Office of the Mayor
Tony T. Yarber, Mayor

219 South President Street
Post Office Box 17
Jackson, Mississippi 39205-0017
Telephone: 601-960-1084
Facsimile: 601-960-2193

May 8, 2014

Chief, Environmental Enforcement Section
Environment and National Resources Division
U. S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611
Re: DOJ No. 90-5-1-1-09841

Brad Ammons
Environmental Engineer
Clean Water Enforcement Branch
Municipal & Industrial Enforcement Section
U. S. EPA Region 4
61 Forsyth St., S. W.
Atlanta, GA 30303

Karl Fingerhood
Environmental Enforcement Section
U. S. Department of Justice
Box 7611 Ben Franklin Station
Washington, DC 20044-7611

RE: City of Jackson
EPA Consent Decree
1st Annual Report, March 2013 through February 2014
4th Quarterly Report, January – March 2014

Dear Gentlemen:

Enclosed, please find the First Annual Report for the period of March 2013 through February 2014. The report was developed and submitted by the City of Jackson in accordance with the EPA Consent Decree dated March 1, 2013.

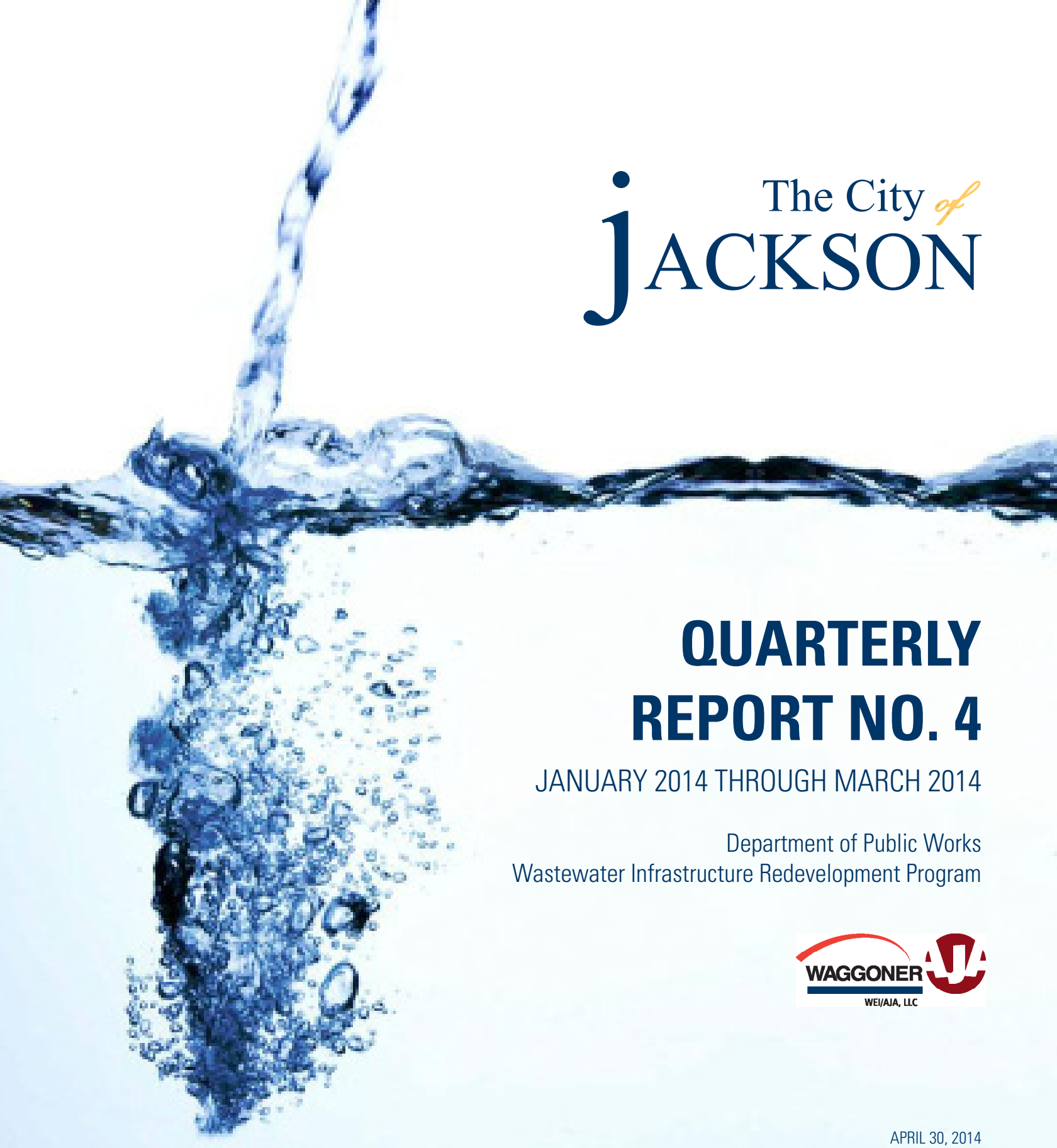
Also enclosed is the Fourth Quarterly Report for the period of January through March 2014. This report was developed and submitted by the City of Jackson in accordance with the EPA Consent Decree dated March 1, 2013. In the May 31st letter, you agreed to change the date for the first quarterly report to July 31st.

