Pump Station</b>	<b>Number of Wet-Weather Related Discharge Occurrences</b>	<b>Total Estimated Volume (gallons)</b>
Bullitsville	2	64,000
Gammon Calmet <sup>1</sup>	3	18,000
Gunpowder	2	10,000
Highland Heights	9	780,000
Keavy Road	3	35,000
Levi	1	2,000
Mafred	5	40,000
Meadow Hill <sup>2</sup>	2	8,000
Ridgeway	2	21,000
Silver Grove	1	858,000
Winters Lane	2	12,000
<b>TOTAL</b>	<b>32</b>	<b>1,848,000</b>

<sup>1</sup> One of the bypasses at the Gammon Calmet Pump Station occurred during dry weather when the station was shut-down due to an upstream sewer line break. Mobilization to haul the sludge was not feasible.

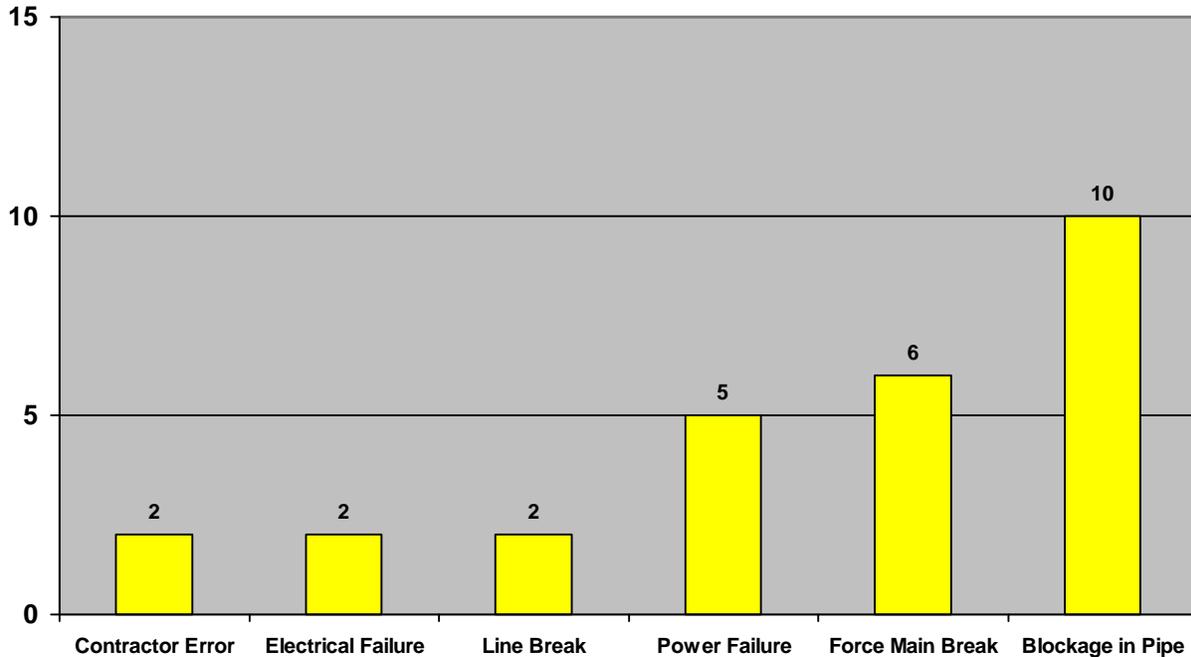
<sup>2</sup> One of the bypasses at the Meadow Hill Pump Station occurred during dry weather due to a power failure.

## 2.2 Non-recurring SSOs

During the current reporting period, there were a total of 27 non-recurring SSOs throughout the District's service area with a total estimated overflow volume of 1,492,000 gallons. As previously mentioned, this category of overflows includes discharges from the District's sanitary sewer system that have been observed to overflow less frequently than twice in a 12-month period. Included in this category are occurrences at pump stations that are not a result of wet weather capacity issues. Many of these are one-time, dry-weather occurrences caused by temporary system issues that are investigated and corrected as soon as practicable. Manning's Gravity Flow and Pipe Calculation is used to estimate discharge volume from any overflow release out of a pipe, and industry standard volume estimation techniques and calculations are used for spills or for any witnessed overflow from a manhole.

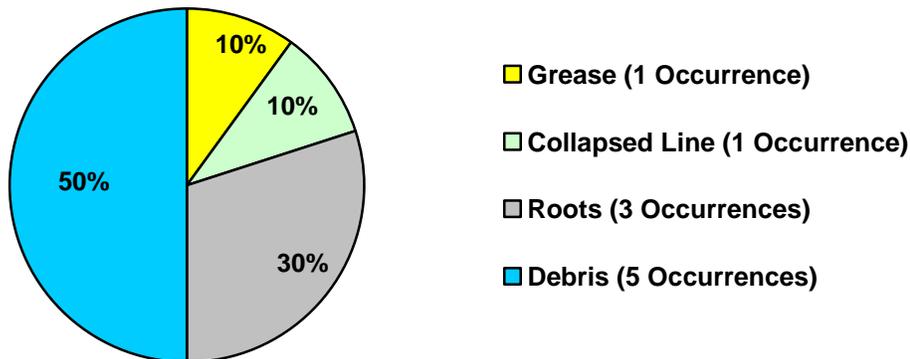
The 27 overflows reported in this category can be broken down by the primary causes demonstrated in Figure 2.1.

**Figure 2.1 Causes for Non-recurring SSOs**  
(April 1, 2008 – June 30, 2008)



The 10 non-recurring SSOs caused by blockages can further be broken down into five secondary causes, as demonstrated in Figure 2.2.

**Figure 2.2 Causes for Blockages in Pipes Resulting in Non-recurring SSOs**  
(April 1, 2008 – June 30, 2008)



All of these SSOs were immediately acted upon and the problems repaired. Where blockages and line breaks were found, the reasons for the blockages and breaks were

identified and recorded in gbaMS. If deemed necessary, the sewers were then put on a preventive maintenance list to be inspected and cleaned as-needed in the next six months as part of our Continuous Sewer Assessment Program.

### **2.3 Wet Weather CSOs**

Included in Appendix D are the modeled activation and volume statistics for the District's 96 CSOs. This data was generated from the hydraulic modeling program previously described in Section 2.1.

### **2.4 Dry Weather CSOs**

During the current reporting period, there were three CSOs during dry weather, with a total estimated discharge volume of 299,000 gallons. These dry weather CSOs were evaluated for cause, and solutions were identified to ensure they do not reoccur in accordance with our Nine Minimum Control No. 5 plan to reduce and eliminate dry weather CSOs. Table 2.4 summarizes the locations, causes of the overflows, estimated overflow volumes, and the actions taken to prevent these overflows from occurring in the future.

