

Report for
City of Ashland, Kentucky

Consent Judgment Annual Report 2015

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1.01 INTRODUCTION

The City of Ashland (City) has entered into a Consent Judgment with the Energy and Environment Cabinet (EEC) formerly known as the Environmental and Public Protection Cabinet. The Consent Judgment was signed by the Franklin Circuit Court Division II, Judge Thomas Wingate, and entered as Civil Action No. 07-CI-1256 on September 5, 2007. The Consent Judgment addresses the operation of the wastewater collection system owned by the City and is founded on the EEC's duty to enforce the federal Clean Water Act.

The City initiated development of its combined sewer operational plan (CSOP) in 1995. The CSOP has been submitted annually to the Commonwealth of Kentucky. This Annual Report is intended to meet the Consent Judgment requirement for Annual Reporting and the Kentucky Pollution Discharge Elimination System (KPDES) Permit No. KY022373 requirement for the annual CSOP update.

This document is the Annual Report submitted in accordance with Paragraph CJ-21 of the Consent Judgment. Sections 2 through 7 correspond to Paragraphs CJ-21A through CJ-21F, respectively. Section 8 summarizes information from the CSOP required by the KPDES Permit.

The completion and submittal of this annual report is also intended to fulfill Paragraphs 17 (sanitary sewer overflow [SSO] data) and 18 (combined sewer overflow [CSO] data) of the Administrative Order issued on December 21, 2007, by the United States Environmental Protection Agency (USEPA).

Reporting requirements include the following items:

- A. Progress on the development and implementation of programs including Capacity, Management, Operation and Maintenance (CMOM), nine minimum controls (NMC) for CSOs, a sanitary sewer overflow plan (SSOP), a sewer overflow response protocol (SORP), a CSOP, and a long-term control plan (LTCP).
- B. Schedules and costs for capital improvement projects.
- C. Schedules for study and planning activities.
- D. Documentation of SSOs, wet weather CSOs, and dry weather CSOs.

This Annual Report is compiled for calendar year 2015.

1.02 SUMMARY OF PERMIT

The City operates a combined sewer system (CSS) along with a wastewater treatment plant (WWTP). The City also receives wastewater into its collection system from two satellite sewer systems. The receiving water for the facility is the Ohio River at mile point 659.7.

Details of the wastewater discharge permit are shown in Table 1.02-1.

Name	Ashland WWTP
NPDES Number	KY0022373
Receiving Water	Ohio River
Mile Point	659.7
Permit Effective	May 1, 2002
Permit Expiration Date	April 30, 2006
Comment	Under administrative extension ¹

¹Draft Permit was published for public comment in January 2013.

Table 1.02-1 WWTP Permit

The current KPDES KY0022373 permit became effective May 1, 2002, and expired on April 30, 2006. The WWTP is currently discharging under an administrative extension of the 2002 permit. According to the permit, the City has nine registered outfall points, as shown in Table 1.02-2.

Outfall No.	Location	Latitude	Longitude	Receiving Water
001	WWTP			Ohio River
002	26th Street	38°28'22"	82°37'30"	Ohio River
004	37th Street	38°27'45"	82°36'37"	Ohio River
006	34th Street	38°28'01"	82°37'01"	Ohio River
008	18th Street	38°28'44"	82°38'09"	Ohio River
009	15th Street	38°28'50"	82°38'09"	Ohio River
010	10th Street	38°28'59"	82°38'43"	Ohio River
012	6th Street	38°28'54"	82°39'10"	Ohio River via Long Run
014	Roberts Drive	38°28'39"	82°39'46"	Ohio River via Hoods Creek

Table 1.02-2 KPDES Permitted Outfalls

1.03 DEFINITIONS

- City City of Ashland
- CMOM Capacity, Management, Operation and Maintenance
- CSO combined sewer overflow
- CSOP combined sewer operational plan
- CSS combined sewer system
- EAP Early Action Plan
- EEC Energy and Environment Cabinet
- FT feet
- hp horsepower
- KDOW Kentucky Division of Water
- KPDES Kentucky Pollution Discharge Elimination System

LF	linear feet
LTCP	long-term control plan
NMC	nine minimum controls
O&M	operations and maintenance manual
S&F	solids and floatables
SCADA	supervisory control and data acquisition
SORP	sewer overflow response protocol
SSO	sanitary sewer overflow
SSOP	sanitary sewer overflow plan
SUO	sewer use ordinance
USEPA	United States Environmental Protection Agency
WWTP	wastewater treatment plant

This section describes the scope, schedule, and status of Consent Judgment items during the reporting period of January 1 through December 31, 2015.

2.01 STATUS UPDATE OF THE CONSENT JUDGMENT

Paragraph CJ-21A specifies the Annual Report shall include a status update of the requirements of the Consent Judgment. This is accomplished in the form of a Gantt chart in Table 2.01-1. One requirement involved submittal of an Annual Report for 2015 (CJ-21) during the 2016 calendar year.

The City submitted the Final LTCP to EEC for approval in 2011. The City received comments from the Kentucky Division of Water (KDOW) on January 31, 2013. The City addressed the KDOW and USEPA comments and submitted the revisions to the Final LTCP to KDOW on August 1, 2013, and June 15, 2015. The Final LTCP, dated May 2015, was approved on September 8, 2015, as a material amendment to the Consent Judgment.

The City has met all Consent Judgment deadlines for 2015 and other activities are on schedule.

2.02 REPORTABLE OVERFLOW AND VOLUME ESTIMATES

Paragraph CJ-15D requests documentation of all reportable overflows during the current reporting period. Overflows for the reporting period of 2015 are tabulated in Section 3.

The City installed permanent flow meters on all its CSO outfalls in December 2009 and three rain gauges at strategic locations within the CSS. These meters and rain gauges generate overflow data (duration and volume) and rainfall details that are then populated into tables. Overflow occurrences continue to receive visual observation.

2.03 EARLY ACTION PLAN ITEMS

A. NMC Compliance

According to Paragraph CJ-16A under the Early Action Plan (EAP) items, documentation for compliance with the NMCs has been developed.

The NMC report was submitted by the 12-month deadline from the date of the Consent Judgment, which was September 5, 2008. The City received comments on its NMC Program on September 7, 2009. A response was sent to KDOW on November 18, 2009. The NMC compliance document was approved by KDOW on April 23, 2010.

Further details of ongoing NMC activities can be found in Section 8 of this report.

B. Capital Improvements Projects Prior to Current Reporting Period

The EAP includes Paragraph CJ-16B.1 for reporting capital improvement projects. Completed projects are included to demonstrate the City's efforts to address compliance.

TABLE 2.01-1

REQUIREMENTS OF CONSENT JUDGMENT (FOR ITEM 21-A)

Consent Judgment Paragraph	Item	Status	Comment	2015												
				January	February	March	April	May	June	July	August	September	October	November	December	
14	Map of Sewer System	Complete	Documented in 2007 annual report.													
15-a	Sewer Use Ordinance (SUO)—submittal	Complete	Documented in 2007 annual report.													
15-b	SUO—resubmittal	Not Required	Documented in 2007 annual report.													
15-c	SUO—adopt and notify customers	Not Required	Documented in 2007 annual report.													
15-d	Report overflow events	Implemented	Installed CSO outfall flow meters.													
16-a	EAP—Compliance with NMC	Complete	Submitted September 5, 2009; revised November 2009; received KDOW approval on April 23, 2010.													
16-b	EAP—Capital Improvements Project List															
16-b.1	List projects completed by January 1, 2007	Complete	Documented in 2007 annual report.													
16-b.2	List projects to be initiated before implementation of LTCP	Complete	Documented in 2007 annual report.													
16-c	EAP—CMOM Programs Self-Assessment	Complete	Submitted June 5, 2008; revised August 2009; awaiting approval.													
16-d	SORP	Complete	Submitted June 5, 2008; KDOW comments received July 1, 2008. Revised report submitted on September 5, 2008; received KDOW approval on September 22, 2009. Updated in 2013 and submitted as part of 2012 Annual Report.													
17, 18	SSOP	Not required														
19	Review of SSOP by KDOW	Not applicable														
20-a	LTCP: Interim	Complete	Submitted September 5, 2008; revised November 2009; received KDOW approval on October 21, 2010.													
20-b	LTCP: Final	Complete	Submitted October 20, 2011; Received KDOW and USEPA comments on January 31, 2013 and January 2015. Revised reports submitted on August 1, 2013, and June 15, 2015. Approved September 2015.													

LEGEND

-  Submittal from Ashland.
-  Approval by EEC.
-  From previous year or continue to following year.
-  Comments from EEC received; resubmittal required.
-  Completion of project or activity.

The various capital improvement projects completed as of January 1, 2015, are divided into the following five categories:

1. Separation of storm drains from sanitary sewers.
2. Replacement of sanitary sewers.
3. Installation of new sanitary sewers.
4. Installation of pumping station improvements.
5. Installation of other sewer system improvements.

Table 2.03-1 includes all projects listed in Exhibit 1 of the Consent Judgment.

C. Capital Improvements Projects Before Implementation of LTCP

Paragraph CJ-16B.2 is also a part of the EAP. This item requests a list of priority projects that are understood as system improvements and should be completed before the implementation of the LTCP. Future projects are based on the City's assessment of needs but are subject to annual budget approvals.

Items on the current list were included in Exhibit 2 of the Consent Judgment. Table 2.03-2 includes these projects and details. All projects are complete.

The City has completed the Roberts Drive and 6th Street Pumping Stations projects to deliver flows directly to the WWTP as EAPs within the LTCP. The project was bid and awarded in 2010. Construction began in 2011 and was completed in 2012. The design and bid of the 37th Street Pumping Station to deliver flows directly to the WWTP, another EAP within the LTCP, were completed in 2012. Construction of the 37th Street Pumping Station Improvements project that began in 2013 was completed in 2015.

D. CMOM Program Self-Assessment

Paragraph CJ-16C requires that a CMOM program be developed. This activity was completed within the nine-month deadline after the entry of the Consent Judgment, which was June 5, 2008.

The City received comments on the CMOM report on June 5, 2009. The City submitted a response to KDOW comments on August 3, 2009. The City is awaiting approval for the revised CMOM report.

E. SORP

Paragraph CJ-16D requires that a SORP be developed. This activity was completed within the nine-month deadline after the entry of the Consent Judgment, which was June 5, 2008. KDOW provided comments on the SORP dated July 1, 2008. The City revised the SORP and resubmitted it to KDOW on September 5, 2008.

The City received approval of its SORP from KDOW on September 22, 2009, and is in the implementation process. An amended copy dated January 4, 2013, was documented in the 2012 Annual Report. The SORP was reviewed in 2013. Appendix C Wastewater Collection Callout Sheet of the SORP was updated in 2014. The revised callout sheet is provided in Appendix A.

TABLE 2.03-1

CAPITAL IMPROVEMENTS BEFORE JANUARY 2015: SEPARATION OF STORM DRAINS AND SANITARY SEWERS

Location	Project	Status	Cost
Separation of Storm Drains and Sanitary Sewers			
17th Street to Long Branch– Mayo Plaza	Storm Extension	Completed 1986	\$200,000
9th Street to Carter Avenue to 11th Street	Storm	Completed 1987	\$50,000
23rd Street on Hilton to 22nd to Mayo Plaza to 18th Street	Storm relocation and separation	Completed 1988	\$298,200
Oakview Road–at Woodland	Storm and Sanitary	Completed 1993	\$236,000
29th Street	Reconstruction and Separation	Completed 1995	\$343,237
Railroad Alley	Phase 1 Storm Drainage Improvements	Completed 1996	\$221,009
Railroad Alley	Phase 2 Storm Drainage Improvements	Completed 1997	\$210,377
Beech Street–May to old 13th	Storm and Sanitary	Completed 1998	\$100,000
Railroad Alley	Phase 3 Storm Drainage Improvements	Completed 1998	\$172,096
Franz Court–Lexington to dead end	Storm Drainage Improvements	Completed 2000	\$21,000
25th Street–Hilton to River	Storm Drain	Completed 2003	\$2,171,706
Moore Street	Storm Extension and Sanitary Improvements	Completed 2004	\$75,000
6th Street and Central	Storm and Sanitary Improvements	Completed 2005	\$75,000
Railroad Alley–25th to 22nd	Storm Drain	Completed 2005	\$186,400
Holten Avenue	Stormwater Drain	Completed 2008	\$425,000
39th and Brown	Ran new main to disconnect storm	Completed 2008	\$50,000
SUBTOTAL			\$4,835,025

TABLE 2.03-1 (cont'd)

CAPITAL IMPROVEMENTS BEFORE JANUARY 2015: SEPARATION OF STORM DRAINS AND SANITARY SEWERS (Continued)

Location	Project	Status	Cost
Replacement of Sanitary Sewers			
A K Steel–40th to Bath House	Replace collapsed pipes	Completed 1986	\$100,000
39th Street–Belmont to Queen	Replaced to remediate excessive infiltration	Completed 2004	\$105,781
Coburn Avenue–Blackburn to Stabb	Replaced to remediate excessive infiltration	Completed 2004	\$67,000
Kirk Street–Blackburn to Maynard	Replaced to remediate excessive infiltration	Completed 2005	\$25,000
AK Steel–New 24-inch DIP Sewer	Rerouted sewer, 2230 LF	Completed 2008	\$574,591
Putnam Street Sewer Project	Replaced to remediate excessive infiltration	Completed 2009	\$250,252
Oliverio Park Sewer	Replaced to remediate excessive infiltration	Completed 2009	\$41,983
Hurricane Road	Replaced to remediate excessive infiltration	Completed 2009	\$10,700
Blackburn Avenue	Replaced to remediate excessive infiltration	Completed 2009	\$11,771
Griffith Street	Replaced to remediate excessive infiltration	Completed 2009	\$19,900
Elm Street	Replaced to remediate excessive infiltration	Completed 2009	\$20,895
Wiltshire Street	Replaced to remediate excessive infiltration	Completed 2009	\$3,779
Shute Street	Sanitary Sewer Replacement	Completed 2010	\$48,500
Montgomery Avenue	Sanitary Sewer Replacement	Completed 2010	\$45,000
Gallaher Drive	Sanitary Sewer Replacement	Completed 2010	\$14,200
Logan Street	Sanitary Sewer Replacement	Completed 2010	\$9,200
Ballard Street	Sanitary Sewer Replacement	Completed 2010	\$12,900
39th Street	Sanitary Sewer Replacement	Completed 2011	\$150,000
Gartrell Street	Sanitary Sewer Replacement	Completed 2011	\$50,000
Gibbs Court	Sanitary Sewer Replacement	Completed 2011	\$20,000
15 Street	Sanitary Sewer Replacement	Completed 2012	\$15,000
Fair Franz	Sanitary Sewer Replacement	Completed 2012	\$5,000
Old Trolley Line	Sanitary Sewer Replacement	Completed 2013	\$5,000
15th Street	Sanitary Sewer Replacement	Completed 2014	\$80,000
39th Street	Upgrade sewer size to increase capacity and eliminate recurring SSOs.	Completed 2014	\$150,000
SUBTOTAL			\$1,836,452