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 gathered and evaluated the information submitted. Based on my inquiry of the 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.

Sincerely,

Tony T. Yarber, Mayor
City of Jackson Mississippi

Cc: Les Herrington, P.E., Mississippi Department of Environmental Quality
Gus McCoy, Chief Administrative Officer, City of Jackson
Monica Joiner, City Attorney, City of Jackson
Charles Williams, PhD., P. E. Interim Director, Department of Public Works, City of Jackson
Mary Carter, Deputy Director of Public Works, City of Jackson
Terry Williamson, Legal Counsel, City of Jackson
Public Depository, Eudora Welty Public Library



The City of JACKSON

QUARTERLY REPORT NO. 4

JANUARY 2014 THROUGH MARCH 2014

Department of Public Works
Wastewater Infrastructure Redevelopment Program

WAGGONER JA
WEI/AJA, LLC

APRIL 30, 2014

City of Jackson
Wastewater Infrastructure Redevelopment Program

Quarterly Report No. 4
January 2014 through March 2014

April 30, 2014

Prepared for:

City of Jackson
Department of Public Works
P.O. Box 17
Jackson, MS 39205-0017

Prepared by:

WEI/AJA LLC
143A LeFleurs Square
Jackson, MS 39211

City of Jackson, Mississippi
Quarterly Report No. 4
January 2014 through March 2014

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. Yarber
Mayor

5.8.14
Date

Dr. Charles E. Williams, Jr., P.E., Interim Director
Department of Public Works

5/8/14
Date

Quarterly Report No. 4
January 2014 through March 2014

Contents

1.0 Introduction

1.1 Consent Decree Overview

On March 1, 2013, the Consent Decree (CD) agreed to by the City of Jackson, Mississippi, U.S. Environmental Protection Agency (EPA), and the Mississippi Department of Environmental Quality (MDEQ) regarding the wastewater collection and treatment system was entered by the U.S. Court, Southern District of Mississippi. 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 of Jackson Public Works Department (JPWD) established the Wastewater Infrastructure Redevelopment Program in 2004. The Waggoner Engineering/AJA Management and Technical Services joint venture company, WEI/AJA LLC, was retained to assist the City in addressing the requirements of the Consent Decree under the existing Program Management contract for the Wastewater Infrastructure Redevelopment Program. Accordingly, the Program Management team compiled this Quarterly Report from information provided by the City and its contractors 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) (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.

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 were observed only at the Savanna Street Wastewater Treatment Facility (SSWWTF).

2.1 Collection System SSOs

Table 1 lists SSOs in the collection system for January through March 2014. Each day of a multiple day event is considered as a separate SSO, in accordance with the determination of penalties according to the CD.

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

- Grease
- Roots
- Solids
- Collapsed Pipe
- Pump Station Failure
- Excessive Flow
- Undersized Line
- Other

Some SSO events had multiple causes. In these instances, each cause was assigned a fractional value, adding up to a total of one cause for each event.