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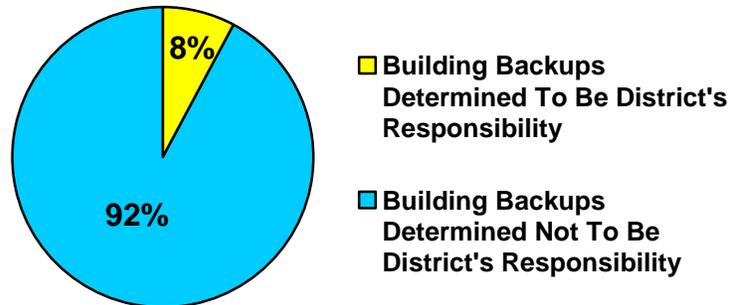
**Table 2.4 Dry Weather CSOs  
(April 1, 2008 – June 30, 2008)**

<b>Structure ID#</b>	<b>Location</b>	<b>Overflow Cause</b>	<b>Estimated Volume</b>	<b>Corrective Action Taken</b>
0820001	4 <sup>th</sup> St. CSO Chamber	Debris in bar rack	290,000 gallons	A new diversion weir wall has been designed and is scheduled for construction over the next month to prevent overflows due to debris in the bar rack. This new wall will provide sufficient time for cleaning of the bar rack before a dry weather overflow occurs. This location is also scheduled to be examined further for inline storage opportunity as part of our Watershed Plans as noted in Appendix D of our Nine Minimum Controls plan. The inline storage design will also aid in preventing future dry weather overflows.
0910055	Eastern & Meinken CSO Diversion	Gatorade bottle caught in dry weather sewer	8,000 gallons	The catch basins upstream of this diversion are in the process of being retrofitted to trap solids & floatables to prevent future dry weather overflow occurrences. The dry weather sewer will also be examined for upsizing to pass debris.
1730008	Rohman St. CSO Diversion	Construction debris from line replacement work fell into dry weather diversion sewer	1,000 gallons	Our construction foreman and crews were instructed about protecting the diversion and dry weather sewer from construction debris during work. Actions will be taken in the future to route flows around the diversion or install a temporary device to keep debris from entering the diversion sewer.

## 2.5 Building Backups

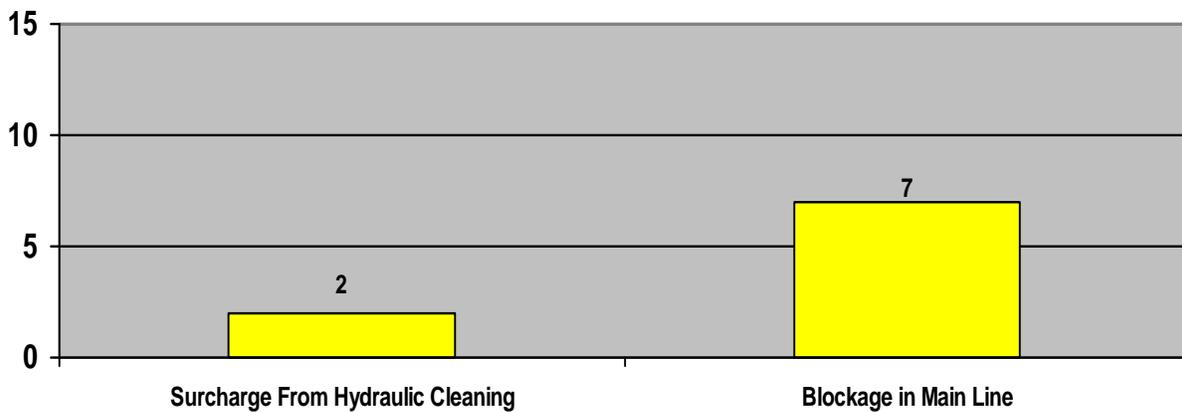
During the current reporting period, there were approximately 115 building backups throughout the District's service area. Of these 115, approximately 9 were determined to be the District's responsibility and 106 were determined not to be the responsibility of the District, as shown in Figure 2.3. The backups determined not to be the responsibility of the District were due to causes such as breaks and blockages in private service laterals.

**Figure 2.3 Building Backups: Public vs. Private**  
(April 1, 2008 – June 30, 2008)



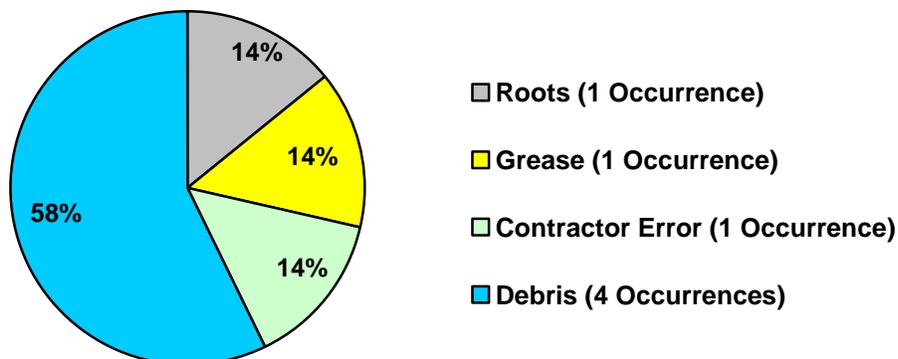
Causes for the approximate 9 building backups determined to be the District's responsibility are detailed in Figure 2.4 below.

**Figure 2.4 Causes of District-Responsible Building Backups**  
(April 1, 2008 – June 30, 2008)



The 7 building backups caused by blockages can further be broken down into four secondary causes, as demonstrated in Figure 2.5.

**Figure 2.5 Causes for Blockages in Main Line Resulting in a Building Backup  
(April 1, 2008 – June 30, 2008)**



All of these backups were immediately acted upon and the problems repaired. Where blockages and line breaks were found, the reasons for the blockages and breaks were identified and recorded in gbaMS. If deemed necessary, the sewers were then put on a preventive maintenance list to be inspected and cleaned as-needed in the next six months as part of our Continuous Sewer Assessment Program.