TABLE 2.03-1

CAPITAL IMPROVEMENTS BEFORE JANUARY 2015: SEPARATION OF STORM DRAINS AND SANITARY SEWERS (Cont'd)

Location	Project	Status	Cost
Installation of New Sanitary Sewers			
Alpha Willis Nolte Sanitary Extension	From septic tanks to municipal sewer	Completed 1990	\$53,000
Winslow/Friendship Road	From septic tanks to municipal sewer	Completed 1990	\$35,000
Stephens Court	From septic tanks to municipal sewer	Completed 1991	\$24,500
Shannon Drive from Rayboume Road	From septic tanks to municipal sewer	Completed 1993	\$47,000
Slem Street	From septic tanks to municipal sewer	Completed 1995	\$22,000
Pitino Court Sanitary Sewer Extension	New expansion	Completed 1996	\$38,000
Skyline Drive Sanitary Sewer	From septic tanks to municipal sewer	Completed 2004	\$1,200,000
Hampton Hills Court	New expansion	Completed 2005	\$27,000
Melody Mountain Development	New expansion	Completed 2005	\$90,000
ATCT Child Development Center	New expansion	Completed 2012	\$5,000
Central Avenue	New Expansion	Completed 2013	\$15,000
18th Street	New Expansion	Completed 2013	\$60,000
SUBTOTAL			\$1,616,500
Pump Station Improvements			
Roberts Drive Pumping Station	New station, new force main to 10th Street	Completed 1992	\$1,500,000
Tunnel Hill Pumping Station	Rebuilt station	Completed 2002	\$45,000
10th Street Pumping Station	Four variable speed drives, four pumping stations	Completed 2002-03	\$100,000
6th Street Pumping Station	Three variable speed drives, three pumping stations	Completed 2003	\$66,000
26th Street Pumping Station	Two channel grinders	Completed 2003	\$200,000
26th Street Pumping Station	One new pump	Completed 2004	\$36,000
Roberts Drive Pumping Station	Five variable speed drives	Completed 2004	\$50,000
5th Street Pumping Station	Two new pumping stations, guide rails	Completed 2005	\$15,600
26th Street Pumping Station	Eight variable speed drives, valves	Completed 2005	\$80,000
37th Street Pumping Station	Two pumping stations, one variable speed drive	Completed 2005	\$100,000
Roberts Drive Pumping Station	One new pump	Completed 2005	\$36,000
45th Street Pumping Station	Refurbishment	Completed 2008	\$103,400
Roberts Drive Pumping Station	Refurbished internal components	Completed 2008	\$15,000

TABLE 2.03-1

CAPITAL IMPROVEMENTS BEFORE JANUARY 2015: SEPARATION OF STORM DRAINS AND SANITARY SEWERS (Cont'd)

Location	Project	Status	Cost
Pump Station Improvements (cont'd)			
Roberts Drive and 26th Street Pumping Stations	Refurbished pumps	Completed 2009	\$3,500
45th Street Pumping Station	Renovation	Completed 2009	\$88,400
10th Street Pumping Station	Replaced pumps piping and valves.	Completed 2009	\$114,000
26th Street	SCADA	Completed 2010	\$2,000
26th Street	Rebuilt grinders, repaired pumps, clean out sand and gravel, removed collapsing plumbing and repair catwalks.	Completed 2011	\$125,000
45th Street Pump Station-SCADA	Installed SCADA system on pumping station and force main	Completed 2012	\$75,000
Roberts Drive Pumping Station	Upgraded pumping station and rerouted force main to discharge directly to WWTP.	Completed 2013	\$4,000,000
6th Street Pumping Station	Upgraded pumping station and rerouted force main to discharge directly to WWTP.	Completed 2013	\$3,000,000
SUBTOTAL			\$9,754,900
Miscellaneous Improvements			
34th Street Outfall	Rebuild headwall	Completed 2009	\$9,600
Installed CSO Outfall Flow Meters	Installed nine area velocity meters	Completed 2009	\$82,300
10th Street CSO Regulator Modifications	Regulator Modifications	Completed 2013	\$300,000
Greenup Ave. CSO Remediation	Installed three new manholes on Greenup Ave trunk sewer to intercept flow before they reach the 18th Street and 19th street CSO regulators. Flow is conveyed to 26th Street PS.	Completed 2014	\$220,000
SUBTOTAL			\$611,900
TOTAL PROJECT COST			\$18,654,777

TABLE 2.03-2

CAPITAL IMPROVEMENTS BEFORE LONG-TERM CONTROL PLAN

	Project	Details	Project Completed By	Estimated Project Cost	Status	2007	2008	2009	2010	2011	2012	2013	2014	2015											
						December	January	February	March	April	May	June	July	August	September	October	November	December							
Separation of Storm Drains and Sanitary Sewers																									
Hilton Avenue	Stormwater drainage - five blocks	1,800 LF of 24 inch and 785 LF of 15 inch.	May 2008	\$425,000	Complete		△																		
Replacement of Sanitary Sewers																									
A K Steel	Sanitary Sewer Replacement	Replaced 2,230 LF of 24-inch sewer.	September 2008	\$574,591	Complete		△																		
Rogers Court and Windsor Court	Sanitary Sewer Replacement	Replaced a total of 170 LF of 8-inch sewer.	August 2007	\$20,000	Complete	△																			
Putnam Street Sewer Project	Sanitary Sewer Replacement	Replaced a total of 2,400 LF of 10-inch sewer with 18-inch sewer.	December 2009	\$250,252	Complete			△																	
Oliverio Park Sewer	Sanitary Sewer Replacement	Replaced 600 LF of 18-inch sewer.	September 2009	\$41,983	Complete			△																	
Hurricane Road	Sanitary Sewer Replacement	Replaced 700 LF of sanitary sewer	July 2009	\$10,700	Complete			△																	
Blackburn Avenue	Sanitary Sewer Replacement	Replaced 200 LF of sanitary sewer.	August 2009	\$11,771	Complete			△																	
Griffith Street	Sanitary Sewer Replacement	Replaced 728 LF of 8-inch sewer.	September 2009	\$19,900	Complete			△																	
Elm Street	Sanitary Sewer Replacement	Replaced 42 LF of 6-inch sewer.	June 2009	\$122.78 (Materials)	Complete			△																	
Wiltshire Boulevard	Sanitary Sewer Replacement	Replaced 318 LF of 6-inch sewer.	July 2009	\$3,779	Complete			△																	
Shute Street	Sanitary Sewer Replacement	Replaced 1216 LF of 8-inch sewer.	December 2010	\$48,500	Complete				△																
Montgomery Avenue	Sanitary Sewer Replacement	Replaced 420 LF of 8-inch sewer and 451 LF of 4-inch sewer	December 2010	\$45,000	Complete				△																
Logan Street	Sanitary Sewer Replacement	Replaced 180 LF of 8-inch sewer	December 2010	\$9,200	Complete				△																
Ballard Street	Sanitary Sewer Replacement	Replaced 400 LF of 10-inch sewer and 106 LF of 8-inch sewer.	December 2010	\$12,900	Complete				△																
39th Street	Sanitary Sewer Replacement	Upsized existing trunk sewer to eliminate SSOs and protect Clyffeside Branch.	August 2011	\$150,000	Complete					△															
Gartrell Street	Sanitary Sewer Replacement	Replaced 600 LF of 8-inch sewer.	December 2011	\$50,000	Complete					△															
Gibbs Court	Sanitary Sewer Replacement	Replaced 200 LF of 8-inch sanitary sewer.	December 2011	\$20,000	Complete					△															
15th Street	Sanitary Sewer Replacement	Replaced section of 15-foot 30-inch sewer.	December 2012	\$15,000	Complete						△	△	△												
Fair Franz	Sanitary Sewer Replacement	Replaced 14 feet of 6-inch sewer main with catch basin to remedy flooding during wet weather.	December 2012	\$5,000	Complete						△	△	△												
Old Trolley Line	Sanitary Sewer Replacement	Replaced section of 105-feet 8-inch sewer.	December 2013	\$5,000	Complete							△	△												
15th Street between Carter and Winchester	Sanitary Sewer Replacement	Replaced 200 LF of 30-inch sewer.	September 2014	\$80,000	Complete								△												
39th Street from Gartrell Street	Sanitary Sewer Replacement	Replaced 600 LF of 18-inch sewer.	June 2014	\$150,000	Complete								△												

TABLE 2.03-2

CAPITAL IMPROVEMENTS BEFORE LONG-TERM CONTROL PLAN (Cont'd)

Installation of New Sanitary Sewers																
ATCT Child Development Center	New Expansion	Extended Sewer to ATCT.	December 2012	\$5,000	Complete											
Central Avenue	New Expansion	Extended 300 feet of 8-inch sewer main extension to Member's Choice Credit Union.	December 2013	\$15,000	Complete							△	△			
18th Street	New Expansion	Extended 1000 feet of 18-inch Sewer main extension from Carter Ave. to Greenup Ave.	December 2013	\$60,000	Complete							△	△			
Pumping Station Improvements																
Roberts Drive	Refurbishment	Refurbished pumps, base, and rail.	April 2009	\$3,500	Complete							△				
45th Street	Refurbishment	Renovation	September 2009	\$88,400	Complete							△				
10th Street	Refurbishment	Replaced pumps piping and valves.	September 2009	\$114,000	Complete							△				
Roberts Drive	Backup Power	Installed pad-mounted generator.	December 2009	\$82,174	Complete							△				
10th Street	Backup Power	Installed pad-mounted generator.	December 2009	\$53,625	Complete							△				
26th Street	SCADA	SCADA installed at PS.	December 2010	\$2,000	Complete								△			
26th Street	Refurbishment	Rebuilt grinders, repaired pumps, clean out sand and gravel, removed collapsing plumbing, and repair catwalks.	December 2011	\$125,000	Complete								△			
Roberts Drive	Expansion	Increased capacity and pump directly to WWTP.	October 2013	\$4,000,000	Complete								△	△		
6th Street	Expansion	Increased capacity and pump directly to WWTP.	October 2013	\$3,000,000	Complete								△	△		
37th Street	Expansion	Increased capacity and pump directly to WWTP.	June 215	\$3,500,000	Complete									△		
Other Projects																
34th Street Outfall	Headwall	Rebuild headwall.	March 2009	\$9,600	Complete								△			
Installed CSO Outfall Flow Meters	CSO Flow Metering	Installed nine area velocity meters.	December 2009	\$82,300	Complete								△			
10th Street CSO Regulator Modifications	Regulator Modifications	modified CSO 010 regulator to convey more flow to the 10th Street Pump Station	October 2013	\$300,000	Complete								△	△		
Greenup Ave. CSO Remediation	Regulator Modifications	Installed 3 manholes on Greenup Ave. to intercept flows to 18th and 19th CSO regulators.	September 2014	\$220,000	Complete									△		
Roberts Drive	Regulator Modifications	Raised CSO weir height	December 2015	\$5,000	Complete											△

LEGEND

-  Submittal from Ashland
-  From previous year or continue to following
-  Approval by EPPC
-  Comments from EPPC received, resubmittal required
-  Completion of Project or Activity

F. SSOP

Paragraph CJ-17 states that if the EEC determines the City has recurring SSOs, the City shall develop an SSOP.

Based on the City's records, there were six locations where overflows occurred twice or more in a 12-month period. Table 3.03-1 describes the unique circumstances of these overflows and justifies they are not "recurring" SSOs. The City has taken proactive steps to address each location and reduce the likelihood of any additional overflows. The 39th Street main that has constantly been having recurring SSOs is being upsized. About 600 LF was replaced in 2014. Since the City is addressing these overflows, an SSOP is not deemed necessary and is not planned.

If EEC determines an SSOP is required, the City would have 12 months from the date of receipt of notification to develop an SSOP. Paragraphs CJ-18 and CJ-19 offer additional direction on the SSOP if it becomes a requirement.

2.04 LTCP

Paragraph CJ-20 details the requirements of the LTCP.

An interim LTCP, required by Paragraph CJ-20A, was submitted 12 months after entry of the Consent Judgment on September 5, 2008. The interim LTCP was reviewed by KDOW and the USEPA. Comments were anticipated by December 5, 2008, in accordance with the three-month review commitment in Paragraph CJ-26.

The City received comments on the interim LTCP in a letter from KDOW dated July 7, 2009. The City responded to the comments in a revised interim LTCP resubmittal dated November 30, 2009. The City received approval of the revised interim LTCP from KDOW on October 21, 2010.

The Final LTCP scheduled due date was December 31, 2009, as stated in Paragraph CJ-20B. The interim LTCP approval letter received from KDOW set the due date of the final LTCP as October 21, 2011, because of the delay in receiving interim LTCP approval from KDOW and USEPA. The City submitted the Final LTCP to KDOW on October 20, 2011. The City received comments on the Final LTCP on January 31, 2013, in a letter from KDOW dated January 25, 2013. The City responded to the comments in a revised Final LTCP resubmittal dated August 1, 2013. The City had a phone conference with KDOW and USEPA personnel on January 26, 2015. The City revised the LTCP and submitted to KDOW and USEPA in June 2015. The Final LTCP was approved by USEPA in August 2015 and KDOW in September 2015.

2.05 OTHER PLANNING ACTIVITIES

In addition to the completed capital projects, other planning and study activities were performed by the City or for the City. Section 5 offers more detail regarding ongoing planning and study activities, which further demonstrates the City's efforts to address compliance issues.

2.06 PENALTIES

Paragraph CJ-22 requires a penalty of \$17,000 to be paid by the City to the EEC for the City's violations. This condition was met within the deadline recorded in the Consent Judgment.

This section provides an account of the number of occurrences of overflows including unauthorized discharges from the combined and separate sewer systems. Paragraph CJ-21B of the Consent Decree requests information on these discharges for the reporting period of 2015. A discussion of unauthorized discharge points and discharges from the City's permitted CSOs is included. Volume estimating methods for SSOs remained consistent with historical reporting methods for the duration of this reporting period. The City is using flow data collected by the permanent flow meters to provide information on CSO volume and occurrence.

Refer to Section 1 of this report for a summary of the WWTP authorization through the KPDES permit and the authorized outfalls under the permit.

3.01 RAINFALL DATA

The wet weather overflow events under the SSO and CSO categories correlate to rainfall events. Figure 3.01-1 offers daily rainfall data as recorded by the City's rain gauges. Occurrences of snow melt are not included in this figure. The total rainfall in 2015 was 40.07 inches.