Figure 2 shows percentages of collection system SSOs for the year by cause. **Figure 3** shows total volume of SSOs for each month. 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 1
City of Jackson, Mississippi
Quarterly Report No. 4 - January 2014 through March 2014
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
1/2/2014	7:50 AM	1235 LYNCREST AVE	Cleanout	1.17	80	Belhaven	Collapsed Pipe.
1/2/2014	4:30 PM	848 NORTH ST	Manhole	0.92	50	Town	Grease. Solids.
1/3/2014	9:55 AM	3540 SUNSET DR	Manhole	0.00	500	Town	Grease.
1/3/2014	1:10 PM	3416 CARDINAL ST	Cleanout	0.42	150	Town	Grease.
1/3/2014	5:15 PM	1543 BURTON ST	Cleanout	1.25	100	Lynch	Grease.
1/7/2014	8:05 AM	408 FORTIFICATION ST JEFFERSON ST	Manhole	5.33	5,580	Belhaven	Grease.
1/12/2014	5:15 PM	3845 SLAYTON AVE	Cleanout	3.50	5	Town	Grease. Solids.
1/13/2014	12:15 PM	3524 EDMAR PL	Manhole	1.08	1,200	Eubanks	Excessive Flow.
1/14/2014	8:44 AM	3679 JAMES MONROE DR	Manhole	2.27		Bogue Chitto	Grease.
1/14/2014	11:37 AM	SCHOOLVIEW DR LIVINGSTON ROAD	Manhole	0.85	80	Eubanks	Grease.
1/15/2014	1:00 PM	117 FLAG CHAPEL CIR	Cleanout	1.00		Town	Grease. Roots.
1/16/2014	10:00 AM	3540 SUNSET DR	Manhole	1.00		Town	Grease. Solids.
1/17/2014	1:00 PM	105 ELCREST ST	Manhole	0.58	950	Lynch	Grease.
1/19/2014	10:00 AM	170 ELMWOOD PL	Manhole	5.00	800	Big Creek	Grease.
1/21/2014	8:30 AM	1119 PRIMROSE ST	Cleanout	0.75	200	Cany	Grease.
1/21/2014	2:35 PM	511 FOREST AVE	Manhole	0.58	580	Eubanks	Grease.
1/22/2014	10:25 AM	3823 LIVINGSTON ROAD	Manhole	0.00	750	Eubanks	Grease.
1/22/2014	5:00 PM	5723 HWY 18	Manhole	0.75	150	Cany	Solids.
1/23/2014	10:50 AM	1425 VALLEY ST	Manhole	3.67	7,210	Three Mile	Collapsed Pipe.
1/23/2014	6:15 PM	1451 BRINKLEY DR	Manhole	2.00	200	Eubanks	Solids.
1/24/2014	12:30 PM	3008 WOODVIEW DR	Cleanout	0.50	90	Cany	Grease.
1/26/2014	11:20 AM	1613 WESTHAVEN BLVD	Manhole	1.33	600	Lynch	Grease.
1/27/2014	1:30 PM	MEDGAR EVERS BLVD RUTLEDGE AVE	Manhole	1.00	750	Town	Grease.
1/29/2014	8:40 AM	2130 MCDOWELL ROAD	Manhole	1.08	600	Cany	Grease.
1/31/2014	11:20 AM	3316 REVELS AVE	Manhole	1.67	4,400	Town	Grease.
1/31/2014	3:45 PM	304 QUEEN MARY LANE	Manhole	1.25	1,180	Lynch	Grease.
1/31/2014	4:00 PM	952 REAVES ST	Manhole	0.33	600	Hardy	Grease.
2/2/2014	5:00 PM	3524 EDMAR PL	Manhole	0.33	1,000	Eubanks	Rain Water.
2/3/2014	10:50 AM	1150 FRONTAGE ROAD	Ground Surface (defective pipe underground)	1.50	1,800	Eubanks	Excessive Flow.
2/3/2014	1:25 PM	2002 WILLOW WAY	Cleanout	1.42	700	Three Mile	Grease.
2/4/2014	11:05 AM	5720 BROWNLEE DR	Manhole	0.48	850	Hanging Moss	Grease. Roots.
2/5/2014	1:50 PM	3434 BAILEY AVE	Manhole	0.58	850	Eubanks	Grease.
2/5/2014	2:30 PM	6343 LYNDON B JOHNSON DR	Manhole	0.50	90	Bogue Chitto	Grease.
2/6/2014	10:05 AM	350 W WOODROW WILSON AVE	Other	2.00	1,200	Town	Grease.
2/7/2014	9:45 AM	848 NORTH ST	Manhole	1.25	80	Town	Grease.
2/7/2014	1:30 PM	3019 LAKEWOOD CV DR	Manhole	1.50	900	Cany	Grease.
2/8/2014	9:00 AM	4882 HWY 18	Manhole	2.00	1,200	Cany	Grease.
2/8/2014	7:15 PM	2151 MILL ST	Manhole	5.00	500	Town	broken water main.
2/9/2014	1:15 PM	1135 GRAND AVE	Cleanout	1.00	300	Town	Grease.
2/10/2014	12:05 PM	691 TIFTON DR	Manhole	1.67	100	Cany	Grease. Solids.
2/10/2014	1:55 PM	3267 BIENVILLE DR	Cleanout	0.83	3	Cany	Solids.
2/10/2014	10:45 PM	3234 WASHINGTON ST	Other	1.00	50	Lynch	Grease.
2/11/2014	8:45 AM	3320 LAKELAND TER	Cleanout	4.00	5,560	Eubanks	Grease. Rags and grease.
2/11/2014	1:45 PM	3077 WOODSIDE DR	Cleanout	0.92	2,280	Cany	Grease.