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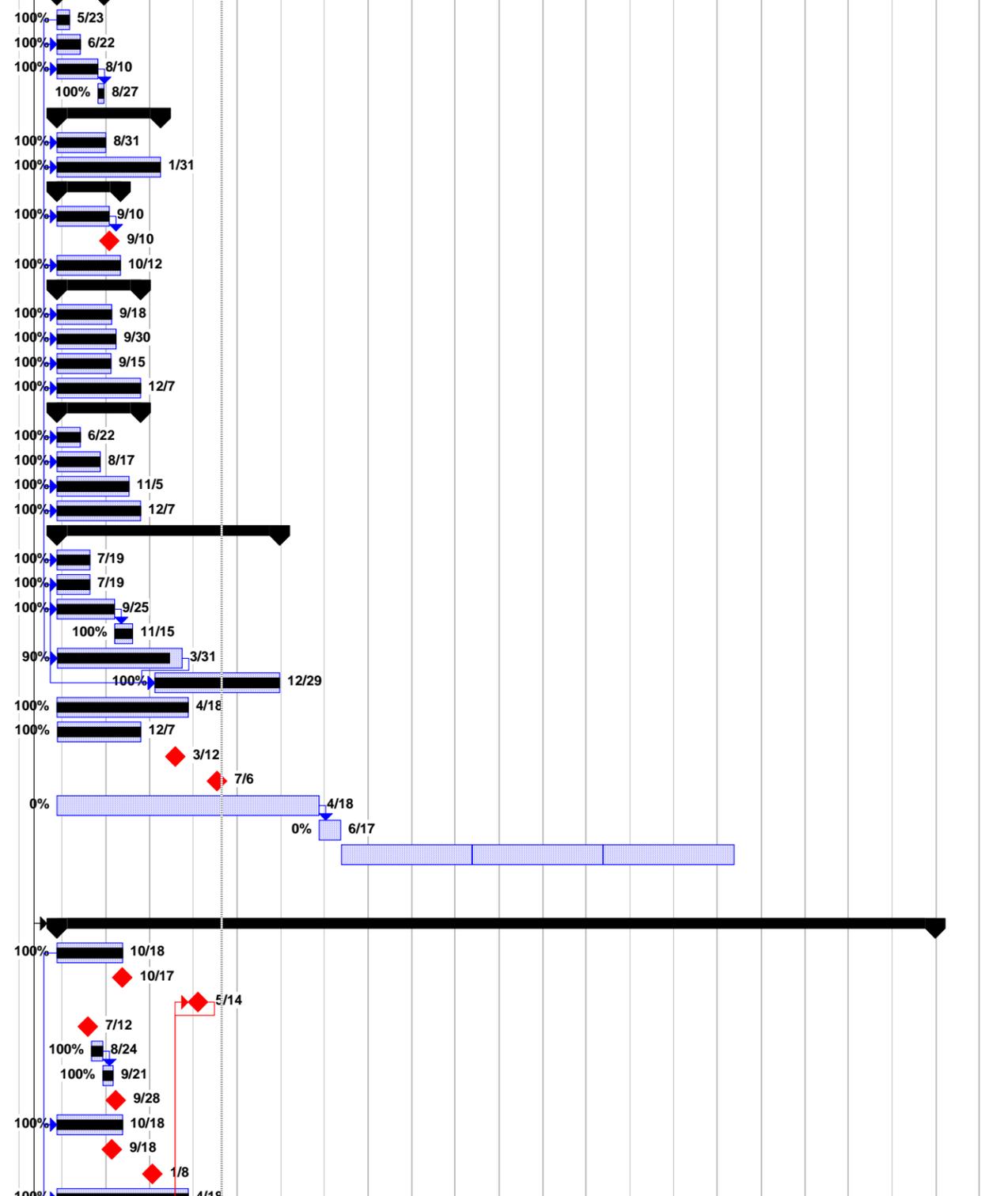
**APPENDIX A:**

***Consent Decree Schedule-2007 thru 2012***

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### Consent Decree Schedule-2007 thru 2012

ID	Task Name	Duration	Start	Finish	CD Paragraph	Responsible Party	2007		2008			2009			2010			2011			2012			2013			2014							
							May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May			
1	<b>Consent Decree</b>	<b>2449 days</b>	<b>Wed 4/18/07</b>	<b>Tue 12/31/13</b>			▶																											
3	<b>NMC PROGRAM REQUIREMENTS</b>	<b>1887.38 days</b>	<b>Wed 4/18/07</b>	<b>Sun 6/17/12</b>			▶																											
4	<b>NMC 1 -- Operation and Maintenance</b>	<b>131 days</b>	<b>Wed 4/18/07</b>	<b>Mon 8/27/07</b>			▶																											
5	O&M Criteria and Weighting Workshop	35 days	Wed 4/18/07	Wed 5/23/07		Novak/Vatter	▶																											
6	Complete Draft O&M Scoping for entire system	65 days	Wed 4/18/07	Fri 6/22/07		Novak/Vatter	▶																											
7	Draft Prioritized O&M Program	114 days	Wed 4/18/07	Fri 8/10/07		Novak/Vatter	▶																											
8	Revised Program Presented to District	17 days	Fri 8/10/07	Mon 8/27/07			▶																											
9	<b>NMC 2 -- Maximization of Storage</b>	<b>288.38 days</b>	<b>Wed 4/18/07</b>	<b>Thu 1/31/08</b>			▶																											
10	Draft Plan	135 days	Wed 4/18/07	Fri 8/31/07		Novak/Vatter	▶																											
11	Final Plan	288 days	Wed 4/18/07	Thu 1/31/08		Novak/Vatter	▶																											
12	<b>NMC 3 -- Pretreatment</b>	<b>177 days</b>	<b>Wed 4/18/07</b>	<b>Fri 10/12/07</b>			▶																											
13	Draft Plan	145 days	Wed 4/18/07	Mon 9/10/07		Novak/Vatter	▶																											
14	Recommendations Presented at Meeting	0 days	Mon 9/10/07	Mon 9/10/07			▶																											
15	Final Plan	177 days	Wed 4/18/07	Fri 10/12/07		Novak/Vatter	▶																											
16	<b>NMC 4 -- Maximize Collection and Treatment</b>	<b>233 days</b>	<b>Wed 4/18/07</b>	<b>Fri 12/7/07</b>			▶																											
17	Interceptor Inspection	153 days	Wed 4/18/07	Tue 9/18/07			▶																											
18	Dry Creek Analysis	165 days	Wed 4/18/07	Sun 9/30/07			▶																											
19	Draft Plan	150 days	Wed 4/18/07	Sat 9/15/07		Novak/Vatter	▶																											
20	Final Plan	233 days	Wed 4/18/07	Fri 12/7/07		Novak/Vatter	▶																											
21	<b>NMC 5 -- Prevent Dry Weather Overflows</b>	<b>233 days</b>	<b>Wed 4/18/07</b>	<b>Fri 12/7/07</b>			▶																											
22	Develop regulator solutions	65 days	Wed 4/18/07	Fri 6/22/07		Novak/Vatter	▶																											
23	Dry Weather Overflow Assessment and Recommendations	121 days	Wed 4/18/07	Fri 8/17/07			▶																											
24	Draft River Water Intrusion Feasibility Plan	201 days	Wed 4/18/07	Mon 11/5/07		Novak/Vatter	▶																											
25	Final River Water Intrusion Feasibility Plan	233 days	Wed 4/18/07	Fri 12/7/07		Novak/Vatter	▶																											
26	<b>NMC 6 -- Solids and Floatable Control</b>	<b>621 days</b>	<b>Wed 4/18/07</b>	<b>Mon 12/29/08</b>			▶																											
27	Draft plan with typical sketches	92 days	Wed 4/18/07	Thu 7/19/07		Novak/Vatter	▶																											
28	Identify locations for pilot floatables control	92 days	Wed 4/18/07	Thu 7/19/07		Novak/Vatter	▶																											
29	Complete Installation Details (Awaiting Modeling to Confirm Sizing)	160 days	Wed 4/18/07	Tue 9/25/07			▶																											
30	Complete Fabrication & Installation	50 days	Wed 9/26/07	Thu 11/15/07			▶																											
31	Complete Pilot Field Study (Dependent on rain events captured)	348 days	Wed 4/18/07	Mon 3/31/08			▶																											
32	Final prioritized plan	348 days	Wed 1/16/08	Mon 12/29/08		Novak/Vatter	▶																											
33	Submit NMC Documentation of Compliance	366 days	Wed 4/18/07	Fri 4/18/08	35	Novak/Vatter	▶																											
34	Draft report to SD1	233 days	Wed 4/18/07	Fri 12/7/07			▶																											
35	Actual Submittal Date	0 days	Wed 3/12/08	Wed 3/12/08		Novak/Vatter	▶																											
36	APPROVAL DATE	0 days	Sun 7/6/08	Sun 7/6/08			▶																											
37	Submit NMC Documentation of Full Compliance	731 days	Wed 4/18/07	Sat 4/18/09	35	Novak/Vatter	▶																											
38	Submit First NMC Annual Report	60 days	Sat 4/18/09	Wed 6/17/09	35	Novak/Vatter	▶																											
39	Submit NMC Annual Report	1095 days	Thu 6/18/09	Sun 6/17/12	35	Novak/Vatter	▶																											
43							▶																											
44							▶																											
45	<b>CMOM PROGRAM REQUIREMENTS</b>	<b>2449 days</b>	<b>Wed 4/18/07</b>	<b>Tue 12/31/13</b>			▶																											
46	Submit CMOM Program Self-Assessment	183 days	Wed 4/18/07	Thu 10/18/07	36	Mulshine	▶																											
47	Actual Submittal Date	0 days	Wed 10/17/07	Wed 10/17/07		Mulshine	▶																											
48	APPROVAL DATE	0 days	Wed 5/14/08	Wed 5/14/08			▶																											
49	Regroup Meeting	0 days	Thu 7/12/07	Thu 7/12/07		Kendall/Mulshine	▶																											
50	CMOM Workshops	32 days	Mon 7/23/07	Fri 8/24/07		Kendall/Mulshine	▶																											
51	Report submitted for internal review	28 days	Fri 8/24/07	Fri 9/21/07		Kendall/Mulshine	▶																											
52	Report submitted to key people for final review	0 days	Fri 9/28/07	Fri 9/28/07		Kendall/Mulshine	▶																											
53	Submit Grease Control Program (FOG)	183 days	Wed 4/18/07	Thu 10/18/07	36(a)	Clark/Martin	▶																											
54	Actual Submittal Date	0 days	Tue 9/18/07	Tue 9/18/07	36(a)	Casey/Waters	▶																											
55	APPROVAL DATE	0 days	Tue 1/8/08	Tue 1/8/08			▶																											
56	Submit Pump Station Backup Power Plan	366 days	Wed 4/18/07	Fri 4/18/08	36(b)	Novak/Vatter	▶																											



