

The City of
JACKSON



**QUARTERLY
REPORT NO. 14**

JULY 2016 THROUGH SEPTEMBER 2016

Department of Public Works
Wastewater Infrastructure Redevelopment Program

City of Jackson
Wastewater Infrastructure Redevelopment
Program

Quarterly Report No. 14
July 2016 through September 2016

January 19, 2016

Prepared by:
City of Jackson
Department of Public Works
Jerriot Smash, Interim Director
Terry S. Williamson, Consent Decree Manager
Post Office Box 17
Jackson, Mississippi 39205-0017

City of Jackson, Mississippi

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



Tony T. Yather
Mayor

1-23-17

Date



Jerriot Smash, Interim Director
Department of Public Works

18 JAN 17

Date

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1.0 Introduction

1.1 Consent Decree Overview

On March 1, 2013, the U.S. District Court for the Southern District of Mississippi entered a Consent Decree (CD) agreed to by the City of Jackson, Mississippi (City), U.S. Environmental Protection Agency (EPA), and the Mississippi Department of Environmental Quality (MDEQ,) regarding the City's wastewater collection and treatment system. Over a 17½ year timeline, the Consent Decree requires the City to:

- Develop, submit, finalize, and implement plans for the continued improvement of the Wastewater Collection and Transportation System (WCTS) and Wastewater Treatment Plants (WWTPs);
- Eliminate Sanitary Sewer Overflows (SSOs), effluent limit violations (including any violations of the new effluent limits for nutrients), and reporting violations, and
- Minimize Prohibited Bypasses.

One of the ongoing requirements of the EPA Consent Decree is to submit periodic reports to demonstrate continuing compliance. The specific reporting requirements of the CD are described below.

1.2 Authority to Promulgate

The City's Consent Decree Manager, Terry Williamson, compiled this Quarterly Report from information provided by the Sewer Maintenance Division of the Department of Public Works and United Water Service of Mississippi, LLC, the City's contract operator for its wastewater treatment facilities and lift stations during this period, to fulfill the requirements of Section IX ¶ 57 (a) set forth in the CD.

1.3 Consent Decree Requirements for Quarterly Report

As stated in the Consent Decree Section IX ¶ 57 (a), the Quarterly Report shall be submitted beginning thirty (30) Days after the first full three (3)-month period following the Date of Entry of this Consent Decree, and thirty (30) Days after each subsequent three (3)-month period until termination of the Consent Decree and shall contain the following, at a minimum:

Quarterly Reports. Beginning thirty (30) Days after the first full three (3) month period following the Date of Entry of this Consent Decree, and thirty (30) Days after each subsequent three (3)-month period thereafter until termination of the Consent Decree, the City shall submit to EPA for review and approval a Quarterly Report that shall include the following:

- (i) the date, time, location, source, estimated duration, estimated volume, receiving water (if any), and cause of all SSOs occurring in the applicable three (3)-month period in a tabulated electronic format; and
- (ii) the date, time, estimated duration, estimated volume, and cause of all Prohibited Bypasses occurring in the applicable three (3)-month period in a tabulated electronic format.

The listing and graphical summaries of the SSOs and prohibited bypasses for July through September 2016 are presented in Section 2 of this report.

2.0 Summary of SSOs and Prohibited Bypasses

SSOs are divided into three elements of the wastewater system: the collection system, West Bank Interceptor, and pump stations. Prohibited Bypasses can occur at any of the City's three wastewater treatment facilities.

2.1 Collection System SSOs

Table 1 lists SSOs in the collection system for July through September 2016. Each day of a multiple day event is considered as a separate SSO, in accordance with the determination of penalties according to the CD. The SSO that began September 28 continued until its source was discovered on October 25. Since the SSO began in September, the City has elected to report this SSO in its entirety on this Quarterly Report.

Figure 1 shows SSO events by month as a result of the following reported causes:

- Grease
- Roots
- Solids
- Collapsed Pipe
- Other

Previously, other causes of SSOs listed were "Pump Station Failure," "Excessive Flow," and "Undersized Line." Since none of these causes occurred during this period, they have been omitted from the graphical presentation.