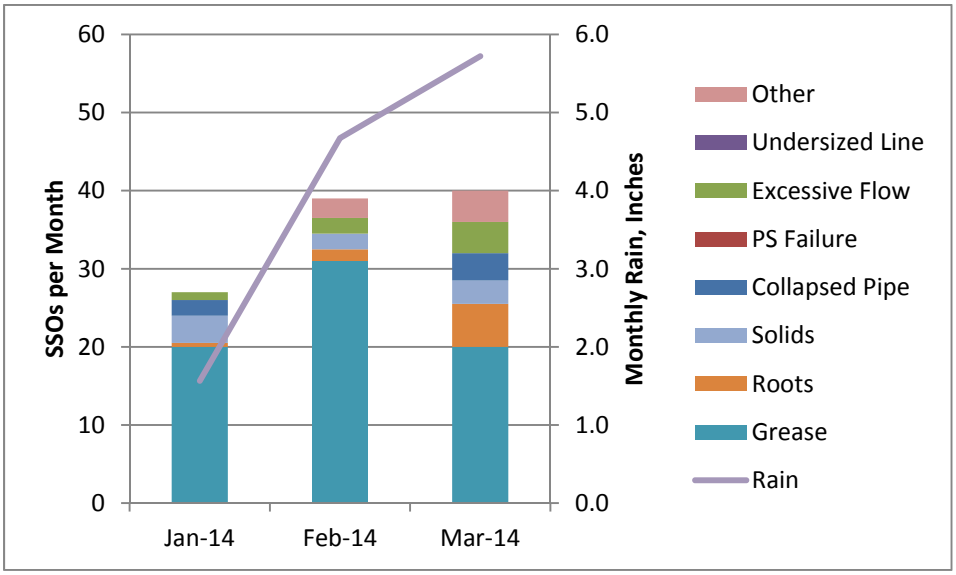
Table 1
City of Jackson, Mississippi
Quarterly Report No. 4 - January 2014 through March 2014
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
2/12/2014	9:35 AM	937-6177 CRAFT ST BURCH ST	Manhole	0.83	100	Lynch	Grease.
2/12/2014	11:15 AM	2148 RIVERSIDE DR	Constructed Bypass	1.25	1,800	Belhaven	Constructed Bypass.
2/12/2014	2:50 PM	SAVANNA AVE EDDY ST	Manhole	0.67		Cany	Grease.
2/13/2014	8:25 AM	5363 QUEEN CHRISTINA LANE	Manhole	1.25	3,350	Lynch	Grease.
2/13/2014	11:55 AM	200 REBEL WOODS	Manhole	0.83	1,180	Cany	Grease.
2/14/2014	11:50 AM	2554 CRESTLEIGH MANOR	Manhole	1.83	2,280	Cany	Grease.
2/21/2014	9:15 PM	2655 BELVEDERE DR	Manhole	0.17	2,230	Hardy	Grease.
2/14/2014	1:35 PM	EDDY ST SAVANNA AVE	Manhole	0.92	1,800	Cany	Grease.
2/18/2014	12:05 PM	346 ELTON ROAD	Manhole	3.42	3,380	Cany	Grease.
2/19/2014	10:15 PM	334 TERRY ROAD	Sewer Stub-out	0.75	100	Hardy	Grease.
2/19/2014	11:10 AM	4921 WOODMONT DR	Storm Drain	1.33	625	Eubanks	Grease.
2/19/2014	1:25 PM	3312 JAYNE AVE	Cleanout	1.92	1,800	Hardy	Grease.
2/19/2014	2:30 PM	350 WOODROW WILSON AVE	Grease Trap	0.50	2,200	Town	Grease.
2/21/2014	9:15 PM	2655 BELVEDERE DR	Manhole	0.17	2,230	Hardy	Grease.
2/22/2014	8:00 AM	SAGAMORE ST DANIELS ST	Manhole	1.00	1,280	Lynch	Grease.
2/24/2014	11:50 AM	REBEL WOODS TERRY ROAD	Manhole	0.92	2,240	Hardy	Grease.
2/25/2014	7:45 AM	ROBINSON ROAD TERRY ROAD	Manhole	1.08	1,280	Hardy	Grease.
2/25/2014	11:50 AM	2969 UNIVERSITY DR	Manhole	2.67	3,380	Eubanks	Grease. Roots.
2/26/2014	7:45 AM	1221 BLAIR ST	Cleanout	3.25	5,580	Town	Grease.
2/27/2014	9:45 AM	3200 MEDGAR EVERS BLVD	Manhole	2.75	2,280	Town	Grease.
2/28/2014	11:15 AM	2027 CAMELLIA LANE	Manhole	1.25	3,380	Three Mile	Grease. Roots.
2/28/2014	1:00 PM	FORTIFICATION ST COHEA ST	Manhole	1.50	2,840	Town	Grease. Solids.
3/1/2014	9:40 AM	1515 MARIA DR	Manhole	1.00	850	Hardy	Grease.
3/2/2014	9:50 AM	512 HOLDEN ST	Cleanout	0.75	30	Lynch	Grease.
3/5/2014	11:10 AM	1605 DORGAN ST	Cleanout	0.50	15	Hardy	Grease. Roots.
3/6/2014	8:20 AM	503 SPRINGFIELD CIR	Manhole	8.67		Lynch	Rain water getting into sewer line.
3/7/2014	10:00 AM	2223 BELVEDERE DR	Manhole	0.50	1,300	Three Mile	Grease.
3/7/2014	10:30 AM	3150 ROBINSON ROAD	Manhole	1.00	1,280	Lynch	Grease.
3/9/2014	8:30 AM	2614 HILLSIDE DR	Cleanout	1.00	80	Three Mile	Grease.
3/9/2014	10:10 AM	3449 SHANNON DALE DR	Other	0.58	5,570	Trahon	Force Main Break.
3/9/2014	11:20 AM	512 HOLDEN ST	Cleanout	0.42	20	Lynch	Grease.
3/10/2014	11:45 AM	1034 WYNWOOD DR	Ground Surface (defective pipe underground)	1.00	60	Lynch	Solids.
3/10/2014	3:45 PM	325 QUEEN CATHERINE LANE	Cleanout	1.25	100	Lynch	Roots.
3/11/2014	8:00 AM	LAMAR ST MCTYERE AVE	Manhole	2.00	800	Town	Collapsed Pipe.
3/11/2014	2:05 PM	1253 WOOD VILLAGE DR	Ground Surface (defective pipe underground)	0.58	1,180	Lynch	Grease. Sewer leaking from botton of manhole.
3/12/2014	4:00 PM	38 WATERSVIEW DR	Manhole	2.25	10	Cany	Roots.
3/13/2014	10:10 AM	2840 ROBINSON ROAD	Manhole	1.25	1,180	Lynch	Grease.