Project: CD Project First Five Years-Au  
Date: Thu 7/17/08

Task		Milestone		Rolled Up Task		Rolled Up Progress		External Tasks		Group By Summary	
Progress		Summary		Rolled Up Milestone		Split		Project Summary		Deadline	

## Consent Decree Schedule-2007 thru 2012

ID	Task Name	Duration	Start	Finish	CD Paragraph	Responsible Party	2007		2008			2009			2010			2011			2012			2013			2014	
							May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May
57	Actual Submittal Date	0 days	Fri 12/14/07	Fri 12/14/07	36(b)	Novak/Vatter																						
58	APPROVAL DATE	0 days	Wed 5/14/08	Wed 5/14/08																								
59	Submit Sewer Overflow Response Plan (SORP)	183 days	Wed 4/18/07	Thu 10/18/07	36(c)	Kendall																						
60	Actual Submittal Date	0 days	Tue 10/9/07	Tue 10/9/07	36(c)	Casey/Waters																						
61	APPROVAL DATE	0 days	Wed 5/14/08	Wed 5/14/08																								
62	<b>Submit CMOM Annual Report</b>	<b>2449 days</b>	<b>Wed 4/18/07</b>	<b>Tue 12/31/13</b>																								
63	Submit CMOM Annual Report 1	257 days	Wed 4/18/07	Mon 12/31/07																								
64	Actual Submittal Date	0 days	Fri 12/28/07	Fri 12/28/07																								
65	Submit CMOM Annual Report 2	365 days	Mon 12/31/07	Tue 12/30/08																								
66	Submit CMOM Annual Report 3	365 days	Wed 12/31/08	Thu 12/31/09																								
67	Submit CMOM Annual Report 4	365 days	Thu 12/31/09	Fri 12/31/10																								
68	Submit CMOM Annual Report 5	365 days	Fri 12/31/10	Sat 12/31/11																								
69	Submit CMOM Annual Report 6	365 days	Sat 12/31/11	Sun 12/30/12																								
70	Submit CMOM Annual Report 7	365 days	Mon 12/31/12	Tue 12/31/13																								
71	<b>Complete SORP Annual Review</b>	<b>1826 days</b>	<b>Fri 10/19/07</b>	<b>Thu 10/18/12</b>	<b>36(c)</b>	<b>Kendall</b>																						
72	Complete SORP Annual Review 2	365 days	Fri 10/19/07	Sat 10/18/08	36(c)	Kendall																						
73	Complete SORP Annual Review 3	364 days	Sun 10/19/08	Sun 10/18/09	36(c)	Kendall																						
74	Complete SORP Annual Review 4	364 days	Mon 10/19/09	Mon 10/18/10	36(c)	Kendall																						
75	Complete SORP Annual Review 5	364 days	Tue 10/19/10	Tue 10/18/11	36(c)	Kendall																						
76	Complete SORP Annual Review 6	365 days	Wed 10/19/11	Thu 10/18/12	36(c)	Kendall																						
77																												
78																												
79	<b>INITIAL WATERSHED PROJECT LIST</b>	<b>2084.38 days</b>	<b>Wed 4/18/07</b>	<b>Mon 12/31/12</b>																								
80	Complete Initial Watershed Projects (51 Total) (Actual Deadline 2014)	2084 days	Wed 4/18/07	Mon 12/31/12	37	Novak																						
81	34 Projects Complete, 9 Under Construction (8 Associated with WRWWTP)	0 days	Tue 6/26/07	Tue 6/26/07	37	Novak																						
82	Submit First Initial Watershed Projects Annual Report	366 days	Wed 4/18/07	Fri 4/18/08	37	Mulshine																						
83	Actual Submittal Date	0 days	Tue 4/8/08	Tue 4/8/08		Mulshine																						
84	Submit Initial Watershed Projects Annual Report	1521.38 days	Sat 4/19/08	Mon 6/18/12	37	Mulshine																						
89																												
90																												
91	<b>PUMP STATION PLAN</b>	<b>1748.38 days</b>	<b>Wed 4/18/07</b>	<b>Mon 1/30/12</b>																								
92	Submit Pump Station Plan (PSP)	183 days	Wed 4/18/07	Thu 10/18/07	38	Novak/Vatter																						
93	Actual Submittal Date	0 days	Tue 9/18/07	Tue 9/18/07		Novak/Vatter																						
94	APPROVAL DATE	0 days	Wed 5/14/08	Wed 5/14/08																								
95	Submit First Pump Station Plan Annual Report	409 days	Thu 10/18/07	Sun 11/30/08	38	Mulshine																						
96	Submit Pump Station Plan Annual Report	1155 days	Mon 12/1/08	Mon 1/30/12	38	Mulshine																						
100	Complete Remedial Measures at 8 Pump Stations	1353 days	Wed 4/18/07	Fri 12/31/10	38	Novak/Vatter																						
101																												
102																												
103	<b>WATERSHED PLANNING (1st of 4 Plans)</b>	<b>804 days</b>	<b>Wed 4/18/07</b>	<b>Tue 6/30/09</b>																								
104	Develop Watershed Framework	226 days	Wed 4/18/07	Fri 11/30/07	39(a)	Gibson/Clements																						
105	Complete Internal Review of Draft Framework	30 days	Sat 12/1/07	Mon 12/31/07	39(a)	Gibson/Clements																						
106	Obtain Public Input on Framework for Watershed Plans	58 days	Wed 1/23/08	Fri 3/21/08	40	Casey																						
107	Submit Framework for Watershed Plans	0 days	Fri 4/18/08	Fri 4/18/08	39(a)	Gibson/Clements																						
108	<b>First Round of Watershed Plans</b>	<b>804 days</b>	<b>Wed 4/18/07</b>	<b>Tue 6/30/09</b>	<b>39(b)</b>	<b>Gibson</b>																						
109	Draft 16 Watershed Characterization Reports	226 days	Wed 4/18/07	Fri 11/30/07		Clements																						
110	Complete 16 Watershed Characterization Reports	304 days	Sat 12/1/07	Tue 9/30/08		Clements																						
111	Develop Alternatives Analysis Approach	212 days	Sat 9/1/07	Mon 3/31/08		Vatter/Turner																						
112	Conduct Banklick Pilot Project	169 days	Tue 11/13/07	Wed 4/30/08		Vatter/Turner																						
113	Refine Interim Water Quality Models	469 days	Wed 4/18/07	Wed 7/30/08		Scott																						
114	Develop Infrastructure Models	439 days	Wed 4/18/07	Mon 6/30/08		Vatter																						
115	Confirm Water Quality Models	90 days	Tue 7/1/08	Tue 9/30/08		Scott																						
116	Conduct Alternatives Analysis	274 days	Tue 4/1/08	Wed 12/31/08		Vatter/Turner																						