Figure 2 shows percentages of collection system SSOs for the period by cause. **Figure 3** shows total volume of SSOs for each month in the period. Volumes are plotted on a logarithmic scale because of the large monthly variations. **Figure 4** shows total duration of SSOs for each month.

Monthly rainfall is plotted in each graph. It should be noted that there does not appear to be a correlation between rainfall and the number, volume, or duration of SSOs.

Table I
Collection System SSOs

Date Began	Time Began	Date Ended	Estimate d Duration, hours	Location	Overflow Source	Est Vol., gallons	Waters of State	Sewershed	Rainfall, inches	Reported Cause
6/26/2016	1:12 PM	6/26/2016	1.26	MCDOWELL PARK 252 CIR	Manhole	360	No	Caney	0.00	Grease
7/1/2016	9:10 AM	7/1/2016	4.36	4410 BROOKS DR.	Manhole	30	Yes	Eubanks	0.00	Grease
7/3/2016	9:30 AM	7/3/2016	2.41	147 ELMWOD PL.	Manhole	30	Yes	Big Creek	0.00	Grease/Solids
7/7/2016	10:46 AM	7/7/2016	1.47	976 PARK LANE	Manhole	120	Yes	Eubanks	0.00	Grease
7/9/2016	6:24 PM	7/9/2016	2.41	948 PARKWOOD PL	Ground Surface (defective pipe underground)	780	Yes	Hanging Moss	0.89	Grease
7/14/2016	7:39 AM	7/14/2016	0.45	2820 NEWPORT ST.	Manhole	120	Yes	Town	0.00	Grease
7/20/2016	7:00 AM	7/22/2016	104.50	5943 WESTMORE DR	Manhole	4,500	Yes	Hanging Moss	0.00	Other (Undetermined)
7/21/2016	9:13 AM	7/21/2016	0.57	2424 BAILEY AVE	Manhole	180	Yes	Town	0.00	Other (Undetermined)
7/22/2016	2:13 9M	7/22/2016	3.32	304 MITCHELL AVE	Manhole	780	Yes	Eubanks	0.00	Grease
7/28/2016	8:30 AM	7/28/2016	2.30	2424 BAILEY AVE	Manhole	60	No	Town	0.14	Collapsed Pipe
8/5/2016	4:19 PM	8/5/2016	1.11	3004 CROSSWAY ST	Manhole	50	Yes	Trahon	0.14	Other (Undetermined)
8/19/2016	8:00 AM	8/19/2016	1.30	7187 22 PRIMOS AVE	Ground Surface (defective pipe underground)/Other	50	Yes	Lynch	0.00	Other (Disjointed Pipe Segment)
8/20/2016	8:02 AM	8/20/2016	2.32	1940 VENTURA DR	Manhole	40	No	Trahon	0.00	Grease
8/21/2016	8:49 AM	8/21/2016	2.29	1195 MCDOWELL CIR	Cleanout	8	No	Hardy	0.00	Grease
8/23/2016	11:06 AM	8/23/2016	0.22	1248 EASTOVER DR	Manhole	240	Yes	Eastover	0.00	Other (Undetermined)
8/24/2016	12:13 PM	8/24/2016	1.33	E. FORTIFICAION 904 ST	Ground Surface (defective pipe underground)	480	Yes	Town	0.00	Collapsed Pipe
9/8/2016	2:21 PM	9/8/2016	0.59	226 QUEEN VICTORIA LN	Manhole	360	Yes	Bogue Chitto	0.00	Grease
9/9/2016	9:38 AM	9/9/2016	1.24	333 QUEEN ISABELLA LN	Cleanout	80	No	Bogue Chitto	0.00	Solids
9/13/2016	11:03 AM	9/13/2016	0.25	2424 BAILEY AVE	Manhole	300	Yes	Town	0.00	Collapsed Pipe
9/16/2016	12:07 PM	9/16/2016	2.48	1405 E. NORTHSIDE DR	Manhole	420	Yes	Eubanks	0.00	Grease
9/19/2016	5:59 PM	9/17/2016	1.16	2047 ALYCE DR	Cleanout	280	No	Caney	0.00	Grease