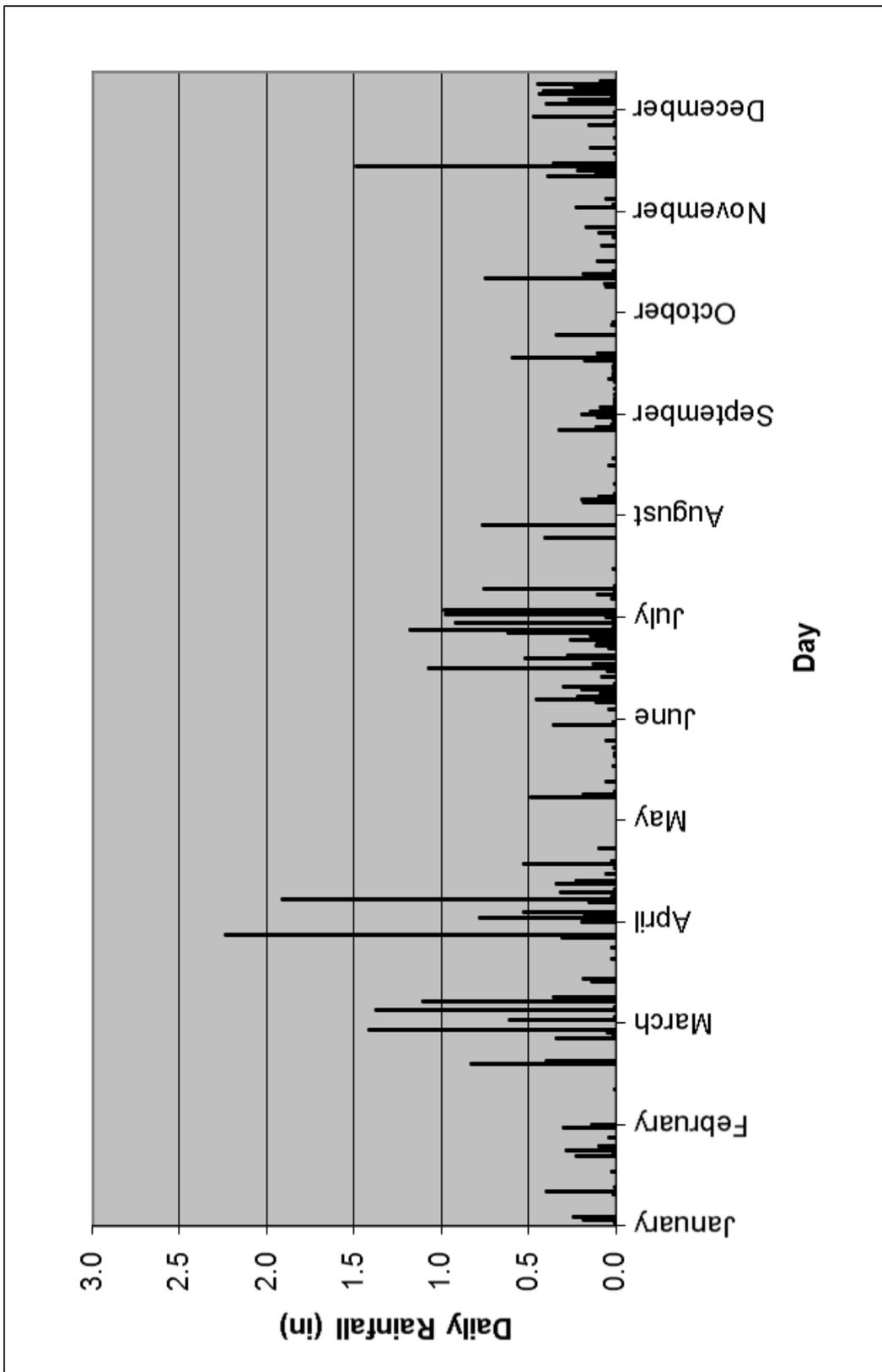
3.02 CSO DATA

Tables 3.02-1 and 3.02-2 show the individual occurrences of CSOs during the current reporting period for wet weather and dry weather, respectively.

Permanent flow meters installed on CSO outfalls in 2009 were used to record and report CSO overflow volume. These meters collected flow and duration information for the calendar year 2015 beginning in January and continued to collect data throughout the entire year. Maintenance, monitoring, and reporting procedures using the flow meters were developed. Where flow metering equipment malfunctioned, the previous method of using an estimation based on depth over the regulator was used. Flow data collected by the flow meters is presented in Appendix B.

3.03 SSO DATA

Table 3.03-1 presents the individual occurrences of SSOs during the current reporting period. When available, referenced photos, including those made available by Louisville-Jefferson County Metropolitan Sewer District for estimating overflow rates from manholes, were used to provide an approximate flow rate. This flow rate was used with the known duration of the overflow to provide a volume estimate for several overflows. In other instances, this method was not appropriate and a description of the overflow or approximation based on response staff experience has been provided.



2015 RAINFALL DATA

CONSENT JUDGMENT ANNUAL REPORT 2014
CITY OF ASHLAND, KENTUCKY



FIGURE 3.01-1
5102.016

TABLE 3.02-1

SUMMARY OF WET WEATHER CSOs

Date of CSO Start	Outfall Number	Outfall Location	Daily Rainfall Data (inches)	Total Rainfall	Start time of CSO (Visual Observation)	End Time of CSO (Visual Observation)	Estimated CSO Volume (gal)	Estimation Method	Was CSO Sampled?	Summary of Sampling Data	How Was It Reported?
January 5, 2015	002	26th Street	0.1+0.19+0.25	0.45	January 5, 2015	January 5, 2015	19,798	Metered	No	Not Available	Called KDOW Morehead
January 13, 2015	002	26th Street	0.02+0.4+0.01+0.03+0.23+0.02+0.29+0.1+0.04+0.3	1.44	January 13, 2015	February 1, 2015	345,194	Metered	No	Not Available	Called KDOW Morehead
February 4, 2015	002	26th Street	0.14	0.14	February 4, 2015	February 9, 2015	124,012	Metered	No	Not Available	Called KDOW Morehead
February 21, 2015	002	26th Street	0.83+0.4	1.23	February 21, 2015	February 22, 2015	210,132	Metered	No	Not Available	Called KDOW Morehead
March 1, 2015	002	26th Street	0.34	0.34	March 1, 2015	March 1, 2015	18,471	Metered	No	Not Available	Called KDOW Morehead
March 4, 2015	002	26th Street	0.02+0.05+1.42+0.61+0.01+1.38+0.01+1.11+0.36	4.97	March 4, 2015	March 15, 2015	18,921,615	Metered	No	Not Available	Called KDOW Morehead
March 19, 2015	002	26th Street	0.14	0.14	March 19, 2015	March 19, 2015	29,286	Metered	No	Not Available	Called KDOW Morehead
April 2, 2015	002	26th Street	0.31+2.24	2.55	April 2, 2015	April 4, 2015	1,418,928	Metered	No	Not Available	Called KDOW Morehead
April 7, 2015	002	26th Street	0.2+0.78+0.18+0.53+0.16+1.91+0.03+0.32+0.01+0.34+0.23+0.06	0.48	April 7, 2015	April 22, 2015	8,508,765	Metered	No	Not Available	Called KDOW Morehead
April 25, 2015	002	26th Street	0.01+0.53	0.54	April 25, 2015	April 25, 2015	40,136	Metered	No	Not Available	Called KDOW Morehead
June 9, 2015	002	26th Street	0.36+0.02	0.38	June 9, 2015	June 9, 2015	825	Metered	No	Not Available	Called KDOW Morehead
June 16, 2015	002	26th Street	0.12+0.46+0.22+0.09	0.89	June 16, 2015	June 18, 2015	163,049	Metered	No	Not Available	Called KDOW Morehead
June 21, 2015	002	26th Street	0.3+0.1	0.31	June 21, 2015	June 21, 2015	6,048	Metered	No	Not Available	Called KDOW Morehead
June 27, 2015	002	26th Street	0.05+1.08+0.13+0.52+0.28	2.06	June 27, 2015	July 1, 2015	234,841	Metered	No	Not Available	Called KDOW Morehead
July 8, 2015	002	26th Street	0.62+1.18+0.02+0.92+0.02	2.76	July 8, 2015	July 11, 2015	521,120	Metered	No	Not Available	Called KDOW Morehead
July 14, 2015	002	26th Street	0.06+0.98+0.99	2.03	July 14, 2015	July 14, 2015	131,645	Metered	No	Not Available	Called KDOW Morehead
September 30, 2015	002	26th Street	0.02+0.01	0.03	September 30, 2015	September 30, 2015	2,271	Metered	No	Not Available	Called KDOW Morehead
October 3, 2015	002	26th Street	0.18+0.6+0.11	0.89	October 3, 2015	October 3, 2015	63,639	Metered	No	Not Available	Called KDOW Morehead
October 28, 2015	002	26th Street	0.75+0.19+0.02	0.96	October 27, 2015	October 28, 2015	549,085	Metered	No	Not Available	Called KDOW Morehead
November 13, 2015	002	26th Street	0.17	0.17	November 13, 2015	November 13, 2015	54,683	Metered	No	Not Available	Called KDOW Morehead
November 19, 2015	002	26th Street	0.23+0.02	0.25	November 19, 2015	November 19, 2015	3,703	Metered	No	Not Available	Called KDOW Morehead
December 2, 2015	002	26th Street	1.49+0.36	1.85	December 2, 2015	December 3, 2015	1,722,148	Metered	No	Not Available	Called KDOW Morehead
December 18, 2015	002	26th Street	0.47+0.01	0.48	December 18, 2015	December 18, 2015	235,261	Metered	No	Not Available	Called KDOW Morehead
December 22, 2015	002	26th Street	0.4+0.27+0.03+0.44+0.42+0.24+0.45+0.09	2.34	December 22, 2015	December 30, 2015	4,037,901	Metered	No	Not Available	Called KDOW Morehead
March 27, 2015	004	37th Street	0.03	0.03	March 27, 2015	March 28, 2015	1,266,194	Metered	No	Not Available	Called KDOW Morehead
April 11, 2015	004	37th Street	0.2+0.78+0.18+0.53	1.69	April 11, 2015	April 12, 2015	201,453	Metered	No	Not Available	Called KDOW Morehead
July 9, 2015	004	37th Street	1.18+0.2	1.2	July 9, 2015	July 9, 2015	434,363	Metered	No	Not Available	Called KDOW Morehead
July 14, 2015	004	37th Street	0.99+0.98	1.97	July 14, 2015	July 15, 2015	31,195	Metered	No	Not Available	Called KDOW Morehead
August 7, 2015	004	37th Street	0.41	0.41	August 7, 2015	August 7, 2015	528	Metered	No	Not Available	Called KDOW Morehead
August 11, 2015	004	37th Street	0.77	0.77	August 11, 2015	August 11, 2015	11,889	Metered	No	Not Available	Called KDOW Morehead
December 11, 2015	004	37th Street	0.01	0.01	December 11, 2015	December 11, 2015	369	Metered	No	Not Available	Called KDOW Morehead
December 25, 2015	004	37th Street	0.4+0.27+0.03+0.44+0.42+0.24+0.45+0.09	2.34	December 25, 2015	December 29, 2015	4,402,403	Metered	No	Not Available	Called KDOW Morehead

TABLE 3.02-1 (Cont'd)

SUMMARY OF WET WEATHER CSOs

Date of CSO Start	Outfall Number	Outfall Location	Daily Rainfall Data (inches)	Total Rainfall	Start time of CSO (Visual Observation)	End Time of CSO (Visual Observation)	Estimated CSO Volume (gal)	Estimation Method	Was CSO Sampled?	Summary of Sampling Data	How Was It Reported?
March 10, 2015	006	34th Street	1.38+0.01+1.11+0.36+0.14+0.19	3.19	March 10, 2015	March 21, 2015	863,069	Metered	No	Not Available	Called KDOW Morehead
April 1, 2015	006	34th Street	0.31+2.24+0.2+0.78+0.18+0.53	4.24	April 1, 2015	April 12, 2015	33,643	Metered	No	Not Available	Called KDOW Morehead
April 15, 2015	006	34th Street	0.16+1.91+0.03+0.32+0.01+0.34+0.23+0.06	3.06	April 15, 2015	April 22, 2015	42,518	Metered	No	Not Available	Called KDOW Morehead
May 18, 2015	006	34th Street	0.49+0.19+0.01	0.69	May 18, 2015	May 18, 2015	1,158	Metered	No	Not Available	Called KDOW Morehead
June 16, 2015	006	34th Street	0.12+0.46+0.22	0.8	June 16, 2015	June 17, 2015	15,411	Metered	No	Not Available	Called KDOW Morehead
June 27, 2015	006	34th Street	0.05+1.08+0.13	1.26	June 27, 2015	June 27, 2015	26,218	Metered	No	Not Available	Called KDOW Morehead
July 11, 2015	006	34th Street	0.92+0.02	0.94	July 11, 2015	July 11, 2015	2,261	Metered	No	Not Available	Called KDOW Morehead
July 14, 2015	006	34th Street	0.98+0.99	1.97	July 14, 2015	July 15, 2015	42,183	Metered	No	Not Available	Called KDOW Morehead
July 22, 2015	006	34th Street	0.03+0.11+0.01+0.76+0.01	0.92	July 22, 2015	July 22, 2015	2,034	Metered	No	Not Available	Called KDOW Morehead
August 11, 2015	006	34th Street	0.77	0.77	August 11, 2015	August 11, 2015	11,889	Metered	No	Not Available	Called KDOW Morehead
September 13, 2015	006	34th Street	0.33+0.12+0.03+0.02+0.11	0.61	September 13, 2015	September 13, 2015	30,235	Metered	No	Not Available	Called KDOW Morehead
December 25, 2015	006	34th Street	0.4+0.27+0.03+0.44+0.42	1.56	December 25, 2015	December 25, 2015	16,339	Metered	No	Not Available	Called KDOW Morehead
January 4, 2015	008	18th Street	0.01+0.19+0.25	0.45	January 4, 2015	January 5, 2015	101,281	Metered	No	Not Available	Called KDOW Morehead
January 13, 2015	008	18th Street	0.02+0.4+0.01	0.43	January 13, 2015	January 15, 2015	25,051	Metered	No	Not Available	Called KDOW Morehead
January 19, 2015	008	18th Street	0.03+0.23+0.02+0.29+0.1	0.03	January 19, 2015	January 27, 2015	329,313	Metered	No	Not Available	Called KDOW Morehead
January 31, 2015	008	18th Street	0.04	0.64	January 31, 2015	January 31, 2015	1,204	Metered	No	Not Available	Called KDOW Morehead
February 3, 2015	008	18th Street	0.3+0.14	0.44	February 3, 2015	February 3, 2015	41,913	Metered	No	Not Available	Called KDOW Morehead
February 22, 2015	008	18th Street	0.83+0.4	1.23	February 22, 2015	February 23, 2015	142,199	Metered	No	Not Available	Called KDOW Morehead
March 1, 2015	008	18th Street	0.34	0.34	March 1, 2015	March 1, 2015	5,249	Metered	No	Not Available	Called KDOW Morehead
March 4, 2015	008	18th Street	0.02+0.05+1.42+0.61+0.01+1.38+0.01+1.11+0.36+0.14	5.11	March 4, 2015	March 20, 2015	14,356,655	Metered	No	Not Available	Called KDOW Morehead
March 30, 2015	008	18th Street	0.03+0.31+2.24+0.2+0.78+0.18+0.53+0.16+1.91+0.03+0.32+0.01+0.34+0.23+0.06+0.01+0.53	7.87	March 30, 2015	April 25, 2015	8,583,511	Metered	No	Not Available	Called KDOW Morehead
May 12, 2014	008	18th Street	0.28+0.01	0.29	May 12, 2016	May 12, 2016	34,693	Metered	No	Not Available	Called KDOW Morehead
May 17, 2015	008	18th Street	0.49+0.19+0.01	0.69	May 17, 2015	May 18, 2015	247,495	Metered	No	Not Available	Called KDOW Morehead
June 9, 2015	008	18th Street	0.36+0.02	0.38	June 9, 2015	June 9, 2015	207,449	Metered	No	Not Available	Called KDOW Morehead
June 14, 2015	008	18th Street	0.04+0.12+0.46+0.22	0.84	June 14, 2015	June 17, 2015	1,580,299	Metered	No	Not Available	Called KDOW Morehead
June 21, 2015	008	18th Street	0.09+0.2+0.3+0.01	0.6	June 21, 2015	June 21, 2015	50,585	Metered	No	Not Available	Called KDOW Morehead
June 24, 2015	008	18 Street	0.29+0.01	0.3	June 24, 2015	June 24, 2015	12,932	Metered	No	Not Available	Called KDOW Morehead
June 27, 2015	008	18th Street	0.05+1.08+0.13+0.52+0.28	2.06	June 27, 2015	July 1, 2015	1,339,803	Metered	No	Not Available	Called KDOW Morehead
July 4, 2015	008	18 Street	0.06+0.07	0.11	July 4, 2015	July 5, 2015	32,569	Metered	No	Not Available	Called KDOW Morehead
July 8, 2015	008	18th Street	0.04+0.12+0.11+0.26+0.15+0.62+1.18+0.02+0.92+0.02+0.06+0.98+0.99	5.47	July 8, 2015	July 16, 2015	4,437,955	Metered	No	Not Available	Called KDOW Morehead
July 22, 2015	008	18th Street	0.03+0.11+0.01+0.76+0.01	0.92	July 22, 2015	July 22, 2015	693,242	Metered	No	Not Available	Called KDOW Morehead
August 6, 2015	008	18th Street	0.41	0.41	August 6, 2015	August 7, 2015	294,100	Metered	No	Not Available	Called KDOW Morehead
August 10, 2015	008	18th Street	0.77	0.77	August 10, 2015	August 11, 2015	274,166	Metered	No	Not Available	Called KDOW Morehead
August 21, 2015	008	18th Street	0.19+0.2+0.1+0.01	0.5	August 21, 2015	August 21, 2015	518	Metered	No	Not Available	Called KDOW Morehead