Table 1
City of Jackson, Mississippi
Quarterly Report No. 4 - January 2014 through March 2014
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
3/14/2014	12:30 PM	3010 LAKELAND DR GOLF COURSE	Manhole	4.00	900	Eubanks	Roots.
3/15/2014	10:25 AM	5508 QUEEN ELIZABETH LANE	Manhole	1.08	1,280	Lynch	Roots.
3/16/2014	8:00 AM	503 SPRINGFIELD CIR	Manhole	0.50	5,560	Lynch	Excessive Flow.
3/16/2014	11:00 AM	5029 DECKARD DR	Manhole	0.67	3,380	Lynch	Grease.
3/16/2014	12:25 PM	BELL CT W BELL ST	Manhole	1.08	2,260	Town	Grease.
3/16/2014	3:30 PM	4938 ROSEHAVEN DR	Cleanout	1.17	800	Lynch	Grease.
3/18/2014	2:50 PM	315 RAYMOND ROAD	Manhole	1.00	1,180	Lynch	Grease. Roots.
3/19/2014	8:30 AM	439 BROADVIEW ST	Cleanout	2.83	50	Town	Grease.
3/19/2014	8:45 AM	315 RAYMOND ROAD	Manhole	2.00	1,180	Lynch	Grease. Roots.
3/19/2014	1:30 PM	HOUSTON AVE WILLING AVE	Cleanout	1.58	15	Lynch	Grease. Solids.
3/19/2014	2:50 PM	6306 AMBLEWOOD CT	Manhole	0.83	2,240	Hanging Moss	Grease.
3/20/2014	11:05 AM	J.R. LYNCH ST ROSE ST	Ground Surface (defective pipe underground)	1.33	600	Town	Where contractor are lying fiber optic cable.
3/24/2014	10:00 AM	1209 LYNCREST DR	Cleanout	1.25	25	Belhaven	Collapsed Pipe.
3/25/2014	8:15 AM	2026 CHEROKEE DR.	Ground Surface (defective pipe underground)	3.62	3,100	Eastover	Collapsed Pipe.
3/25/2014	8:25 AM	337 QUEEN CATHERINE LANE	Cleanout	1.58	40	Lynch	Solids.
3/25/2014	11:35 AM	120 WILDWOOD CIR	Cleanout	0.67	15	Cany	Grease.
3/26/2014	2:30 PM	1225 N STATE ST	Manhole	0.50	600	Town	Grease.
3/27/2014	4:00 PM	4754 FRONTAGE ROAD	Ground Surface (defective pipe underground)	1.00	800	Hanging Moss	Collapsed Pipe. Broke Down.
3/29/2014	8:00 AM	3538 EDMAR PL	Manhole	0.50	700	Eubanks	Excessive Flow.
3/29/2014	12:30 PM	2856 BOOKER WASHINGTON ST	Ground Surface (defective pipe underground)	0.50		Town	Excessive Flow.
3/29/2014	4:30 PM	1422 COOKS AVE	Manhole	1.50	1,500	Trahon	Grease.
3/31/2014	10:35 AM	910 VALLEY FALLS ROAD	Ground Surface (defective pipe underground)	1.58	200	Cany	Main line backed up.
3/31/2014	12:10 PM	4125 SUNSET DR	Manhole	0.67	3,340	Town	Grease.
3/31/2014	1:10 PM	4126 PARKWAY AVE	Cleanout	1.17	1,180	Town	Grease.
3/31/2014	5:00 PM	3237 ROBINSON ST	Cleanout	1.75	200	Lynch	Grease. Solids.