Table 1
Collection System SSOs

Date Began	Time Began	Date Ended	Estimated Duration, hours	Location	Overflow Source	Est. Vol., gallons	Waters of State	Sewershed	Rainfall, inches	Reported Cause
9/20/2016	12:39 PM	9/20/2016	1.07	3316 REVELS AVE	Ground Surface (defective pipe underground)	380	Yes	Eubanks	0.00	Grease
9/21/2016	10:36 AM	9/21/2016	1.03	125 TAYLOR ST	Cleanout	380	Yes	Town	0.00	Grease
9/25/2016	9:25 AM	9/25/2016	5.26	4576 WILL-O-LAKE DR	Manhole	1,200	Yes	Big Creek	0.00	Other (Undetermined)
9/21/2016	5:38 PM	9/21/2016	0.55	1235 MELWOOD PL	Other/Storm Drain	260	Yes	Eubanks	0.00	Grease
9/23/2016	3:32 PM	9/23/2016	1.28	WILL-O-LAKE/ LAKECOVE	Manhole	1,500	No	Big Creek	0.00	Grease
9/24/2016	11:33 AM	9/24/2016	3.55	1040 MADISON ST	Manhole	540	Yes	Town	0.00	Grease
9/25/2016	5:40 PM	9/25/2016	0.60	1405 E. NORTHSIDE DR	Manhole	800	No	Hanging Moss	0.00	Grease
9/24/2016	1:57 PM	9/24/2016	2.58	4070 MEADOW LANE	Ground Surface (defective pipe underground)	720	Yes	Hanging Moss	0.00	Grease
9/27/2016	6:41 PM	9/27/2016	0.45	255 WOODROW WILSON	Manhole	75	Yes	Town	0.00	Collapsed Pipe
9/27/2016	5:28 PM	9/27/2016	0.39	132 PINELAWN PL	Manhole	280	Yes	Lynch	0.00	Grease
9/28/2016	5:35 PM	10/25/2016	648.00	235 FACTORY ST	Manhole	5000	Yes	Lynch	0.00	Grease
9/30/2016	4:06 PM	9/30/2016	1.52	3811 TROY AVE.	Ground Surface (defective pipe underground)	360	Yes	Town	0.00	Collapsed Pipe