TABLE 3.02-1 (Cont'd)

SUMMARY OF WET WEATHER CSOs

Date of CSO Start	Outfall Number	Outfall Location	Daily Rainfall Data (inches)	Total Rainfall	Start time of CSO (Visual Observation)	End Time of CSO (Visual Observation)	Estimated CSO Volume (gal)	Estimation Method	Was CSO Sampled?	Summary of Sampling Data	How Was It Reported?
September 5, 2015	008	18th Street	0.01	0.01	September 5, 2015	September 5, 2015	31,238	Metered	No	Not Available	Called KDOW Morehead
September 10, 2015	008	18th Street	0.33+0.12+0.03+0.02+0.11	0.61	September 10, 2015	September 11, 2015	155,645	Metered	No	Not Available	Called KDOW Morehead
October 2, 2015	008	18th Street	0.18+0.6+0.11	0.89	October 2, 2015	October 3, 2015	68,879	Metered	No	Not Available	Called KDOW Morehead
October 26, 2015	008	18th Street	0.06+0.07+0.75+0.19+0.02	1.09	October 26, 2015	October 29, 2015	227,857	Metered	No	Not Available	Called KDOW Morehead
November 7, 2015	008	18th Street	0.08	0.08	November 7, 2015	November 7, 2015	388	Metered	No	Not Available	Called KDOW Morehead
November 11, 2015	008	18th Street	0.02+0.1+0.17	0.29	November 11, 2015	November 13, 2015	80,984	Metered	No	Not Available	Called KDOW Morehead
November 19, 2015	008	18th Street	0.23+0.02+0.06	0.31	November 19, 2015	November 20, 2015	635	Metered	No	Not Available	Called KDOW Morehead
November 29, 2015	008	18th Street	0.39+0.12+0.22+1.49+0.36	2.58	November 29, 2015	December 3, 2015	1,635,570	Metered	No	Not Available	Called KDOW Morehead
December 8, 2015	008	18th Street	0.15	0.15	December 8, 2015	December 8, 2015	264	Metered	No	Not Available	Called KDOW Morehead
December 15, 2015	008	18th Street	0.16+0.01+0.47+0.01	0.65	December 15, 2015	December 18, 2015	231,275	Metered	No	Not Available	Called KDOW Morehead
December 21, 2015	008	18th Street	0.4+0.27+0.03+0.44+0.42+0.24+0.45+0.09	2.34	December 21, 2015	December 29, 2015	3,351,324	Metered	No	Not Available	Called KDOW Morehead
January 4, 2015	009	15th Street	0.01+0.19+0.25	0.45	January 4, 2015	January 5, 2015	3,328	Metered	No	Not Available	Called KDOW Morehead
January 13, 2015	009	15th Street	0.02+0.4+0.01	0.43	January 13, 2015	January 13, 2015	2,475	Metered	No	Not Available	Called KDOW Morehead
January 19, 2015	009	15th Street	0.03+0.23+0.02+0.29+0.1+0.04+0.3+0.14	1.15	January 19, 2015	February 3, 2015	45,474	Metered	No	Not Available	Called KDOW Morehead
February 22, 2015	009	15th Street	0.83+0.4	1.23	February 22, 2015	February 23, 2015	3,972	Metered	No	Not Available	Called KDOW Morehead
March 2, 2015	009	15th Street	0.34+0.02+0.05+1.42+0.61+0.01+1.38+0.01+1.11+0.36+0.14+0.19	5.64	March 2, 2015	March 21, 2015	1,024,447	Metered	Yes	See Appendix B	Called KDOW Morehead
April 3, 2015	009	15th Street	0.31+2.24+0.2+0.78+0.18+0.53+0.16+1.91+0.03+0.32+0.01+0.34+0.23+0.06	7.3	April 3, 2015	April 23, 2015	2,634,964	Metered	No	Not Available	Called KDOW Morehead
April 26, 2015	009	15th Street	0.01+0.53+0.03	0.57	April 26, 2015	April 26, 2015	21,559	Metered	No	Not Available	Called KDOW Morehead
May 16, 2015	009	15th Street	0.49	0.49	May 16, 2015	May 16, 2015	92,905	Metered	No	Not Available	Called KDOW Morehead
June 9, 2015	009	15th Street	0.36+0.02	0.38	June 9, 2015	June 9, 2015	76,902	Metered	No	Not Available	Called KDOW Morehead
June 14, 2015	009	15th Street	0.04+0.12+0.46+0.22+0.09+0.2+0.3+0.01	1.44	June 14, 2015	June 21, 2015	676,725	Metered	No	Not Available	Called KDOW Morehead
June 27, 2015	009	15th Street	0.05+1.08+0.13+0.52+0.28	2.06	June 27, 2015	July 1, 2015	689,911	Metered	No	Not Available	Called KDOW Morehead
July 4, 2015	009	15th Street	0.04+0.12+0.11	0.27	July 4, 2015	July 4, 2015	23,260	Metered	No	Not Available	Called KDOW Morehead
July 8, 2015	009	15th Street	0.26+0.15+0.62+1.18+0.02+0.92+0.02+0.06+0.98+0.99	5.2	July 8, 2015	July 15, 2015	1,619,559	Metered	No	Not Available	Called KDOW Morehead
July 22, 2015	009	15th Street	0.03+0.11+0.01+0.76+0.01	0.92	July 22, 2015	July 22, 2015	307,491	Metered	No	Not Available	Called KDOW Morehead
August 7, 2015	009	15th Street	0.41	0.41	August 7, 2015	August 7, 2015	18,667	Metered	No	Not Available	Called KDOW Morehead
August 11, 2015	009	15th Street	0.77	0.77	August 11, 2015	August 11, 2015	195,893	Metered	No	Not Available	Called KDOW Morehead
August 19, 2015	009	15th Street	0.19+0.2+0.1+0.01	0.5	August 19, 2015	August 21, 2015	971	Metered	No	Not Available	Called KDOW Morehead
September 10, 2015	009	15th Street	0.33+0.12+0.03+0.02+0.11	0.61	September 10, 2015	September 13, 2015	63,149	Metered	No	Not Available	Called KDOW Morehead
October 3, 2015	009	15th Street	0.18+0.6+0.11	0.89	October 3, 2015	October 3, 2015	30,006	Metered	No	Not Available	Called KDOW Morehead
October 10, 2015	009	15th Street	0.34	0.34	October 10, 2015	October 10, 2015	499	Metered	No	Not Available	Called KDOW Morehead

TABLE 3.02-1 (Cont'd)

SUMMARY OF WET WEATHER CSOs

Date of CSO Start	Outfall Number	Outfall Location	Daily Rainfall Data (inches)	Total Rainfall	Start time of CSO (Visual Observation)	End Time of CSO (Visual Observation)	Estimated CSO Volume (gal)	Estimation Method	Was CSO Sampled?	Summary of Sampling Data	How Was It Reported?
October 28, 2015	009	15th Street	0.75+0.19+0.02	0.96	October 28, 2015	October 29, 2015	7,301	Metered	No	Not Available	Called KDOW Morehead
November 13, 2015	009	15th Street	0.17	0.17	November 13, 2015	November 13, 2015	21,484	Metered	No	Not Available	Called KDOW Morehead
December 1, 2015	009	15th Street	1.49+0.36	1.85	December 1, 2015	December 3, 2015	337,028	Metered	No	Not Available	Called KDOW Morehead
December 18, 2015	009	15th Street	0.47+0.01	0.48	December 18, 2015	December 18, 2015	1,354	Metered	No	Not Available	Called KDOW Morehead
December 22, 2015	009	15th Street	0.4+0.27+0.03+0.44+0.42+0.24+0.45+0.09	2.34	December 22, 2015	December 28, 2015	403,718	Metered	No	Not Available	Called KDOW Morehead
January 15, 2015	010	10th Street	0.02+0.4+0.01	0.43	January 15, 2015	January 15, 2015	109,399	Metered	No	Not Available	Called KDOW Morehead
January 19, 2015	010	10th Street	0.03	0.03	January 19, 2015	January 19, 2015	918,448	Metered	No	Not Available	Called KDOW Morehead
March 6, 2015	010	10th Street	0.34+0.02+0.05+1.42+0.61+0.01	2.45	March 6, 2015	March 9, 2015	94,759	Metered	No	Not Available	Called KDOW Morehead
March 13, 2015	010	10th Street	1.38+0.01+1.11+0.36	2.86	March 13, 2015	March 15, 2015	772,953	Metered	No	Not Available	Called KDOW Morehead
April 4, 2015	010	10th Street	0.31+2.24	2.55	April 4, 2015	April 4, 2015	302,931	Metered	No	Not Available	Called KDOW Morehead
April 9, 2015	010	10th Street	0.2+0.78+0.18+0.53	1.69	April 9, 2015	April 11, 2015	744,840	Metered	No	Not Available	Called KDOW Morehead
April 14, 2015	010	10th Street	0.16+1.91+0.03+0.32+0.01	2.43	April 14, 2015	April 17, 2015	1,359,821	Metered	No	Not Available	Called KDOW Morehead
May 17, 2015	010	10th Street	0.49+0.19	0.68	May 17, 2015	May 17, 2015	54,585	Metered	No	Not Available	Called KDOW Morehead
June 9, 2015	010	10th Street	0.36+0.02	0.38	June 9, 2015	June 9, 2015	140,474	Metered	No	Not Available	Called KDOW Morehead
June 16, 2015	010	10th Street	0.04+0.12+0.46+0.22	0.84	June 16, 2015	June 17, 2015	912,615	Metered	No	Not Available	Called KDOW Morehead
June 27, 2015	010	10th Street	0.05+1.08+0.13	1.26	June 27, 2015	June 27, 2015	372,189	Metered	No	Not Available	Called KDOW Morehead
June 30, 2015	010	10th Street	0.52+0.28	0.8	June 30, 2015	July 1, 2015	328,518	Metered	No	Not Available	Called KDOW Morehead
July 4, 2015	010	10th Street	0.04+0.12+0.11	0.27	July 4, 2015	July 4, 2015	57,684	Metered	No	Not Available	Called KDOW Morehead
July 8, 2015	010	10th Street	0.26+0.15+0.62+1.18	2.21	July 8, 2015	July 8, 2015	57,610	Metered	No	Not Available	Called KDOW Morehead
July 11, 2015	010	10th Street	0.02+0.92+0.02	0.96	July 11, 2015	July 11, 2015	426,259	Metered	No	Not Available	Called KDOW Morehead
July 14, 2015	010	10th Street	0.06+0.98+0.99	2.03	July 14, 2015	July 15, 2015	994,655	Metered	No	Not Available	Called KDOW Morehead
July 22, 2015	010	10th Street	0.03+0.11+0.01+0.76+0.01	0.92	July 22, 2015	July 22, 2015	519,592	Metered	No	Not Available	Called KDOW Morehead
August 11, 2015	010	10th Street	0.77	0.77	August 11, 2015	August 11, 2015	147,708	Metered	No	Not Available	Called KDOW Morehead
September 13, 2015	010	10th Street	0.33+0.12+0.03+0.02+0.11	0.61	September 13, 2015	September 13, 2015	5,165	Metered	No	Not Available	Called KDOW Morehead
December 25, 2015	010	10th Street	0.4+0.27+0.03+0.44+0.42	1.56	December 25, 2015	December 25, 2015	188,396	Metered	No	Not Available	Called KDOW Morehead
January 3, 2015	014	Roberts Drive	0.01+0.19+0.25	0.45	January 3, 2015	January 5, 2015	35,712	Metered	No	Not Available	Called KDOW Morehead
January 13, 2015	014	Roberts Drive	0.02+0.4+0.01	0.43	January 13, 2015	January 13, 2015	32,782	Metered	No	Not Available	Called KDOW Morehead
January 26, 2015	014	Roberts Drive	0.23+0.02+0.29+0.1	0.64	January 26, 2015	January 27, 2015	611	Metered	No	Not Available	Called KDOW Morehead
January 31, 2015	014	Roberts Drive	0.04+0.3+0.14	0.48	January 31, 2015	February 2, 2015	48,720	Metered	No	Not Available	Called KDOW Morehead
February 22, 2015	014	Roberts Drive	0.83+0.4+0.34+0.02+0.05+1.42+0.61+0.01+1.38+0.01+1.11+0.36	6.54	February 22, 2015	March 15, 2015	927,576	Metered	No	Not Available	Called KDOW Morehead
March 19, 2015	014	Roberts Drive	0.14+0.19+0.03	0.36	March 19, 2015	March 28, 2015	5,317	Metered	No	Not Available	Called KDOW Morehead
April 1, 2015	014	Roberts Drive	0.31+2.24+0.2+0.78+0.18+0.53	4.24	April 1, 2015	April 11, 2015	586,265	Metered	No	Not Available	Called KDOW Morehead
April 14, 2015	014	Roberts Drive	0.16+1.91+0.03+0.32+0.01+0.34+0.23+0.06+0.01+0.53+0.03	3.63	April 14, 2015	April 26, 2015	880,801	Metered	No	Not Available	Called KDOW Morehead