Figure 1: Collection System SSOs by Cause



0.0	2.5	4.0	Other
0.0	0.0	0.0	Undersized Line
1.0	2.0	4.0	Excessive Flow
0.0	0.0	0.0	PS Failure
2.0	0.0	3.5	Collapsed Pipe
3.5	2.0	3.0	Solids
0.5	1.5	5.5	Roots
20.0	31.0	20.0	Grease
27.0	39.0	40.0	Total

Figure 2: Percentage of Collection System SSOs by Cause

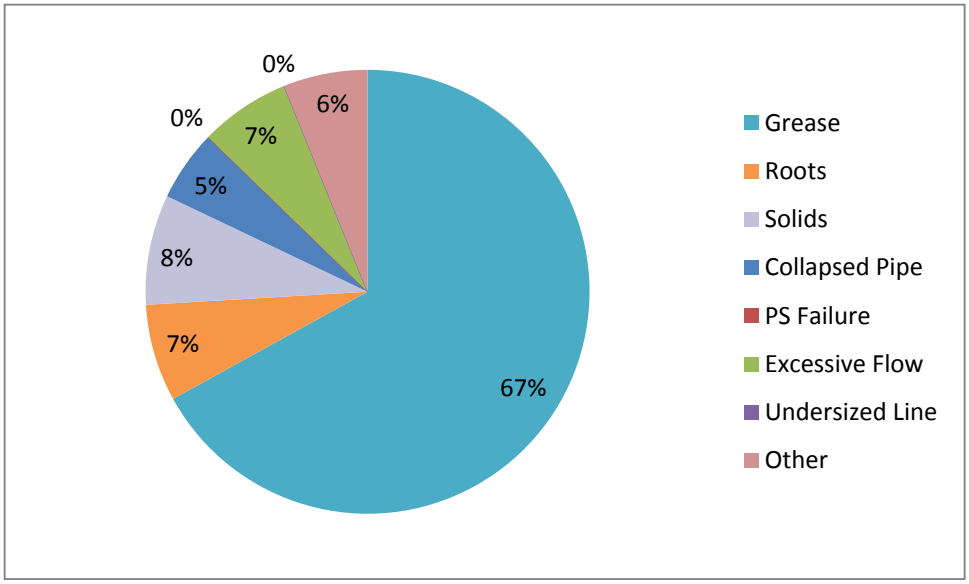


Figure 3: Collection System SSO Volume

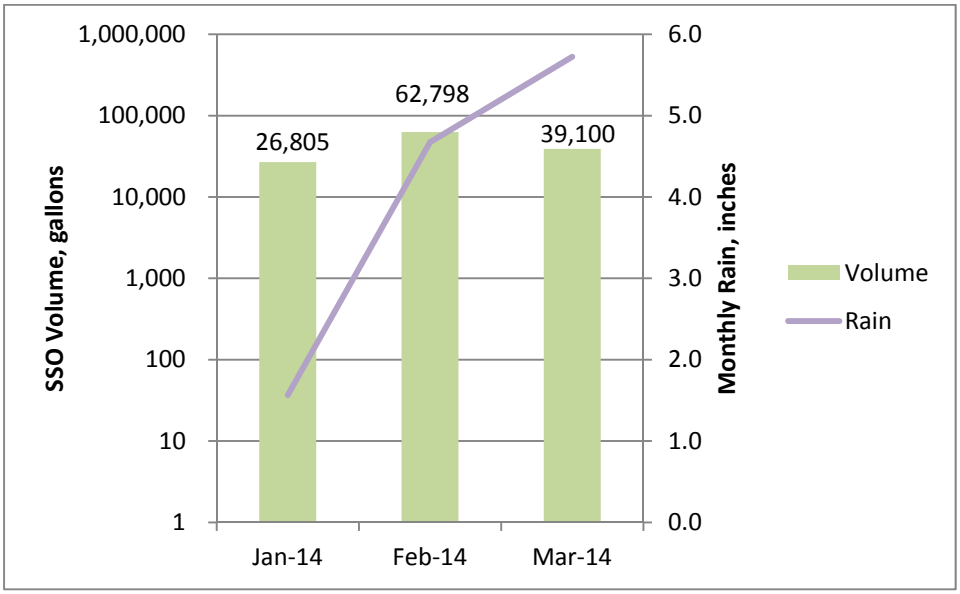
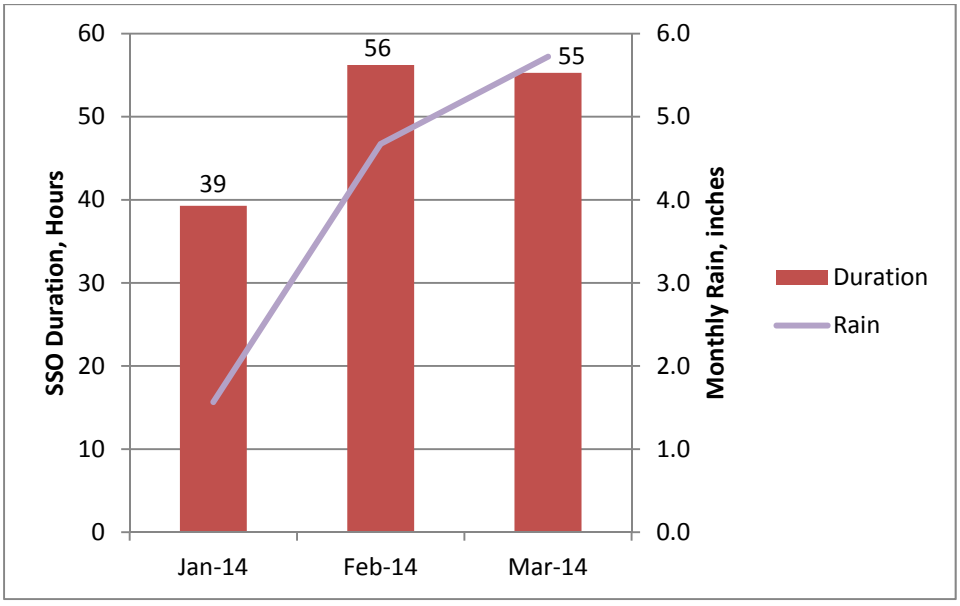


Figure 4: Collection System SSO Duration



2.2 West Bank Interceptor SSOs