Figure 1: Collection System SSOs by Cause

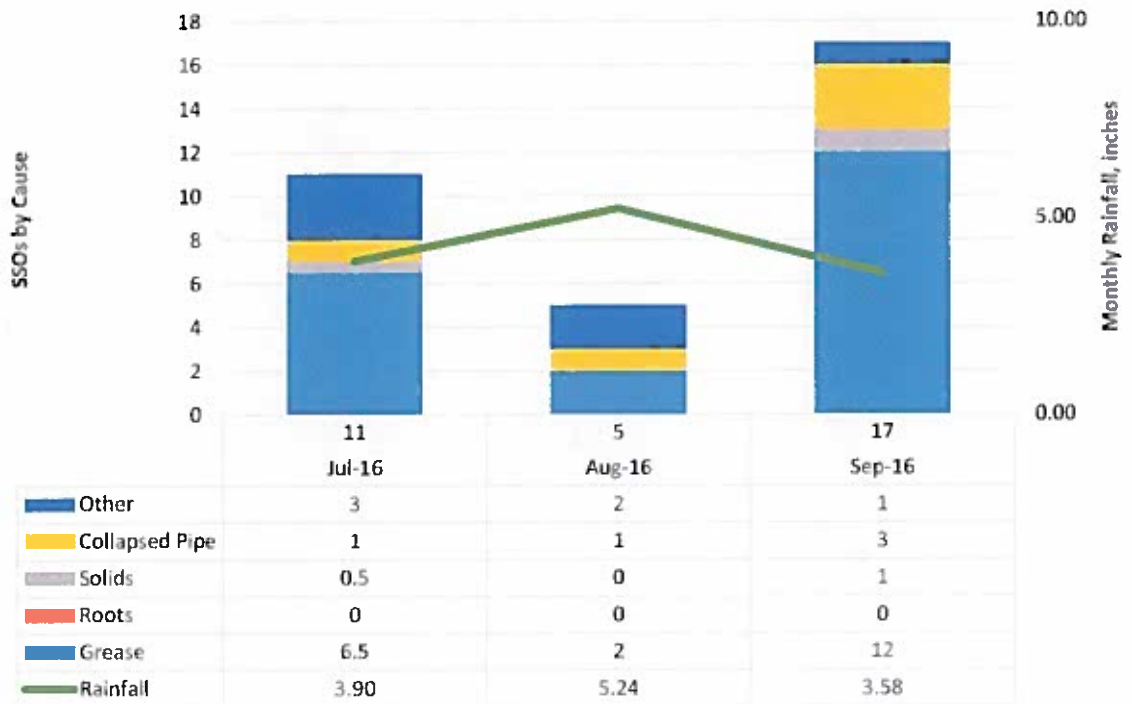


Figure 2: Percentage of Collection System SSOs by Cause

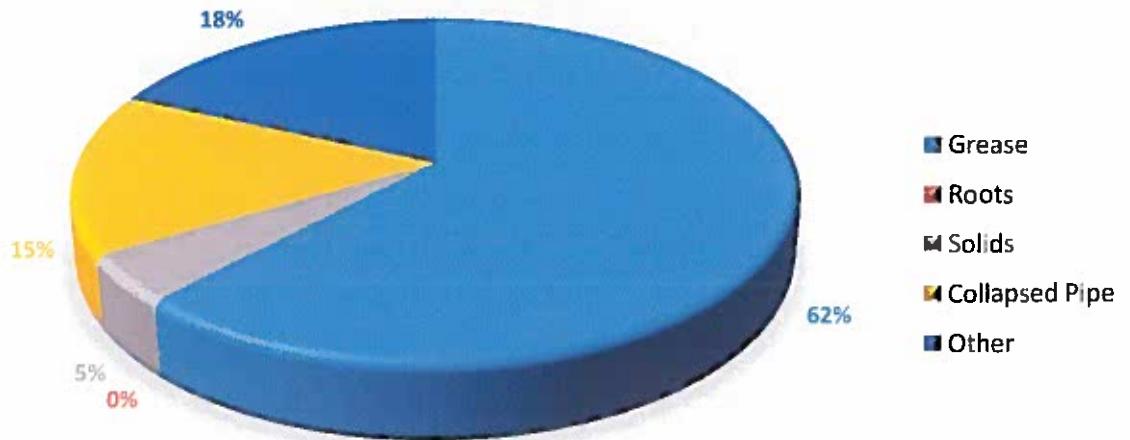


Figure 3: Collection System SSO Volume

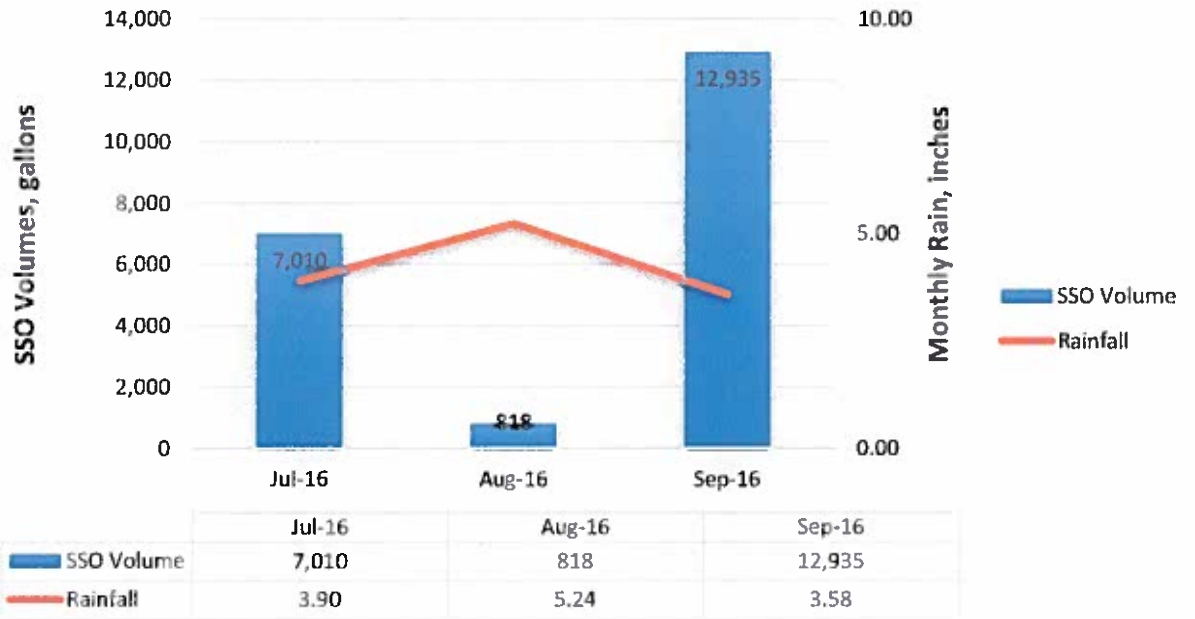
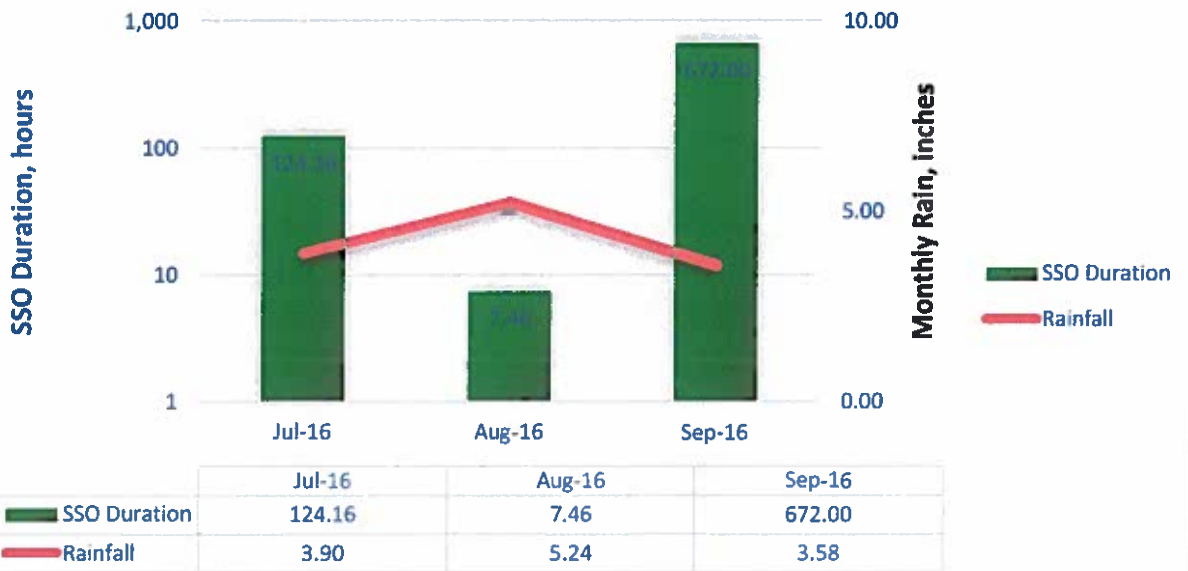


Figure 4: Collection System SSO Duration



2.2 West Bank Interceptor SSOs

No SSOs were reported in the West Bank Interceptor from July through September 2016.

2.3 Pump Station SSOs

No SSOs were report at pump stations from July through September 2016. This is the fifth consecutive quarter without a pump station SSO.

2.4 Prohibited Bypasses

No prohibited bypasses were reported from July through September 2016.