TABLE 3.02-1 (Cont'd)

SUMMARY OF WET WEATHER CSOs

Date of CSO Start	Outfall Number	Outfall Location	Daily Rainfall Data (inches)	Total Rainfall	Start time of CSO (Visual Observation)	End Time of CSO (Visual Observation)	Estimated CSO Volume (gal)	Estimation Method	Was CSO Sampled?	Summary of Sampling Data	How Was It Reported?
May 16, 2015	014	Roberts Drive	0.49+0.19+0.01+0.06	0.75	May 16, 2015	May 22, 2015	7,686	Metered	No	Not Available	Called KDOW Morehead
May 26, 2015	014	Roberts Drive	0.02	0.02	May 26, 2015	May 26, 2015	821	Metered	No	Not Available	Called KDOW Morehead
June 8, 2015	014	Roberts Drive	0.36	0.36	June 8, 2015	June 8, 2015	2,845	Metered	No	Not Available	Called KDOW Morehead
June 13, 2015	014	Roberts Drive	0.04+0.12+0.46+0.22+0.09+0.2+0.3+0.01+0.08	1.52	June 13, 2015	June 23, 2015	23,305	Metered	No	Not Available	Called KDOW Morehead
June 26, 2015	014	Roberts Drive	0.05+1.08+0.13+0.52+0.28+0.04+0.12+0.11	2.33	June 26, 2015	July 4, 2015	38,209	Metered	No	Not Available	Called KDOW Morehead
July 8, 2015	014	Roberts Drive	0.26+0.15+0.62+1.18+0.02+0.92	3.15	July 8, 2015	July 10, 2015	5,605	Metered	No	Not Available	Called KDOW Morehead
July 13, 2015	014	Roberts Drive	0.06+0.98+0.99	2.03	July 13, 2015	July 14, 2015	105,233	Metered	No	Not Available	Called KDOW Morehead
July 19, 2015	014	Roberts Drive	0.03+0.11+0.01	0.15	July 19, 2015	July 20, 2015	3,414	Metered	No	Not Available	Called KDOW Morehead
August 7, 2015	014	Roberts Drive	0.41	0.41	August 7, 2015	August 7, 2015	1,112	Metered	No	Not Available	Called KDOW Morehead
September 11, 2015	014	Roberts Drive	0.33+0.12+0.03+0.02+0.11	0.61	September 11, 2015	September 13, 2015	3,506	Metered	No	Not Available	Called KDOW Morehead
September 27, 2015	014	Roberts Drive	0.01+0.04+0.02+0.02	0.09	September 27, 2015	September 27, 2015	813	Metered	No	Not Available	Called KDOW Morehead
September 30, 2015	014	Roberts Drive	0.02+0.02+0.01+0.18+0.6+0.11	0.94	September 30, 2015	October 3, 2015	14,489	Metered	No	Not Available	Called KDOW Morehead
October 9, 2015	014	Roberts Drive	0.34	0.34	October 9, 2015	October 9, 2015	533	Metered	No	Not Available	Called KDOW Morehead
November 18, 2015	014	Roberts Drive	0.23	0.23	November 18, 2015	November 18, 2015	8,705	Metered	No	Not Available	Called KDOW Morehead
November 21, 2015	014	Roberts Drive	0.06	0.06	November 21, 2015	November 21, 2015	1,183	Metered	No	Not Available	Called KDOW Morehead
November 28, 2015	014	Roberts Drive	0.39+0.12+0.22+1.49+0.36	2.58	November 28, 2015	December 2, 2015	25,810	Metered	No	Not Available	Called KDOW Morehead
December 14, 2015	014	Roberts Drive	0.16	0.16	December 14, 2015	December 14, 2015	782	Metered	No	Not Available	Called KDOW Morehead
December 17, 2015	014	Roberts Drive	0.47	0.47	December 17, 2015	December 17, 2015	5,410	Metered	No	Not Available	Called KDOW Morehead
December 21, 2015	014	Roberts Drive	0.4+0.27+0.03+0.44+0.42+0.24+0.45+0.09	2.34	December 21, 2015	December 28, 2015	31,572	Metered	No	Not Available	Called KDOW Morehead

Total wet weather CSO occurrences in 2015: 45
 Total Volume of wet weather CSOs in 2015: 102, 984,609
 If information is not available, please explain why: Where volume estimates are not provided=flow meter malfunction.
 Other overflows: Volume estimates not recorded at time of overflow.

TABLE 3.02-2

SUMMARY OF DRY WEATHER CSOs AND CSOs CAUSED BY REASONS OTHER THAN PRECIPITATION (2015)

Date of CSO Start	Outfall Number	Outfall Location	Daily Rainfall Data (inches)	Estimated CSO Volume (gal)	Estimation Method	Was CSO Sampled?	Summary of Sampling Data	How Was It Reported?	Observations/Cause
February 1, 2015	009	15th Street		365	Metered	No	Not Available	Called KDOW Morehead	
March 25, 2015	010	10th Street		908	Metered	No	Not Available	Called KDOW Morehead	
August 3, 2015	014	Roberts Drive		1,954	Metered	No	Not Available	Called KDOW Morehead	

NA=Not available

Total dry weather and other caused CSO occurrences in 2015: 3

Total volume of dry weather CSOs in 2015: 3,227

If information is not available, please explain why:

TABLE 3.03-1

SUMMARY OF SSOs

Date	Location, including Source	Time and Date Respondent Became Aware	Time and Date Crew Responded	Time and Date SSO Ceased, if Any	Time and Date Corrective Action was Complete	Estimated SSO Volume	Ultimate Destination of Overflow (water body, storm drain, dry land, building)	Cause (grease, roots, other blockage, wet weather, loss of power, pump failure)	How Was It Reported?	Description of Corrective Actions Taken to Stop SSO	Description of Corrective Actions Taken to Prevent This or Similar SSOs in Future	Is This A Recurring SSO?
January 5, 2015	2212 Hilton Ave. 6-inch main	1/5/15 7:45 PM	1/5/15 7:45 PM	1/8/15 10:25 AM	1/8/15 10:25 AM	Not available	Ohio River	unknown blockage	Call to KDOW	ran jet truck to open blockage		
January 8, 2015	1100 Ferguson 8-inch main	1/8/15 5:40 PM	1/8/15 5:40 PM	1/8/15 5:50 PM	1/8/15 5:50 PM	Not available	Clyffside Branch	water works broke top off sewer main	Call to KDOW	replaced broken segment		
January 9, 2015	Save-a-Lot Mall US 60 8-inch main	1/9/15 10:19 AM	1/9/15 10:19 AM	1/9/15 11:20 AM	1/9/15 11:20 AM	manhole overflowing	Ohio River	manhole overflowing	Call to KDOW	ran jet truck to open grease blockage		
January 15, 2015	3037 Lydia Street 6-inch main	1/15/15 1:30 PM	1/15/15 1:30 PM	1/15/15 2:10 PM	1/15/15 2:10 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
January 20, 2015	13th Street Mayo Plaza 24-inch main	1/20/15 8:00 AM	1/20/15 8:00 AM	1/21/15 1:30 PM	1/21/15 1:30 PM	Not available	Ohio River	water works broke pipe repairing water line	Call to KDOW	replaced broken segment		
January 23, 2015	Midtown Shopping Center 8-inch main	1/23/15 12:46 PM	1/23/15 12:46 PM	1/23/15 1:30 PM	1/23/15 1:30 PM	manhole overflowing	Long Branch	grease blockage	Call to KDOW	ran jet truck to open blockage		
February 3, 2015	605 Hunt Street 8-inch main	2/3/15 10:25 AM	2/3/15 10:25 AM	2/3/15 10:35 AM	2/3/15 10:35 AM	Not available	basement	roots blockage	Call to KDOW	ran jet truck to open blockage		
February 4, 2015	2613 Jackson Ave. 8-inch main	2/4/15 10:00 AM	2/4/15 10:00 AM	2/4/15 3:00 PM	2/4/15 3:00 PM	Not available	Keys Creek	broken pipe	Call to KDOW	replaced broken segment		
February 6, 2015	3816 Putnam Street 8-inch main	2/6/15 8:57 AM	2/6/15 8:57 AM	2/11/15 4:30 PM	2/11/15 4:30 PM	Not available	Clyffside Branch	root blockage	Call to KDOW	ran jet truck, hand rodded, dug up and replaced part of main line		
February 21, 2015	4068 168 8-inch main	2/21/15 9:21 PM	2/21/15 9:21 PM	2/21/15 10:58 PM	2/21/15 10:58 PM	manhole overflowing	Long Branch	unknown blockage	Call to KDOW	ran jet truck to open blockage		
February 22, 2015	3117 Mason 8-inch main	2/22/15 9:40 PM	2/22/15 9:40 PM	2/22/15 9:45 PM	2/22/15 9:45 PM	Not available	Little Hood Creek/basement	unknown blockage	Call to KDOW	rodded line to open blockage		
February 27, 2015	2415 South 29th Street 8-inch main	2/27/15 8:30 PM	2/27/15 8:30 PM	2/27/15 9:15 PM	2/27/15 9:15 PM	Not available	basement	grease blockage	Call to KDOW	ran jet truck to open blockage		
March 1, 2015	2415 South 29th Street 8-inch main	3/1/15 11:45 AM	3/1/15 11:45 AM	3/1/15 12:00 PM	3/1/15 12:00 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage	need to camera later	Yes
March 3, 2015	2548 Hilton Ave. 6-inch main	3/3/15 4:40 PM	3/3/15 4:40 PM	3/3/15 5:20 PM	3/3/15 5:20 PM	cleanout overflowing	Ohio River	unknown blockage	Call to KDOW	ran jet truck to open blockage		
March 3, 2015	2212 Hilton Ave. 6-inch main	3/3/15 9:20 PM	3/3/15 9:20 PM	3/3/15 10:00 PM	3/3/15 10:00 PM	Not available	Ohio River/basement	unknown blockage	Call to KDOW	ran jet truck to open blockage, called in line locates		
March 4, 2015	4405 Blackburn Ave 8-inch main	3/4/15 5:20 AM	3/4/15 5:20 AM	3/4/15 5:40 AM	3/4/15 5:40 AM	Not available	Keys Creek/basement	root blockage	Call to KDOW	ran jet truck to open blockage and camera line		
March 6, 2015	2515 Clinton St 8-inch main	3/6/15 4:15 PM	3/6/15 4:15 PM	3/6/15 6:00 PM	3/6/15 6:00 PM	manhole overflowing	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage	line locates and dig to repair	
March 9, 2015	2515 Clinton St 8-inch main	3/9/15 8:09 AM	3/9/15 8:09 AM	3/9/15 8:40 AM	3/9/15 8:40 AM	manhole overflowing	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage	line locates and dig to repair	
March 10, 2015	4068 Valleyview 8-inch main	3/10/15 2:40 PM	3/10/15 2:40 PM	3/10/15 3:00 PM	3/10/15 3:00 PM	manhole overflowing	Keys Creek	broken manhole upstream	Call to KDOW	ran jet truck to open blockage and repaired upstream manhole		
March 10, 2015	2901 Dawes St. 8-inch main	3/10/15 4:20 PM	3/10/15 4:20 PM	3/10/15 5:30 PM	3/10/15 5:30 PM	manhole overflowing	Keys Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage		
March 11, 2015	4401 Blackburn Ave 8-inch main	3/11/15 9:30 AM	3/11/15 9:30 AM	3/11/15 9:35 AM	3/11/15 9:35 AM	Not available	basement	root blockage	Call to KDOW	ran jet truck to open blockage		
March 12, 2015	2515 Clinton St 8-inch main	3/12/15 8:30 AM	3/12/15 8:30 AM	3/12/15 11:20 AM	3/12/15 11:20 AM	stayed in ditch	Little Hood Creek	root blockage	Call to KDOW	replace line due to roots		
March 11, 2015	1913 Weymouth Drive 8-inch main	3/11/15 2:30 PM	3/11/15 2:30 PM	3/12/15 3:30 PM	3/12/15 3:30 PM	Not available	Long Branch	unknown blockage	Call to KDOW	dug out and repaired line		
March 15, 2015	1616 Elliot Ave 8-inch main	3/15/15 3:15 PM	3/15/15 3:15 PM	3/15/15 4:00 PM	3/15/15 4:00 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
March 19, 2015	2954 Shadowlawn 8-inch main	3/19/15 12:28 PM	3/19/15 12:28 PM	3/19/15 7:20 PM	3/19/15 7:20 PM	manhole overflowing	Keys Creek	river backs up and covers manhole	Call to KDOW	no action taken		
March 25, 2015	5th St. (behind Texas Roadhouse) 8-inch main	3/25/15 10:30 PM	3/25/15 10:30 PM	3/26/15 12:46 AM	3/26/15 12:46 AM	Not available	Long Branch	grease blockage	Call to KDOW	ran jet truck to open blockage	have everyone clean grease traps monthly	
March 27, 2015	5225 Blackburn Ave 8-inch main	3/25/15 8:45 AM	3/25/15 8:45 AM	3/25/15 9:15 AM	3/25/15 9:15 AM	stayed in ditch	Keys Creek	broken pipe	Call to KDOW	replaced broken segment		
March 30, 2015	3519 Thompson Drive 8-inch main	3/30/15 8:10 AM	3/30/15 8:10 AM	3/30/15 8:51 AM	3/30/15 8:51 AM	manhole overflowing	Keys Creek	bricks in pipe	Call to KDOW	ran jet truck to open blockage and removed bricks		
March 30, 2015	1720 Oakview Road 6-inch main	3/30/15 12:40 PM	3/30/15 12:40 PM	3/30/15 1:00 PM	3/30/15 1:00 PM	manhole overflowing	Long Branch	unknown blockage	Call to KDOW	ran jet truck to open blockage		
April 2, 2015	800 Montgomery 8-inch main	4/2/15 2:59 PM	4/2/15 2:59 PM	4/2/15 4:30 PM	4/2/15 4:30 PM	manhole overflowing	Long Branch	rags blockage	Call to KDOW	ran jet truck to open blockage		
April 8, 2015	4344 Ferguson 8-inch main	4/8/15 9:00 PM	4/8/15 9:00 PM	4/8/15 9:00 PM	4/8/15 9:00 PM	Not available	Clyffside Branch	sink hole	Call to KDOW	ran jet truck to open main, repair hole		
April 14, 2015	Floyd Street 8-inch main (3218, 3210, and 3213)	4/14/15 2:20 AM	4/14/15 2:20 AM	4/14/15 9:00 AM	4/14/15 9:00 AM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
April 14, 2015	4201 168 8-inch main	4/14/15 9:53 AM	4/14/15 9:53 AM	4/15/15 1:38 PM	4/15/15 1:38 PM	manhole overflowing	Keys Creek	wet weather	Call to KDOW	improve system		
April 19, 2015	4344 Ferguson 8-inch main	4/19/15 6:30 PM	4/19/15 6:30 PM	4/19/15 6:45 PM	4/19/15 6:45 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open main	line locates and dig to repair	
April 23, 2015	4344 Ferguson 8-inch main	4/23/15 11:30 AM	4/23/15 11:30 AM	4/23/15 1:05 PM	4/23/15 1:05 PM	Not available	basement	line broken during repair	Call to KDOW	replaced broken segment		
May 5, 2015	1433 Wurts Ave. 8-inch main	5/5/15 10:40 AM	5/5/15 10:40 AM	5/8/15 1:00 PM	5/8/15 1:00 PM	Not available	Long Branch	line broken during repair	Call to KDOW	will replace broken segment		
May 12, 2015	1433 Wurts Ave. 8-inch main	5/12/15 10:30 AM	5/12/15 10:30 AM	5/12/15 3:15 PM	5/12/15 3:15 PM	stayed in ditch	Long Branch	line broken during repair	Call to KDOW	replaced broken segment		
May 12, 2015	2412 Boone Street 8-inch main	5/12/15 9:30 PM	5/12/15 9:30 PM	5/12/15 11:45 PM	5/12/15 11:45 PM	Not available	Little Hood Creek	road fell and broke main	Call to KDOW	replaced clay tile pipe with PVC		
June 9, 2015	Mindy Jane & 168 8-inch main	6/9/15 3:00 PM	6/9/15 3:00 PM	6/9/15 5:30 PM	6/9/15 5:30 PM	manhole overflowing	Keys Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage		
June 22, 2015	1913 Weymouth Drive 8-inch main	6/22/15 9:45 AM	6/22/15 9:45 AM	6/22/15 1:22 PM	6/22/15 1:22 PM	Not available	Long Branch	line broken manhole installation	Call to KDOW	replaced broken segment		
June 22, 2015	Dead end of Elk Street 8-inch main	6/22/15 2:00 PM	6/22/15 2:00 PM	6/22/15 4:10 PM	6/22/15 4:10 PM	manhole overflowing	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage		
June 27, 2015	3427 Thompson Drive 8-inch main	6/27/15 1:54 PM	6/27/15 1:54 PM	6/27/15 2:10 PM	6/27/15 2:10 PM	manhole overflowing	Keys Creek	grease blockage	Call to KDOW	ran jet truck to open blockage		
July 13, 2015	2415 South 29th Street 8-inch main	7/13/15 5:20 PM	7/13/15 5:20 PM	7/13/15 5:25 PM	7/13/15 5:25 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		Yes