Table 2 lists the recorded SSOs in the West Bank Interceptor for the quarter.

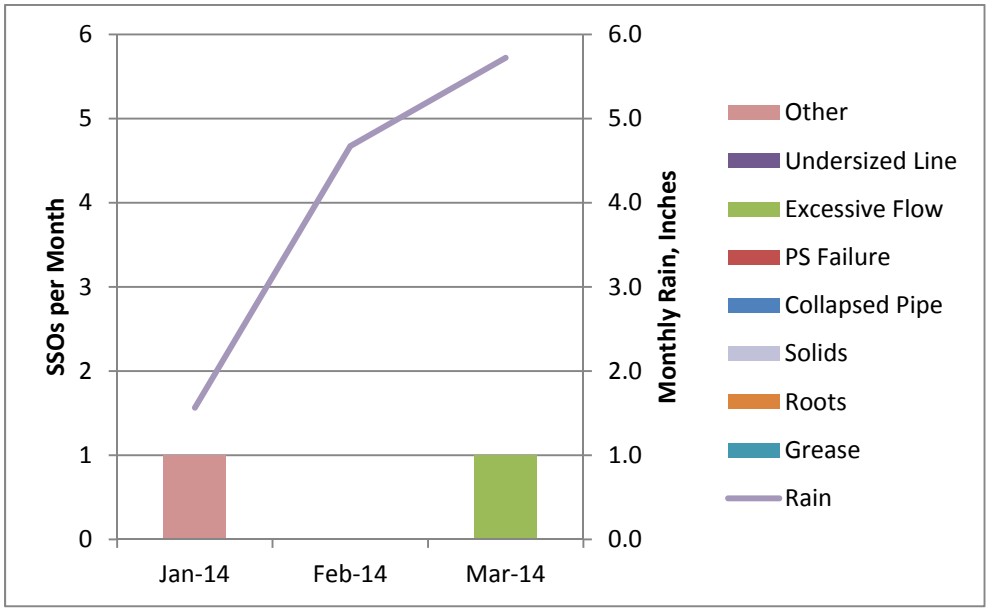
Figure 5 shows SSO events each month by reported cause, as well as by monthly rainfall. **Figure 6** shows percentages of collection system SSOs for the year by cause.

Figure 7 shows total volume of SSOs for each month, along with rainfall. Because of the large variations in volume, these are plotted on a logarithmic scale. **Figure 8** shows total duration of SSOs for each month, and monthly rainfall. Note that duration for the SSO in January was not reported.