Project: CD Project First Five Years-Au  
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Task Milestone Rolled Up Task Rolled Up Progress External Tasks Group By Summary

Progress Summary Rolled Up Milestone Split Project Summary Deadline

### Consent Decree Schedule-2007 thru 2012

ID	Task Name	Duration	Start	Finish	CD Paragraph	Responsible Party	2007		2008			2009			2010			2011			2012			2013		2014	
							May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan	May	Sep	Jan
117	Conduct Financial Affordability Analysis	274 days	Tue 4/1/08	Wed 12/31/08	39(a)	Turner/Schmitt			100%			12/31															
118	Conduct Water Quality Assessments (Stream Monitoring)	623 days	Wed 4/18/07	Wed 12/31/08		Scott/Wooten	40%					12/31															
119	Develop Stream Condition Index	426 days	Thu 11/1/07	Wed 12/31/08		Wooten		45%				12/31															
120	Complete Draft Watershed Plans	88 days	Fri 1/2/09	Tue 3/31/09	39(b)	Gibson					0%	3/31															
121	Obtain Public Input on First Round of Watershed Plans	60 days	Wed 4/1/09	Sun 5/31/09	40	Casey					0%	5/31															
122	Submit First Round of Watershed Plans	0 days	Tue 6/30/09	Tue 6/30/09	39(b)	Gibson																					
123	Watershed Summit -- Meets Public Input Requirement for Watershed Plan Process	0 days	Thu 8/30/07	Thu 8/30/07	40	Casey																					
124																											
125																											
126	<b>REPORTING</b>	<b>2022.38 days</b>	<b>Wed 4/18/07</b>	<b>Tue 10/30/12</b>																							
127	Submit Quarterly Report 1	287 days	Wed 4/18/07	Wed 1/30/08		Mulshine	100%					1/30															
128	Actual Submittal Date	0 days	Wed 1/30/08	Wed 1/30/08		Mulshine																					
129	<b>Quarterly Reports</b>	<b>1734 days</b>	<b>Thu 1/31/08</b>	<b>Tue 10/30/12</b>	<b>42</b>	<b>Mulshine</b>																					
130	Submit Quarterly Report 2	90 days	Thu 1/31/08	Wed 4/30/08		Mulshine						90%	4/30														
131	Actual Submittal Date	0 days	Wed 4/30/08	Wed 4/30/08		Mulshine																					
132	Submit Quarterly Report 3	3 mons	Thu 5/1/08	Wed 7/30/08	42	Mulshine						70%	7/30														
133	Submit Quarterly Report 4	3 mons	Fri 8/1/08	Thu 10/30/08	42	Mulshine						0%	10/30														
134	Submit Quarterly Report 5	3 mons	Sat 11/1/08	Fri 1/30/09	42	Mulshine						0%	1/30														
135	Submit Quarterly Report 6	3 mons	Fri 1/30/09	Thu 4/30/09	42	Mulshine						0%	4/30														
136	Submit Quarterly Report 7	3 mons	Fri 5/1/09	Thu 7/30/09	42	Mulshine						0%	7/30														
137	Submit Quarterly Report 8	3 mons	Sat 8/1/09	Fri 10/30/09	42	Mulshine						0%	10/30														
138	Submit Quarterly Report 9	3 mons	Sun 11/1/09	Sat 1/30/10	42	Mulshine						0%	1/30														
139	Submit Quarterly Report 10	3 mons	Sat 1/30/10	Fri 4/30/10	42	Mulshine						0%	4/30														
140	Submit Quarterly Report 11	3 mons	Sat 5/1/10	Fri 7/30/10	42	Mulshine						0%	7/30														
141	Submit Quarterly Report 12	3 mons	Sun 8/1/10	Sat 10/30/10	42	Mulshine						0%	10/30														
142	Submit Quarterly Report 13	3 mons	Mon 11/1/10	Sun 1/30/11	42	Mulshine						0%	1/30														
143	Submit Quarterly Report 14	3 mons	Sun 1/30/11	Sat 4/30/11	42	Mulshine						0%	4/30														
144	Submit Quarterly Report 15	3 mons	Sun 5/1/11	Sat 7/30/11	42	Mulshine						0%	7/30														
145	Submit Quarterly Report 16	3 mons	Mon 8/1/11	Sun 10/30/11	42	Mulshine						0%	10/30														
146	Submit Quarterly Report 17	3 mons	Tue 11/1/11	Mon 1/30/12	42	Mulshine						0%	1/30														
147	Submit Quarterly Report 18	3 mons	Tue 1/31/12	Mon 4/30/12	42	Mulshine						0%	4/30														
148	Submit Quarterly Report 19	3 mons	Tue 5/1/12	Mon 7/30/12	42	Mulshine						0%	7/30														
149	Submit Quarterly Report 20	3 mons	Wed 8/1/12	Tue 10/30/12	42	Mulshine						0%	10/30														
150																											
151																											
152	<b>CIVIL PENALTY</b>	<b>61 days</b>	<b>Wed 4/18/07</b>	<b>Mon 6/18/07</b>																							
153	Pay Civil Penalties to EPPC and US EPA	61 days	Wed 4/18/07	Mon 6/18/07	46	Schmitt	100%						6/18														
154																											
155																											
156	<b>SUPPLEMENTAL PROJECTS</b>	<b>1887 days</b>	<b>Wed 4/18/07</b>	<b>Sun 6/17/12</b>																							
157	Supplemental Env. Projects	1827 days	Wed 4/18/07	Wed 4/18/12	47	Turner	24%																			4/18	
158	SEP Completion Reports	60 days	Wed 4/18/12	Sun 6/17/12	48	Mulshine																				0% 6/17	
159																											
160																											
161	<b>STATE ENVIRONMENTAL PROJECTS</b>	<b>1887.38 days</b>	<b>Wed 4/18/07</b>	<b>Sun 6/17/12</b>	<b>49</b>	<b>Gibson/Casey</b>																					
162	Conservancies	1827 days	Wed 4/18/07	Wed 4/18/12	49	Frye	10%																			4/18	
163	Licking River Watershed Watch	1827 days	Wed 4/18/07	Wed 4/18/12	49	Scott	25%																			4/18	
164	Split Rock	1827 days	Wed 4/18/07	Wed 4/18/12	49	Wooten	100%																			4/18	
165	Education Programs	1827 days	Wed 4/18/07	Wed 4/18/12	49	Casey/Eggemeyer	5%																			4/18	
166	State Environmental Project Completion Report	60 days	Wed 4/18/12	Sun 6/17/12	50	Mulshine																				0% 6/17	
167	Set up 6 Separate Escrow Accounts	183 days	Wed 4/18/07	Thu 10/18/07	Exhibit H	Schmitt	100%																			10/18	