TABLE 3.03-1 (Cont'd)

SUMMARY OF SSOs

Date	Location, Including Source	Time and Date Respondent Became Aware	Time and Date Crew Responded	Time and Date SSO Ceased, If Any	Time and Date Corrective Action was Complete	Estimated SSO Volume	Ultimate Destination of Overflow (water body, storm drain, dry land, building)	Cause (grease, roots, other blockage, wet weather, loss of power, pump failure)	How Was It Reported?	Description of Corrective Actions Taken to Stop SSO	Description of Corrective Actions Taken to Prevent This or Similar SSOs in Future	Is This A Recurring SSO?
July 14, 2015	3925 Valleyview 8-inch main	7/14/15 9:45 AM	7/14/15 9:45 AM	7/14/15 12:06 PM	7/14/15 12:06 PM	manhole overflowing	Keys Creek	debris blockage	Call to KDOW	ran jet truck to open blockage		
July 15, 2015	3420 Willis Street 6-inch main	7/15/15 1:30 AM	7/15/15 1:30 AM	7/15/15 2:00 AM	7/15/15 2:00 AM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
July 15, 2015	3404 Ridgeway Dr 6-inch main	7/15/15 9:00 AM	7/15/15 9:00 AM	7/15/15 9:15 AM	7/15/15 9:15 AM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
July 15, 2015	1655 Elliot Ave 8-inch main	7/15/15 1:50 PM	7/15/15 1:50 PM	7/15/15 3:00 PM	7/15/15 3:00 PM	Not available	Little Hood Creek	line broken during repair	Call to KDOW	repaired broken main		
July 21, 2015	833 McCullough Dr 8-inch main	7/21/15 3:00 PM	7/21/15 3:00 PM	7/21/15 5:10 PM	7/21/15 5:10 PM	Not available	Little Hood Creek	line broken by gas company	Call to KDOW	repaired broken main		
August 10, 2015	870 39th Street 18-inch main	8/10/15 4:01 PM	8/10/15 4:01 PM	8/10/15 4:10 PM	8/10/15 4:10 PM	manhole overflowing	Clyffside Branch	wet weather	Call to KDOW	caused by upstream line expansion before downstream line		
August 19, 2015	715 Ernestine St 6-inch main	8/19/15 8:30 AM	8/19/15 8:30 AM	8/21/15 11:49 AM	8/21/15 11:49 AM	Not available	Little Hood Creek	broken pipe	Call to KDOW	repaired broken main		
August 26, 2015	1200 Long St. 8-inch main	8/26/15 10:00 AM	8/26/15 10:00 AM	8/26/15 10:50 AM	8/26/15 10:50 AM	Not available	Long Branch	broken pipe in creek	Call to KDOW	repaired broken main		
August 26, 2015	2731 Blackburn Ave 8-inch main	8/26/15 2:30 PM	8/26/15 2:30 PM	8/26/15 2:30 PM	8/26/15 2:30 PM	manhole overflowing	Clyffside Branch	rags blockage	Call to KDOW	ran jet truck to open blockage		
August 31, 2015	4508 Blackburn Ave 10-inch main	8/31/15 10:30 AM	8/31/15 10:30 AM	8/31/15 1:00 PM	8/31/15 1:00 PM	manhole overflowing	Clyffside Branch	roots blockage	Call to KDOW	ran jet truck to open blockage		
September 24, 2015	Corner of Stewart & Lewis Lane 8-inch main	9/24/15 9:45 AM	9/24/15 9:45 AM	9/24/15 10:40 AM	9/24/15 10:40 AM	Not available	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage		
October 6, 2015	1200 Long St. 8-inch main	10/6/15 11:00 AM	10/6/15 11:00 AM	10/6/15 12:45 PM	10/6/15 12:45 PM	Not available	Long Branch	broken pipe in creek	Call to KDOW	replaced broken segment		
October 14, 2015	609 Hagan Ct 6-inch main	10/14/15 9:30 AM	10/14/15 9:30 AM	10/14/15 9:40 AM	10/14/15 9:40 AM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
October 14, 2015	527 Hagan Ct 6-inch main	10/14/15 9:30 AM	10/14/15 9:30 AM	10/14/15 9:40 AM	10/14/15 9:40 AM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
October 21, 2015	1520 Chestnut Hill Drive 6-inch main	10/21/15 10:10 PM	10/21/15 10:10 PM	10/21/15 10:35 PM	10/21/15 10:35 PM	Not available	Long Branch	unknown blockage	Call to KDOW	ran jet truck to open blockage		
November 9, 2015	13th Street Gla-Low Apartments 8-inch main	11/9/15 2:45 PM	11/9/15 2:45 PM	11/10/15 8:20 AM	11/10/15 8:20 AM	Not available	Little Hood Creek	broken pipe	Call to KDOW	dug out and repaired line		
November 23, 2015	3116 Mason 8-inch main	11/23/15 11:55 AM	11/23/15 11:55 AM	11/23/15 12:32 PM	11/23/15 12:32 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
December 1, 2015	3119 Calvin Street 8-inch main	12/1/15 9:26 AM	12/1/15 9:26 AM	12/1/15 10:21 AM	12/1/15 10:21 AM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage		
December 1, 2015	4201 168 8-inch main	12/1/15 8:02 AM	12/1/15 8:02 AM	12/1/15 11:28 AM	12/1/15 11:28 AM	Not available	Keys Creek	wet weather	Call to KDOW			
December 1, 2015	5308 168 8-inch main	12/1/15 11:28 AM	12/1/15 11:28 AM	12/2/15 1:27 PM	12/2/15 1:27 PM	manhole overflowing	Keys Creek	wet weather	Call to KDOW			
December 2, 2015	870 39th Street 18-inch main	12/2/15 8:00 AM	12/2/15 8:00 AM	12/2/15 11:00 AM	12/2/15 11:00 AM	manhole overflowing	Clyffside Branch	wet weather	Call to KDOW	caused by upstream line expansion before downstream line		
December 5, 2015	3119 Cogan 8-inch main	12/5/15 1:00 PM	12/5/15 1:00 PM	12/9/15 2:30 PM	12/9/15 2:30 PM	cleanout overflowing	Little Hood Creek	line broken during repair	Call to KDOW	replaced pipe from manhole to manhole		
December 7, 2015	536 Dixon 8-inch main	12/7/15 2:00 PM	12/7/15 2:00 PM	12/7/15 2:45 PM	12/7/15 2:45 PM	cleanout overflowing	Long Branch	unknown blockage	Call to KDOW	ran jet truck to open blockage		
December 10, 2015	43rd & Daniels 8-inch main	12/10/15 12:57 PM	12/10/15 12:57 PM	12/10/15 1:50 PM	12/10/15 1:50 PM	Not available	Keys Creek	broken pipe in creek	Call to KDOW	replaced broken segment		
December 11, 2015	End of Horn St 8-inch main	12/11/15 2:30 PM	12/11/15 2:30 PM	12/11/15 3:00 PM	12/11/15 3:00 PM	Not available	Little Hood Creek	roots blockage	Call to KDOW	repair and screen pipe		
December 15, 2015	2330 6th St 8-inch main	12/15/15 2:36 PM	12/15/15 2:36 PM	12/15/15 2:42 PM	12/15/15 2:42 PM	manhole overflowing	Little Hood Creek	grease and rags blockage	Call to KDOW	ran jet truck to open blockage		
December 31, 2015	2114 Blackburn Ave 8-inch main	12/31/15 8:30 AM	12/31/15 8:30 AM	12/31/15 9:00 AM	12/31/15 9:00 AM	manhole overflowing	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage		

Total SSO occurrences in 2015: 70.

Total volume of SSOs: Not available in 70 occurrences.

If information is not available, please explain why: The City did not collect or record this type of information on the daily worksheets or on the Damage/Loss Reports.

¹Plans for improvements at this location to prevent future overflows are underway or already completed.

²Not a capacity issue.

³Design is underway to upsize this pipe segment to address the overflow issue.

Table 3.03-2 lists all backups attributed to private property lateral issues. The City often responds to homeowner complaints of a backup; however, the problem is often not in the City's sewer system. These private property backups are not considered SSOs.

Several private lateral overflows and SSOs were the result of repairs or projects completed to repair or upgrade portions of the system.

Based on the City's records, there were two locations where overflows occurred at least twice in a 12-month period. The corrective actions column in Table 3.03-1 describes the unique circumstances of these overflows and justifies why they are not "recurring" SSOs. The City has taken proactive steps to address each location and reduce the likelihood of any additional overflows. The entire length of the 39th Street sewer that had 8 SSOs in 2014 has been upsized from a 12-inch and 15-inch sewer to an 18-inch sewer to eliminate the bottleneck created by earlier construction. Construction of the sewer upgrade was completed in June 2014. The City continued to cut the roots out in the remaining section in order to get a camera in to determine if replacement is necessary, or just point repair. The City will budget a capital project for further trunk replacement in 2016 if it is determined to be necessary. Since the City is addressing these overflows, an SSOP is not deemed necessary and is not planned.

TABLE 3.03-2

SUMMARY OF DOCUMENTED LATERAL ISSUES IN 2015

Date	Location, including source	Time and Date Respondent Became Aware	Time and Date Crew Responded	Time and Date SSO Ceased, If Any	Time and Date Corrective Action Was Complete	Estimated SSO Volume	Ultimate Destination of Overflow (water body, storm drain, dry land, building, etc)	Cause (grease, roots, other blockage, wet weather, loss of power, pump failure, etc)	How Was It Reported?	Description of Corrective Actions Taken	Description of Corrective Actions Taken to Prevent This or Similar In Future
January 6, 2015	2212 6th St. - 4" lateral	1/6/15 2:30 PM	1/6/15 2:30 PM	1/6/15 3:40 PM	1/6/15 3:40 PM	Not available	Little Hood Creek	cleanout overflowing	Call to KDOW	ran jet truck to open blockage	
January 7, 2015	610 8th St. - 4" lateral	1/7/15 8:49 AM	1/7/15 8:49 AM	1/7/15 9:13 AM	1/7/15 9:13 AM	Not available	Ohio River	unknown blockage	Call to KDOW	ran jet truck to open blockage, will camera at later date	
January 13, 2015	2706 Montgomery Ave. - 6" lateral	1/13/15 2:00 PM	1/13/15 2:00 PM	1/13/15 3:00 PM	1/13/15 3:00 PM	Not available	Ohio River	broken by water works while repairing main	Call to KDOW	replace broken pipe	
January 20, 2015	2013 Sharon Rd - 6" lateral	1/20/15 10:40 AM	1/20/15 10:40 AM	1/20/15 11:20 AM	1/20/15 11:20 AM	Not available	Clyffeside Branch/basement	unknown blockage	Call to KDOW	ran jet truck to open blockage	
January 20, 2015	2723 Chinn St. - 4" lateral	1/20/15 10:00 AM	1/20/15 10:00 AM	1/21/15 2:34 PM	1/21/15 2:34 PM	Not available	Little Hood Creek	broken lateral	Call to KDOW	dug up and replaced broken pipe	
February 4, 2015	3004 Lookout St. - 4" lateral	2/4/15 1:00 PM	2/4/15 1:00 PM	2/5/15 1:45 PM	2/5/15 1:45 PM	Not available	Clyffeside Branch	broken by water works while installing new water main	Call to KDOW	replace broken pipe	
February 9, 2015	3613 13th St. (Shell Station) - 4" lateral	2/9/15 8:15 AM	2/9/15 8:15 AM	2/9/15 8:45 AM	2/9/15 8:45 AM	cleanout overflowing	Little Hood Creek	grease blockage	Call to KDOW	ran jet truck to open blockage	
February 11, 2015	1608 Carter Ave. - 4" lateral	2/11/15 11:30 AM	2/11/15 11:30 AM	2/11/15 11:44 AM	2/11/15 11:44 AM	Not available	Ohio River	roots blockage	Call to KDOW	ran jet truck to open blockage, cleared roots	
March 3, 2015	916 29th St. - 4" lateral	3/3/15 1:55 PM	3/3/15 1:55 PM	3/3/15 2:19 PM	3/3/15 2:19 PM	cleanout overflowing	Clyffeside Branch	unknown blockage	Call to KDOW	ran jet truck to open blockage	
March 10, 2015	2913 Franklin St. - 4" lateral	3/10/15 9:50 AM	3/10/15 9:50 AM	3/10/15 10:04 AM	3/10/15 10:04 AM	cleanout overflowing	Clyffeside Branch	unknown blockage	Call to KDOW	ran jet truck to open blockage	
March 18, 2015	376 Ferry St. - 6" lateral	3/18/15 5:15 PM	3/18/15 5:15 PM	3/19/15 7:30 PM	3/19/15 7:30 PM	Not available	Little Hood Creek	broken by water works while repairing main	Call to KDOW	replace broken pipe	
April 3, 2015	1429 Wurts Ave. - 6" lateral	4/3/15 11:20 AM	4/3/15 11:20 AM	4/3/15 12:45 PM	4/3/15 12:45 PM	cleanout overflowing	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage	
April 4, 2015	711 17th St. - 4" lateral	4/4/15 7:07 PM	4/4/15 7:07 PM	4/4/15 7:30 PM	4/4/15 7:30 PM	cleanout overflowing	Ohio River	unknown blockage	Call to KDOW	ran jet truck to open blockage	
April 5, 2015	3428 Douglas - 4" lateral	4/5/15 3:46 PM	4/5/15 3:46 PM	4/5/15 4:17 PM	4/5/15 4:17 PM	cleanout overflowing	Little Hood Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage	
April 11, 2015	2223 Crooks St. - 4" lateral	4/11/15 4:55 PM	4/11/15 4:55 PM	4/11/15 5:10 PM	4/11/15 5:10 PM	Not available	Clyffeside Branch	roots blockage	Call to KDOW	ran jet truck to open blockage	
April 21, 2015	2625 Jackson - 4" lateral	4/21/15 11:15 AM	4/21/15 11:15 AM	4/21/15 12:20 PM	4/21/15 12:20 PM	cleanout overflowing	Keys Creek	rags blockage	Call to KDOW	ran jet truck to open blockage	
April 22, 2015	1421 Maryland Parkway - 4" lateral	4/22/15 1:30 PM	4/22/15 1:30 PM	4/24/15 2:15 AM	4/24/15 2:15 AM	Not available	Little Hood Creek	pipe broken	Call to KDOW	replace broken pipe	
April 27, 2015	2013 Sharon Rd - 4" lateral	4/27/15 10:30 AM	4/27/15 10:30 AM	4/27/15 12:50 PM	4/27/15 12:50 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage	
May 15, 2015	4820 Williams Ave. - 4" lateral	5/15/15 8:00 PM	5/15/15 8:00 PM	5/15/15 8:05 PM	5/15/15 8:05 PM	cleanout overflowing	Keys Creek	unknown blockage	Call to KDOW	ran jet truck to open blockage	
May 15, 2015	5075 Maid Marion - 4" lateral	5/15/15 10:30 AM	5/15/15 10:30 AM	5/15/15 1:30 PM	5/15/15 1:30 PM	Not available	Keys Creek	broken during power repair	Call to KDOW	repaired broken lateral	
May 16, 2015	3420 Willis St. - 4" lateral	5/16/15 3:00 PM	5/16/15 3:00 PM	5/16/15 3:20 PM	5/16/15 3:20 PM	Not available	basement	unknown blockage	Call to KDOW	ran jet truck to open blockage	
June 2, 2015	100 Blackburn Ave. - 4" lateral	6/2/15 1:30 PM	6/2/15 1:30 PM	6/3/15 9:35 AM	6/3/15 9:35 AM	Not available	Clyffeside Branch	cleanout broken	Call to KDOW	replace cleanout	
July 17, 2015	3416 Willis St. - 4" lateral	unknown	unknown	unknown	unknown	Not available	basement	roots blockage	Call to KDOW	ran jet truck to open blockage	
July 20, 2015	2752 Carolyn - 4" lateral	7/20/15 1:00 PM	7/20/15 1:00 PM	7/21/15 9:30 AM	7/21/15 9:30 AM	Not available	Keys Creek	pipe broken	Call to KDOW	repaired broken lateral	
August 26, 2015	2202 Dixon - 6" lateral	8/26/15 9:25 AM	8/26/15 9:25 AM	8/26/15 2:30 PM	8/26/15 2:30 PM	Not available	Little Hood Creek	broken lateral in creek	Call to KDOW	repaired broken lateral	
August 31, 2015	4508 Blackburn Ave. - 4" lateral	8/31/15 10:30 AM	8/31/15 10:30 AM	9/1/15 9:30 AM	9/1/15 9:30 AM	Not available	Clyffeside Branch	broken lateral	Call to KDOW	repaired broken lateral	

Total lateral backup occurrences (non-SSOs) in 2015: 26. Total volume of SSOs: Not available in 26 occurrences.
If information is not available, please explain why: The City did not collect nor record this type of information on the daily worksheets or on the Damage/Loss Reports.

This section describes the anticipated projects and activities scheduled during the next reporting period of January 1 through December 31, 2016, for continued compliance with the Consent Judgment.

4.01 CONSENT JUDGMENT DEADLINES

Table 4.01-1 presents the anticipated schedule in 2016 for submittal requirements of the Consent Judgment.

4.02 CAPITAL IMPROVEMENT PROJECTS

The various capital improvement projects are divided into the following five categories similar to those listed in Section 2 of this report:

1. Separation of storm drains from sanitary sewers.
2. Replacement of sanitary sewers.
3. Installation of new sanitary sewers.
4. Installation of pumping station improvements.
5. Miscellaneous Improvements

Anticipated projects for 2016 are shown in Table 4.02-1.

4.03 STUDIES AND PLANNING ACTIVITIES

The City submitted the Final LTCP to KDOW in 2011 and received KDOW and USEPA comments on January 31, 2013, in a letter from KDOW dated January 26, 2012. The City addressed the comments and submitted the Revised Final LTCP to KDOW on August 1, 2013. The City had a phone conference with KDOW and USEPA personnel on January 26, 2015. The City revised the LTCP and submitted to KDOW and USEPA in June 2015. The Final LTCP was approved in September 2015. In addition, the City will address any review comments received from KDOW on the CMOM report that is also pending approval.

TABLE 4.01-1

CONSENT JUDGMENT (ITEM 21-C): ANTICIPATED SCHEDULE FOR 2016

Consent Judgment Reference Paragraph	Item	Status	Comment	2016												
				January	February	March	April	May	June	July	August	September	October	November	December	
14	Map of Sewer System	Complete	Documented in 2007 annual report.													
15-a	SUO–submittal	Complete	Documented in 2007 annual report.													
15-b	SUO–resubmittal	Not Required	Documented in 2007 annual report.													
15-c	SUO–adopt and notify customers	Not Required	Documented in 2007 annual report.													
15-d	Report overflow events	Implemented	Installed CSO outfall flow meters.	→												→
16-a	EAP–Compliance with NMC	Complete	Submitted September 5, 2009; revised November 2009; received KDOW approval on April 23, 2010.	→												→
16-b	EAP–Capital Improvements Project List															
16-b.1	List projects completed by January 1, 2007	Complete	Documented in 2007 annual report.													
16-b.2	List projects to be initiated before implementation of LTCP	Complete	Documented in 2007 annual report.													
16-c	EAP–CMOM Programs Self-Assessment	Complete	Submitted June 5, 2008; revised August 2009; awaiting approval.	→												→
16-d	Sewer Overflow Response Protocol (SORP)	Complete	Submitted June 5, 2008, KDOW comments received July 1, 2008. Revised report submitted on September 5, 2008; received KDOW approval on September 22, 2009. Updated in 2013 and submitted as part of 2012 Annual Report.													
17, 18	Sanitary Sewer Overflow Plan (SSOP)	Not required														
19	Review of SSOP by KDOW	Not applicable														
20-a	LTCP: Interim	Complete	Submitted September 5, 2008; revised November 2009; received KDOW approval on October 21, 2010.													
20-b	LTCP: Final	Complete	Submitted October 20, 2011; Received KDOW and EPA comments on January 31, 2013. Revised report submitted on August 1, 2013. Had phone conference with KDOW and USEPA on January 26, 2015. Revised report submitted in June 2015. Approved in September 2015. City will continue to implement elements of the approved LTCP.	→												→

LEGEND

-  Submittal from Ashland.
-  Approval by EEC.
-  From previous year or continue to following year.
-  Comments from EEC received; resubmittal required.

TABLE 4.02-1

CAPITAL IMPROVEMENTS SCHEDULED FOR 2016

LOCATION	PROJECT	PROJECT START DATE	PROJECT COMPLETE DATE	ESTIMATED PROJECT COST	2016																		
					January	February	March	April	May	June	July	August	September	October	November	December							
Separation of Storm Drains and Sanitary Sewers																							
29th Street	Install new 4,700 LF of 42-inch, 600 LF of 12-inch, 18-inch, 24-inch, and 36-inch to separate stormwater from combined sewer system.	September 2016	December 2017	\$3,500,000																			
Replacement of Sanitary Sewers																							
Installation of New Sanitary Sewers																							
Pumping Station Improvements																							
Miscellaneous Improvements																							
CIP Sewer Lining	CIP sewer lining for 15th street sewer from Carter to Greenup and 17th Street sewer from Central to Winchester.	January 2016	March 2016	\$240,000																			

5.01 ADDITIONAL INFORMATION ON EAP AND LTCP

The City proceeded with the required projects to comply with the obligations of the Consent Judgment. All projects not completed remain on schedule. The Revised CSO LTCP was submitted to KDOW on August 1, 2013. The City had a phone conference with KDOW and USEPA personnel on January 26, 2015. The City revised the LTCP and submitted to KDOW and USEPA in June 2015. The Final LTCP received approval in September 2015.

Section 8 of this report includes the Annual CSOP report required by the KPDES permit.

6.01 SUMMARY OF CMOM IMPLEMENTATION

Paragraph CJ-16C requires the development of a CMOM program. This program was developed and submitted within the deadline of nine months after the entry of the Consent Judgment on June 5, 2008.

The City received comments on the CMOM report on June 5, 2009, and submitted a response to KDOW's comments on August 3, 2009. The City is awaiting approval of the revised CMOM report.

Upon approval by the EEC, the CMOM Program Self-Assessment and Recommendations will be included as an appendix to future annual reports. Progress on implementation will be reported in future annual reports.

The City began tracking some CMOM-related activities in 2009. See Table 6.01-1 for CMOM-related activities in 2015.

Description	Number
Sewer Calls	273
SSOs	96
After-Hour Emergencies	77
New Sewer Main Extensions (ft)	145
Sewer Main Replacements (ft)	382
Sewer Main Repairs	36
New Lateral Pipe Installations (ft)	312
Lateral Pipe Replacements(ft)	135
Lateral Pipe Repairs	23
New Taps	17
Renewed or Repaired Taps	4
Clean Outs-Installed/Repaired/Sized	29
New Manhole Installations	9
Manhole Repairs	14
Manhole Adjustments to Grade	21
Main Line(s) Flushes (ft)	62,695
Camera Truck-Inspection (ft)	19,387
Dress Ups	32
Locates (for construction)	1,561
Smoke Tests	40
Dye Tests	18
Grease Trap Checks	202
Trouble Spot Checked or Treated	237
Compliance Issues	14

Table 6.01-1 CMOM-Related Activities in 2015

7.01 CONSENT JUDGMENT REVIEW FOR 2015

Paragraph CJ-21F requests the details of projects completed during the current reporting period. Table 7.01-1 presents Consent Judgment items that were submitted. Deadlines for 2015 were met.

Consent Judgment Reference Paragraph	Item	Status	Comment
20-b	LTCP: Final	Approved	Revised report submitted in June 2015. Approved in September 2015.
21	Annual Report	Complete	Submitted on February 27, 2015.

Table 7.01-1 Consent Judgment Requirements Met in 2015

7.02 COMPLETED CAPITAL IMPROVEMENT PROJECTS IN 2015

Table 7.02-1 summarizes capital improvement projects completed in 2015. The various capital improvement projects are divided into the following categories similar to those listed in Section 2 of this report:

1. Separation of storm drains from sanitary sewers.
2. Replacement of sanitary sewers.
3. Installation of new sanitary sewers.
4. Installation of pumping station improvements.
5. Installation of other sewer system improvements.

7.03 PLANNING AND STUDY ACTIVITIES IN 2015

The City submitted the final LTCP to KDOW in 2011 and received KDOW and USEPA comments on January 31, 2013, in a letter from KDOW dated January 26, 2012. The City addressed comments and submitted the Revised Final LTCP to KDOW on August 1, 2013. The City had a phone conference with KDOW and USEPA personnel on January 26, 2015. The City revised the LTCP and submitted to KDOW and USEPA in June 2015. Approval was received September 2015.

TABLE 7.02-1

CAPITAL IMPROVEMENTS IN 2015

Location	Project	Details	Project	Estimated	Status	2015														
			Complete By	Project Cost		January	February	March	April	May	June	July	August	September	October	November	December			
37th Street Pumping Station	Pumping Station Improvements	Upgrade pumping stations and reroute force main to discharge directly to WWTP.	Jun-15	\$3,500,000	Complete	→														→
	(Construction)																			
Roberts Drive Pump Station CSO	CSO Regulator Modification	Raised CSO weir height.	Dec-15	\$5,000	Completed	→														△
	(Construction)																			

Legend

→ From previous year or continue to following year.

△ Completion of project or activity.

8.01 OVERVIEW

Presented as Section 8 of the Consent Judgment Annual Report, the City is submitting the required annual status report of CSOP for 2015. The City continues to visually check the permitted CSOs on a daily basis and performs a detailed check when a rain/snow event or mechanical problem occurs. The recorded data contains information on bypassing, rain events, snow events, and mechanical problems.

As presented in Section 3 of this report, Tables 3.02-1 and 3.02-2 include 2015 data for each CSO. The data includes information on rain events, snow melts, and mechanical problems.

Maintenance and pretreatment personnel continue to inspect the system and keep all data recorded and charted on a monthly basis. These records indicate a total of nine dry weather overflows during 2015, with all nine overflows resulting from mechanical/electrical problems that were promptly corrected. Seven of the recorded dry weather overflow events also experienced measurable precipitation. Under advisement from the KDOW Morehead office inspector, these overflows were recorded as dry weather overflows because of malfunctioning equipment.

8.02 CONSENT JUDGMENT INCLUDING THE LTCP

The City received the Consent Judgment from the EEC on September 5, 2007. The City hired Strand Associates, Inc.[®] (Strand) to aid in the development of responses and submittals for the Consent Judgment, including the LTCP.

To date, the City has met all Consent Judgment deadlines for submittals. Other requirements are under development and on schedule.

The City submitted the LTCP to KDOW and USEPA on October 20, 2011. The City submitted the Final LTCP to KDOW in 2011 and received KDOW and USEPA comments on January 31, 2013, in a letter from KDOW dated January 26, 2012. The City addressed comments and submitted the Revised Final LTCP to KDOW on August 1, 2013. The City had a phone conference with KDOW and USEPA personnel on January 26, 2015. The City will revised the LTCP and submitted to KDOW and USEPA in June 2015. The Final LTCP was approved in September 2015.