Project: CD Project First Five Years-Au  
Date: Thu 7/17/08

Task Milestone Rolled Up Task Rolled Up Progress External Tasks Group By Summary

Progress Summary Rolled Up Milestone Split Project Summary Deadline

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**APPENDIX B:**  
***Initial Watershed Projects***

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## Initial Watershed Projects

CIP Code	CIP Title	Project Manager	Past Activity on Project from 4/1/2008 to 6/30/2008	Planned Activity for 7/1/2008 to 9/30/2008
<b>East Watershed Projects</b>				
C-054-00	Eastern Regional - Contract 1--Pond Creek Force Main and Gravity Sewer to Eastern Regional WWTP	Darleen McGuire	Continued work on punchlist items.	Complete a few minor punchlist items.
C-075-00	Eastern Regional - Contract 3--Riley Force Main and Gravity Sewer to the ERWWTP	Darleen McGuire	Continued construction.	Four tie-ins to be complete once Riley Road Pump Station is in service mid-November. Complete restoration and punchlist items.
C-076-00	Eastern Regional - Contract 4--Alex Licking Gravity Sewer & Force Main to Contract 1	Bob Wilson	Completed work on force main and sewer.	Sewer and force main work is complete. Can put system into service once Alex-Licking Pump Station work is completed.
C-077-01	Eastern Regional - Contract 5--Sunset Force Main and Gravity Sewer	Jim Turner	Continued work on completing design plans.	Developer to obtain individual permit. Continue work on securing remaining two easements. Construction planned to start on the sanitary line later this year.
C-079-00	Eastern Regional - Contract 7--Riley Road #2 Pump Station	Brandon Vatter	Continued construction.	Continued construction.
C-080-00	Eastern Regional - Contract 8--Alex-Licking and Sunset Pump Stations	Jim Turner	Continued construction.	Final completion of all construction items, including placement of back-up generator and demolition of old pump station.
C-426-00 & 01	Eastern Regional Wastewater Treatment Plant	Chris Novak	Sludge Processing Facilities and EQ storage put into operation. The entire Water Reclamation Facility reached substantial completion.	All work scheduled to be complete by July 31. Only warranty items left to complete.
<b>West Watershed Projects</b>				
C-001-00	Western Regional Conveyance System to Western Regional WWTP	Brandon Vatter	Continued design and easement acquisition.	Complete design and easement acquisition. Anticipate advertising for Bids in August and accepting bids in October.
C-002-00	Western Regional - Sunnybrook Sewer	Brandon Vatter	Continued design.	Continue and complete design. Get project ready for bidding.
C-003-00	Western Regional - Frogtown Interceptor Sewer (from Sunnybrook Dr. to Frogtown Rd.)	Brandon Vatter	Continued design.	Continued design.
C-004-00	Western Regional - South Fork Gunpowder Interceptor Sewer and Rosetta Sewer	Brandon Vatter	Continued design.	Continued design.
C-005-00	Western Regional - Narrows Road Diversion Pump Station	Brandon Vatter	Continued design.	Continued design.
C-038-00	Western Regional - Gunpowder Interceptor Sewer	Bob Wilson	Resumed work on installing 72 inch gravity sewer and manholes.	Continue installation of 72-inch gravity sewer and manholes.
C-039-00	Western Regional - Richwood Sewer and Force Main	Brandon Vatter	Continued design.	Continued design.
C-063-00	Western Regional - Turkeyfoot Industrial Road Force Main	Bob Wilson	Revisions were made to the design to better coordinate with the Sunnybrook sewer project. Revisions will be completed and construction is anticipated to begin next quarter.	Start construction.

## Initial Watershed Projects

CIP Code	CIP Title	Project Manager	Past Activity on Project from 4/1/2008 to 6/30/2008	Planned Activity for 7/1/2008 to 9/30/2008
C-414-02	American Sign Pump Station Rehabilitation	Jim Turner	Continued work on punchlist items.	Final completion of punchlist items.
C-424-00	Western Regional Wastewater Treatment Plant	Chris Novak	Continued work on final construction plans and specifications.	Construction plans and specifications will be completed. Waiting for final approval from KDOW on KPDES Discharge Permit and Facility Plan Amendment. The project will go out to bid this fall.
<b>Central Watershed Projects</b>				
C-414-16	Meyer Road Pump Station Rehabilitation	Jim Turner	Continued work on punchlist items.	Final completion of punchlist items.
C-414-43	Macke Pump Station Rehabilitation	Jim Turner	Completed punchlist items.	No activity planned; project is complete.
<b>North &amp; East Watershed Projects</b>				
C-475-00	Grit Chamber Projects	Bob Wilson	Continued construction. Construction was delayed due to Licking River flooding.	Complete construction of grit chamber and put structure into service.

**APPENDIX C:**  
***Recurring SSOs***

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**Recurring SSOs**

No.	MHID	City	County	Model Predicted Overflow Activations	Model Predicted Overflow Volume (MG)
1	0020014	Silver Grove	Campbell	0	0.00
2	0050022	Fort Thomas	Campbell	4	0.19
3	0060001	Unincorp Campbell County	Campbell	2	0.12
4	0060002	Unincorp Campbell County	Campbell	1	0.01
5	0090009	Highland Heights	Campbell	0	0.00
6	0100001	Highland Heights	Campbell	0	0.00
7	0100002	Highland Heights	Campbell	2	0.04
8	0110010	Highland Heights	Campbell	2	0.05
9	0150023	Southgate	Campbell	0	0.00
10	0150058	Wilder	Campbell	4	0.50
11	0150063	Wilder	Campbell	0	0.00
12	0150064	Wilder	Campbell	0	0.00
13	0150065	Wilder	Campbell	3	0.06
14	0150069	Wilder	Campbell	0	0.00
15	0150351	Southgate	Campbell	0	0.00
16	0150356	Southgate	Campbell	0	0.00
17	0300008	Fort Thomas	Campbell	0	0.00
18	0410010	Fort Thomas	Campbell	6	0.06
19	0410011	Fort Thomas	Campbell	0	0.00
20	0410019	Fort Thomas	Campbell	5	0.07
21	0410036	Fort Thomas	Campbell	0	0.00
22	0410068	Newport	Campbell	0	0.00
23	0440074	Fort Thomas	Campbell	1	< 0.01
24	0530083	Newport	Campbell	7	0.55
25	0650025	Bellevue	Campbell	5	1.66
26	0650053	Bellevue	Campbell	0	0.00
27	0650098	Bellevue	Campbell	0	0.00
28	0860001*	Wilder	Campbell	9	17.58
29	0860003	Wilder	Campbell	0	0.00
30	0860016	Wilder	Campbell	0	0.00
31	1040060	Independence	Kenton	2	0.22
32	1090069	Edgewood	Kenton	0	0.00
33	1110025	Erlanger	Kenton	4	0.13
34	1110067	Erlanger	Kenton	3	0.55
35	1110161	Erlanger	Kenton	4	0.11
36	1110294	Erlanger	Kenton	0	0.00
37	1160004	Crestview Hills	Kenton	0	0.00
38	1190007	Erlanger	Kenton	0	0.00
39	1220029	Erlanger	Kenton	0	0.00
40	1240008	Erlanger	Kenton	5	0.46
41	1280008	Erlanger	Kenton	0	0.00
42	1560016	Fort Mitchell	Kenton	0	0.00
43	1560019	Fort Mitchell	Kenton	0	0.00
44	1560074	Fort Mitchell	Kenton	0	0.00
45	1570100	Fort Mitchell	Kenton	4	0.03
46	1590006	Lakeside Park	Kenton	0	0.00
47	1600005	Lakeside Park	Kenton	0	0.00
48	1600009	Lakeside Park	Kenton	4	0.28
49	1600029	Lakeside Park	Kenton	0	0.00
50	1600049	Lakeside Park	Kenton	0	0.00
51	1600050	Lakeside Park	Kenton	4	0.05
52	1600059	Lakeside Park	Kenton	0	0.00
53	1600110	Lakeside Park	Kenton	0	0.00
54	1600113	Lakeside Park	Kenton	0	0.00
55	1610102	Fort Mitchell	Kenton	0	0.00
56	1610114	Fort Mitchell	Kenton	1	< 0.01

Recurring SSOs					
No.	MHID	City	County	Model Predicted Overflow Activations	Model Predicted Overflow Volume (MG)
57	1610115	Fort Mitchell	Kenton	0	0.00
58	1620001	Fort Mitchell	Kenton	1	< 0.01
59	1630012	Crescent Springs	Kenton	0	0.00
60	1680001	Unincorp Kenton County	Kenton	4	0.50
61	1690043	Fort Wright	Kenton	4	0.01
62	1700025	Park Hills	Kenton	1	< 0.01
63	1730104	Fort Mitchell	Kenton	1	0.03
64	1730110	Bromley	Kenton	0	0.00
65	1760047	Edgewood	Kenton	0	0.00
66	1760048	Edgewood	Kenton	0	0.00
67	1820014	Villa Hills	Kenton	0	0.00
68	1830017	Unincorp Boone County	Boone	0	0.00
69	1830020	Unincorp Boone County	Boone	0	0.00
70	1830067	Unincorp Boone County	Boone	0	0.00
71	1860108	Taylor Mill	Kenton	1	< 0.01
72	1870013	Covington	Kenton	0	0.00
73	1890001	Lakeside Park	Kenton	0	0.00
74	1890010	Lakeside Park	Kenton	0	0.00
75	1890011	Lakeside Park	Kenton	0	0.00
76	1900028	Cold Spring	Campbell	4	0.07
77	1920163	Cold Spring	Campbell	0	0.00
78	1950199	Fort Wright	Kenton	0	0.00
79	1960012	Crestview Hills	Kenton	0	0.00
80	2030097	Edgewood	Kenton	0	0.00
81	2090001	Elsmere	Kenton	0	0.00
82	2090026	Elsmere	Kenton	0	0.00
83	2110002	Elsmere	Kenton	6	0.98
84	2120001	Elsmere	Kenton	3	0.10
85	2120002	Elsmere	Kenton	0	0.00
86	2120041	Elsmere	Kenton	2	0.03
87	2130022	Villa Hills	Kenton	3	0.18
88	2150050	Crestview	Kenton	0	0.00
89	2160036	Fort Mitchell	Kenton	0	0.00
90	2280011	Unicorp Kenton County	Kenton	4	0.30
91	2280012	Unicorp Kenton County	Kenton	0	0.00
92	2290001	Crescent Springs	Kenton	1	0.01
93	2300123	Unicorp Kenton County	Kenton	7	0.85
94	2380001	Unincorp Boone County	Boone	3	0.30
95	2390002	Unincorp Boone County	Boone	0	0.00
96	2390006	Unincorp Boone County	Boone	1	0.02
97	2390008	Unincorp Boone County	Boone	0	0.00
98	2390762	Unincorp Boone County	Boone	3	0.25
99	1950PS1*	Fort Wright	Kenton	7	9.40
<b>TOTAL</b>				<b>138</b>	<b>35.76</b>