8.03 EVALUATION OF CSOs

The improvements to the Roberts Drive, 6th Street and the 37th Street Pumping Stations have contributed to a significant decrease in CSO flow volume. In 2011, Roberts Drive contributed over 45 million total gallons. In 2012, this number decreased to only about 2 million total gallons. The total overflow volume for Roberts Drive CSO remained at about 2 million total gallons for both 2013 and 2014. The same trend was seen at the 6th Street station. In 2011, 6th Street contributed 4 million total gallons. In 2012, this number decreased to just over 500 total gallons, all of which were contributed before the 6th Street Pumping Station improvement project was completed in March 2012. In 2013 and 2014, there were no overflows at the 6th Street Pumping Station CSO. The 34th and the 37th CSOs combined contributed about 92 million total gallons in 2013. The total reduced to 54 million in 2014 and

7.5 million in 2015 with the completion of the 37th Pump Station project. These improvements provide significant reductions to the total CSO flow.

Other CSO outfalls such as 10th Street, 18th Street, and 37th Street have all seen CSO flow reductions due to these improvements. This is because pump stations do not have to double-pump flow being received from the Roberts Drive and 6th Street Pumping Stations since the flow is being directly pumped to the WWTP. This allowed for the total CSO flow to be reduced from 392 million gallons in 2011 to about 133 million gallons in 2014 and 103 million in 2015. Also, by reducing the double-pumping of these pumping stations, an \$80,000 decrease in energy cost was realized. The City's collection system currently captures over 85 percent by volume of the combined sewage collected in the CSS during precipitation events on a systemwide annual average basis.

During 2015, the City continued its efforts to improve the overall CSO program. The City has continued to implement many of the suggestions made during its 2006 inspection such as writing internal procedures for callouts, inspections, and reporting.

Two improvement projects were completed during the past year to improve the collection system. These projects are listed below.

1. Roberts Drive CSO regulator modifications: Project included raising the weir height. The project cost was \$5,000.
2. Improved 37th Street Pumping Station: The project increased the pumping station capacity and allows the pumping station to pump directly to the WWTP. The project cost was \$3,500,000.

8.04 REVIEW OF NMCs

The City submitted a report to the EEC detailing its plan for compliance based on the 1995 guidance provided by USEPA. The report was a requirement of the Consent Judgment the City entered into with EEC in September 2007. A report to these agencies was submitted by September 5, 2008, according to the terms of the Consent Judgment in effect for Ashland's CSO LTCP. The intent of the report was to provide a plan for compliance by the September 2009 deadline. The City received comments on the NMC Compliance Report in September 2009 and submitted a revised report in November 2009.

Strand was hired to prepare the review of NMC compliance for the City's CSO and CSS. The review discussed the status of the NMC programs, with attention given to each minimum control measure identified in the guidance. Planned activities for enhancements to these programs were provided. A summary of activities to be completed and the progress made is provided in Table 8.04-1. Many of these changes dovetail with those made in the CMOM Program Self-Assessment completed under the Consent Judgment.

The City received approval of the NMC compliance report from KDOW on April 23, 2010.

TABLE 8.04-1

SUMMARY OF NMC ENHANCEMENTS RECOMMENDED IN THE 2009 NMCs COMPLIANCE REPORT

	Minimum Control	Major NMC Enhancements Recommendations	Major NMC Enhancements Progress Made
1	Proper O&M	Formalize O&M programs through the development of a written O&M manual.	City has developed Sanitary Sewer Design, Construction, and Maintenance Manual. City has also developed a CSO Flow Monitoring Manual.
2	Maximization of collection system storage	Provide active tracking of infiltration/inflow testing results.	Smoke and dye testing, downspout removal.
3	Pretreatment	Initiate dialogue between the City and industrial users to explore potential improvements.	The City no longer receives hauled waste during wet weather.
4	Maximization of flow to the publicly-owned treatment works for treatment.	Installed three new manholes on Greenup Avenue trunk sewer to intercept flow before they reach the 18th Street and 19th street CSO regulators and overflow. Flow is conveyed to 26th Street PS and is pumped directly to the WWTP.	City is maximizing flow to the WWTP. LTCP CSO abatement projects are designed to increase peak flow to the WWTP. Both Roberts Drive and 6th Street Pumping Station improvements have been completed and convey flow directly to the WWTP. The 37th Street Pumping Station improvement project is about 98 percent complete.
5	Prohibition of dry weather CSOs	Consider visual aids or other devices to assist in overflow detection.	City has installed flow meters and is in the process of installing floats at all CSO outfalls and connecting them to the SCADA system to notify City personnel if there is an overflow.
6	Control of solids and floatables (S&F)	Modify street sweeping routes to focus more on the CSS. Evaluate feasible S&F controls for CSOs.	Considered in 6th Street Pump Station Improvements project. Also considered in 37th Street Pumping Station Improvements project and 34th Street.
7	Pollution Prevention Programs	No major changes.	Existing program adequate.
8	Public Notification	Explore other avenues for public involvement, including CSO page on City's Web site and e-mail notification list.	CSO warning signs installed on all outfalls. City has been using sewer bill inserts to educate the public on CSOs. City has organized public meetings in the past to educate and involve the public in the LTCP process. City created a brochure on sewer rate increases. There has been a three-part story on CSOs and the LTCP process in the Ashland newspaper "The Independent".
9	Monitoring and characterization of CSOs	Consider visual aids or automated monitoring for overflows. Develop wet weather sampling program.	City has installed flow meters on all CSO outfalls and rain gauges at three strategic locations within the collection system. City started CSO and receiving water body sampling program in December 2010 to establish baseline conditions. The City is using data collected by the flow meters to document CSO discharge information. City continued with CSO and receiving water sampling in 2012.

WASTEWATER COLLECTION - 8320 CALLOUT SHEET

NAME	CELL PHONE	HOME PHONE	OFFICE PHONE
RAY HALE Superintendent, Col Sys Op IV	(606) 922 - 8353	(606) 388 - 2088	(606) 327 - 2039
BRUCE WORTHINGTON Field Supervisor, Col Sys Op IV	(606) 694 - 2623		
JOHN BROWN Pump Station Technician, Col Sys Op III	(606) 571 - 0587		
RANDY SPEARS Equipment Operator, Col Sys Op IV	(606) 831 - 0850		
BRANDON CARPENTER Equipment Operator, Col Sys Op I	(740) 646 - 9637		
JAMES ABRAHANSON Collection System Operator III	(606) 831 - 0102		
RAYMOND BARNEY Collection System Operator III	(606) 923 - 1020		
RANDY DUSANG Collection System Operator I (in Training)	(606) 694 - 4888		
STAN HARRIS Collection System Operator III	(606) 331 - 8071		
DAVID PETITT Collection System Operator III	(606) 371 - 9205		
DONNA HINES **** Inventory Control Clerk **** BUILDING ACCESS / PARTS ONLY	(606) 465 - 5732	(606) 327 - 1183	
RYAN EASTWOOD Director of Engineering and Utilities	(606) 922 - 4495		

Distribution

JA Abrahamson	R Downs	SC Harris	A McDowell	R Spears
RA Barney	RC Dusang	D Hines	J Okyere (Strand Engrg)	BE Worthington
JW Brown	R Eastwood	E Huffine	D Petitt	Water Plant
CB Carpenter	WR Hale	P Huffman	B Prater	

Consent Judgement Annual Report
 2015 CSO Flow Meter Data
 City of Ashland, Kentucky

DRAFT-(02.25.16)

Site Name	6th Street	10th Street	15th Street	18th Street	19th Street	26th Street	34th Street	37th Street	Roberts Drive	Roberts Drive Rain	WWTP Rain	WTP Rain
Date	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow			
	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Inches	Inches	Inches
2/1/2015 0:00	0	0	0	0	0	2,710	0	No meter installed	32,230	0.36	0.25	0.3
2/2/2015 0:00	0	0	2,520	0	0	0	17		15,482	0.09	0.15	0.14
2/3/2015 0:00	0	0	5,247	32,791	9,122	0	113		0	0	0	0
2/4/2015 0:00	0	0	0	0	0	21,884	0		0	0	0	0
2/5/2015 0:00	0	0	0	0	0	31,223	0		0	0	0	0
2/6/2015 0:00	0	0	1	0	0	29,466	0		0	0	0	0
2/7/2015 0:00	0	0	0	0	0	24,210	0		0	0	0	0
2/8/2015 0:00	0	0	0	0	0	13,636	0		0	0	0	0
2/9/2015 0:00	0	0	0	0	0	3,593	0		0	0	0	0
2/10/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/11/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/12/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/13/2015 0:00	0	0	1	0	0	0	0		0	0.01	0	0.01
2/14/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/15/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/16/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/17/2015 0:00	0	0	0	0	0	0	0		0	0	0.01	0
2/18/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/19/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/20/2015 0:00	0	0	0	0	0	0	0		0	0	0	0
2/21/2015 0:00	0	0	0	0	0	73,764	0		0	0.57	0.29	0.83
2/22/2015 0:00	0	0	1,761	66,054	15,095	136,367	4		17,150	0.37	0.02	0.4
2/23/2015 0:00	0	0	2,211	50,687	10,363	0	3		14,936	0	0	0
2/24/2015 0:00	0	0	0	0	18	0	0		6,462	0	0	0
2/25/2015 0:00	0	0	1	0	0	0	0		8,530	0	0	0
2/26/2015 0:00	0	0	0	0	0	0	0		18,208	0	0	0
2/27/2015 0:00	0	0	0	0	0	0	0		809	0	0	0
2/28/2015 0:00	0	0	365	0	0	0	0		4,495	0	0	0
Monthly Net Positive Flow	0	0	12,108	149,532	34,597	336,854	136	0	118,302	1.40	0.72	1.68
Monthly Total Negative Flow												

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 City of Ashland, Kentucky

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Date	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Inches	Inches	Inches
	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons			
3/1/2015 0:00	0	0	0	5,249	22	18,471	0	0	4,495	0.36	0.32	0.34
3/2/2015 0:00	0	0	1,163	0	0	0	0	0	79,313	0.03	0.01	0.02
3/3/2015 0:00	0	0	0	0	0	0	0	0	31,211	0.06	0.04	0.05
3/4/2015 0:00	0	0	159	2,136,992	601,861	314,659	251	0	No Data	1.36	1.32	1.42
3/5/2015 0:00	0	0	77,844	94,062	15,236	724,213	0	0	52,853	0	0	0
3/6/2015 0:00	0	4,411	257	80,031	23,030	48,714	0	0	9,935	0.01	0.07	0
3/7/2015 0:00	0	42,318	76,021	1,207,562	106,401	961,483	132	0	0	0.48	0.17	0.61
3/8/2015 0:00	0	47,595	43,044	2,984,666	25,483	1,331,445	0	0	28,497	0	0	0.01
3/9/2015 0:00	0	435	20,819	36,658	134	2,513	0	0	4,587	0	0	0
3/10/2015 0:00	0	0	337	1,647,237	545,483	647,276	334	0	0	1.22	1.23	1.38
3/11/2015 0:00	0	0	195,793	230,084	1,598	627,375	4	0	597,284	0	0	0.01
3/12/2015 0:00	0	0	0	7,365	0	8,935	0	0	8,139	0	0	0
3/13/2015 0:00	0	9,384	608	1,419,592	468,902	3,847,454	282,293	0	0	1.04	0.96	1.11
3/14/2015 0:00	0	668,806	226,861	2,244,919	106,731	7,879,018	548,879	0	6,753	0.4	0.37	0.36
3/15/2015 0:00	0	94,763	107,957	304,688	71	2,528,530	606	0	33,919	0	0	0
3/16/2015 0:00	0	0	72,741	20,591	0	0	734	0	0	0	0	0
3/17/2015 0:00	0	0	61,370	21,697	0	0	641	0	0	0	0	0
3/18/2015 0:00	0	0	62,498	13,726	0	0	19	0	0	0	0	0
3/19/2015 0:00	0	0	67,086	8,135	2,654	29,286	29,300	0	496	0.2	0.12	0.14
3/20/2015 0:00	0	0	9,811	0	1,066	0	241	0	331	0.12	0.16	0.19
3/21/2015 0:00	0	0	79	0	0	0	19	0	918	0	0	0
3/22/2015 0:00	0	0	0	0	0	0	0	0	403	0	0	0
3/23/2015 0:00	0	0	0	0	0	0	0	0	93	0	0	0
3/24/2015 0:00	0	0	0	0	0	0	0	0	892	0	0	0
3/25/2015 0:00	0	908	0	0	0	0	0	0	0	0	0	0
3/26/2015 0:00	0	16	0	0	0	0	15	0	No Data	0.16	0.05	0.03
3/27/2015 0:00	0	0	57	0	0	0	0	426,764	2,105	0.01	0	0
3/28/2015 0:00	0	0	0	0	0	0	0	839,430	79	0	0	0
3/29/2015 0:00	0	0	0	0	0	0	0	0	0	0.01	0	0
3/30/2015 0:00	0	0	0	66	66	0	0	0	0	0.02	0.02	0.03
3/31/2015 0:00	0	0	3	171	171	0	1		193	0	0	0
Monthly Net Positive Flow	0	868,636	1,024,507	12,463,491	1,898,909	18,969,372	863,467	1,266,194	862,496	5.48	4.84	5.70
Monthly Total Negative Flow												

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Date	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Total Flow	Inches	Inches	Inches
	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons			
5/1/2015 0:00	0	0	0	0	0	0	0	0	0	0.01	0	0
5/2/2015 0:00	0	0	0	0	0	0	0	0	74	0	0	0
5/3/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/4/2015 0:00	0	0	0	0	0	0	0	0	130	0	0	0
5/5/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/6/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/7/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/8/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/9/2015 0:00	0	0	0	0	0	0	0	0	68	0	0	0
5/10/2015 0:00	0	0	0	0	0	0	0	0	124	0	0	0
5/11/2015 0:00	0	0	8,484	0	0	0	0	0	217	0.28	0.08	0
5/12/2015 0:00	0	685	0	27,324	7,369	0	0	0	0	0.01	0	0
5/13/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/14/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/15/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/16/2015 0:00	0	0	92,905	0	0	0	0	0	2,688	0.73	0.5	0.49
5/17/2015 0:00	0	54,585	0	154,648	50,606	0	0	0	628	0.05	0.28	0.19
5/18/2015 0:00	0	0	0	16,286	25,955	0	1,158	0	0	0	0	0.01
5/19/2015 0:00	0	0	0	0	0	0	0	0	384	0	0	0
5/20/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/21/2015 0:00	0	0	0	0	0	0	0	0	2,121	0.1	0.04	0.06
5/22/2015 0:00	0	0	0	0	0	0	0	0	1,865	0	0.01	0
5/23/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/24/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/25/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/26/2015 0:00	0	0	0	0	0	0	0	0	821	0.03	0.03	0.02
5/27/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/28/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
5/29/2015 0:00	0	0	0	0	0	0	0	0	0	0.06	0.02	0.01
5/30/2015 0:00	0	0	0	0	0	0	0	0	0	0.01	0	0.01
5/31/2015 0:00	0	0	0	0	0	0	0	0	0	0	0	0
Monthly Net Positive Flow	0	55,270	101,388	198,258	83,930	0	1,158	0	9,118	1.28	0.96	0.79
Monthly Total Negative Flow	0	0	-12,488	0	0	0	0	0	-4,057			

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