\* District Flow Meter Used for Statistics

Threshold for model activation is 0.001 MGD and 0.001 MG

**APPENDIX D:**  
***Wet Weather CSOs***

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### Wet Weather CSOs

No.	CSO ID	KPDES Permit #	Model Predicted Activations	Model Predicted Overflow Volume (MG)
1	1870194	KY0021466 - Outfall 79	5	0.2
2	1850158	KY0021466 - Outfall 76	22	16.2
3	1870193	KY0021466 - Outfall 78	13	0.4
4	1510199	KY0021466 - Outfall 67	0	0.0
5	1840130	To Be Permitted	12	0.5
6	0880081	KY0021466 - Outfall 36	21	6.7
7	0570089	KY0021466 - Outfall 16	21	17.7
8	0840116	KY0021466 - Outfall 27	17	2.9
9	0570090	KY0021466 - Outfall 17	21	13.0
10	0790086	KY0021466 - Outfall 29	19	71.3
11	1480187	KY0021466 - Outfall 30	23	186.2
12	0640090	KY0021466 - Outfall 24	27	42.2
13	1420142	KY0021466 - Outfall 51	23	39.1
14	0840111	To Be Permitted	16	9.7
15	0910068	KY0021466 - Outfall 37	14	19.5
16	0980081	KY0021466 - Outfall 48	19	22.6
17	1500131	KY0021466 - Outfall 66	14	2.8
18	0840112	To Be Permitted	17	0.8
19	1490132	KY0021466 - Outfall 65	10	5.4
20	0630061	KY0021466 - Outfall 83	16	0.8
21	0790084	KY0021466 - Outfall 31	23	6.1
22	0650090	KY0021466 - Outfall 26	5	2.2
23	0910065	KY0021466 - Outfall 38	17	72.4
24	0610071	KY0021466 - Outfall 21	27	5.8
25	0620075	KY0021466 - Outfall 23	24	4.1
26	0880082	KY0021466 - Outfall 35	4	0.4
27	0600104	To Be Permitted	4	0.1
28	0600097	KY0021466 - Outfall 19	20	1.8
29	0540009	To Be Permitted	12	0.5
30	0540044	To Be Permitted	15	0.9
31	0600094	KY0021466 - Outfall 18	18	0.7
32	0610072	KY0021466 - Outfall 20	12	0.2
33	0620077	KY0021466 - Outfall 22	15	0.2
34	0930105	KY0021466 - Outfall 41	21	10.4
35	1440209	KY0021466 - Outfall 56	28	17.9
36	1470093	KY0021466 - Outfall 63	21	12.7
37	1720109	KY0021466 - Outfall 73	13	7.9
38	1880091	KY0021466 - Outfall 80	3	1.7
39	0960063	KY0021466 - Outfall 45	5	2.2
40	1710116	KY0021466 - Outfall 68	24	12.7
41	0600096	To Be Permitted	11	0.1
42	0770096	KY0021466 - Outfall 28	24	2.8
43	0870079	KY0021466 - Outfall 34	20	13.7
44	0930104	KY0021466 - Outfall 40	1	0.1
45	0930106	KY0021466 - Outfall 39	3	0.0
46	1420144	KY0021466 - Outfall 52	0	0.0
47	1420145	KY0021466 - Outfall 53	0	0.0
48	1420147	KY0021466 - Outfall 55	2	0.0
49	1440206	KY0021466 - Outfall 61	18	1.3
50	1440212	KY0021466 - Outfall 58	17	2.0
51	1730263	KY0021466 - Outfall 74	10	0.7

<b>Wet Weather CSOs</b>				
<b>No.</b>	<b>CSO ID</b>	<b>KPDES Permit #</b>	<b>Model Predicted Activations</b>	<b>Model Predicted Overflow Volume (MG)</b>
52	0870078	KY0021466 - Outfall 33	7	0.6
53	1350155	KY0021466 - Outfall 49	1	14.5
54	1420141	KY0021466 - Outfall 50	16	0.3
55	1440205	KY0021466 - Outfall 60	13	0.3
56	1710114	KY0021466 - Outfall 69	4	0.1
57	1710119	KY0021466 - Outfall 70	9	8.5
58	1710121	KY0021466 - Outfall 71	8	4.1
59	1880090	KY0021466 - Outfall 81	4	1.0
60	0550024	To Be Permitted	4	0.0
61	0930102	KY0021466 - Outfall 43	0	0.0
62	0930103	KY0021466 - Outfall 42	3	0.0
63	0960064	KY0021466 - Outfall 44	1	0.0
64	0980073	KY0021466 - Outfall 46	4	0.1
65	0980080	KY0021466 - Outfall 47	1	0.0
66	1420146	KY0021466 - Outfall 54	0	0.0
67	1470089	KY0021466 - Outfall 62	1	0.0
68	1480185	To Be Permitted	12	0.8
69	1490172	KY0021466 - Outfall 64	0	0.0
70	1710124	KY0021466 - Outfall 72	8	1.6
71	0530110	To Be Permitted	7	0.6
72	0330100	KY0021466 - Outfall 12	2	0.0
73	0340050	KY0021466 - Outfall 14	7	0.2
74	0340051	KY0021466 - Outfall 13	7	0.4
75	0600095	To Be Permitted	0	0.0
76	0910066	To Be Permitted	0	0.0
77	0910067	To Be Permitted	NA	NA
78	1320093	To Be Permitted	1	4.5
79	0010001	To Be Permitted	8	0.9
80	1730259	KY0021466 - Outfall 75	8	1.0
81	0200069	KY0021466 - Outfall 11	7	0.1
82	0630054	To Be Permitted	0	0.0
83	0660085	To Be Permitted	0	0.0
84	1310100	To Be Permitted	0	0.0
85	1310106	To Be Permitted	0	0.0
86	1380054	To Be Permitted	0	0.0
87	1380083	To Be Permitted	1	5.3
88	1440204	KY0021466 - Outfall 59	0	0.0
89	1440207	To Be Permitted	0	0.0
90	0030031	KY0021466 - Outfall 10	0	0.0
91	0650100	KY0021466 - Outfall 25	7	0.1
92	0010047	To Be Permitted	NA	NA
93	0650008	To Be Permitted	0	0.0
94	1510098	To Be Permitted	0	0.0
95	0690008	To Be Permitted	1	0.0
96	1510133	To Be Permitted	0	0.0
<b>TOTAL</b>			<b>899</b>	<b>684.7</b>

Threshold for model activation is 0.001 MGD and 0.001 MG