Table 2
City of Jackson, Mississippi
Quarterly Report No. 4 - January 2014 through March 2014
West Bank Interceptor SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
1/16/2014	5:55 AM	408 S. JEFFERSON ST	Manhole	Not Reported	7,200,000	Pearl	River up (Pearl River).
3/28/2014	1:00 PM	1200 LAKELAND DR	Manhole	3.00	1,800	Pearl	Excessive Flow.

Figure 5: West Bank Interceptor SSOs by Cause



1.0	0.0	0.0	Other
0.0	0.0	0.0	Undersized Line
0.0	0.0	1.0	Excessive Flow
0.0	0.0	0.0	PS Failure
0.0	0.0	0.0	Collapsed Pipe
0.0	0.0	0.0	Solids
0.0	0.0	0.0	Roots
0.0	0.0	0.0	Grease
1.0	0.0	1.0	Total

Figure 6: Percentage of WBI SSOs by Cause

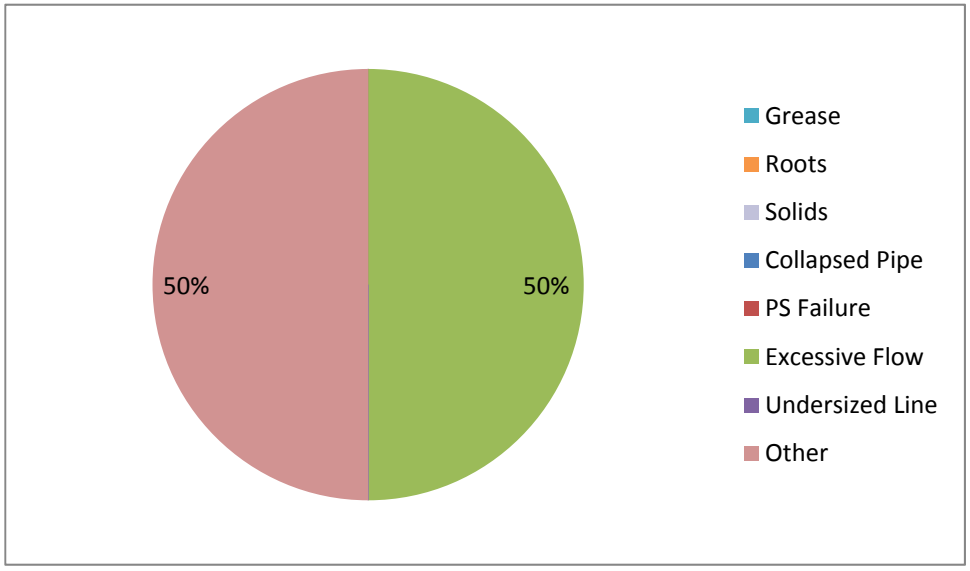


Figure 7: West Bank Interceptor SSO Volume

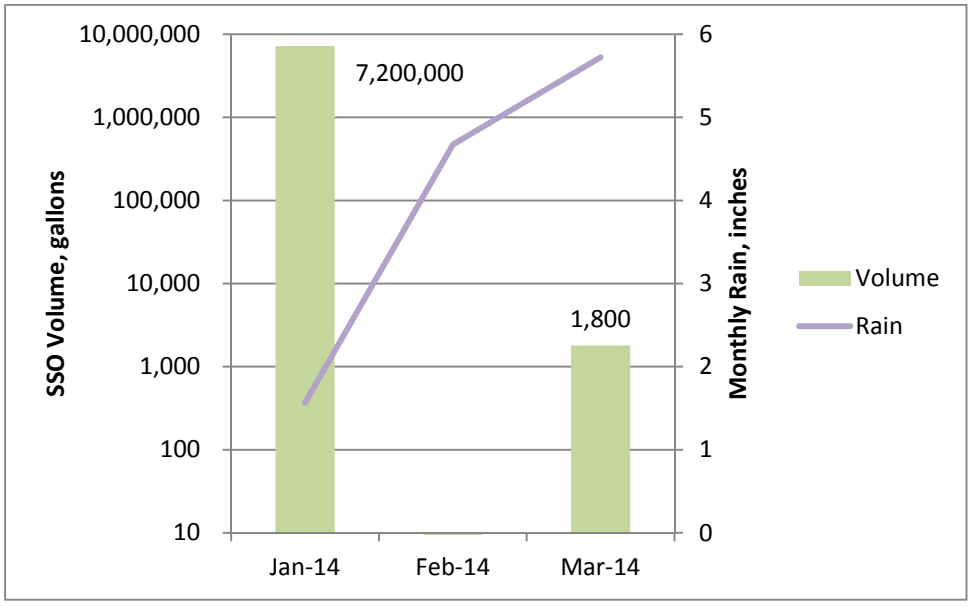
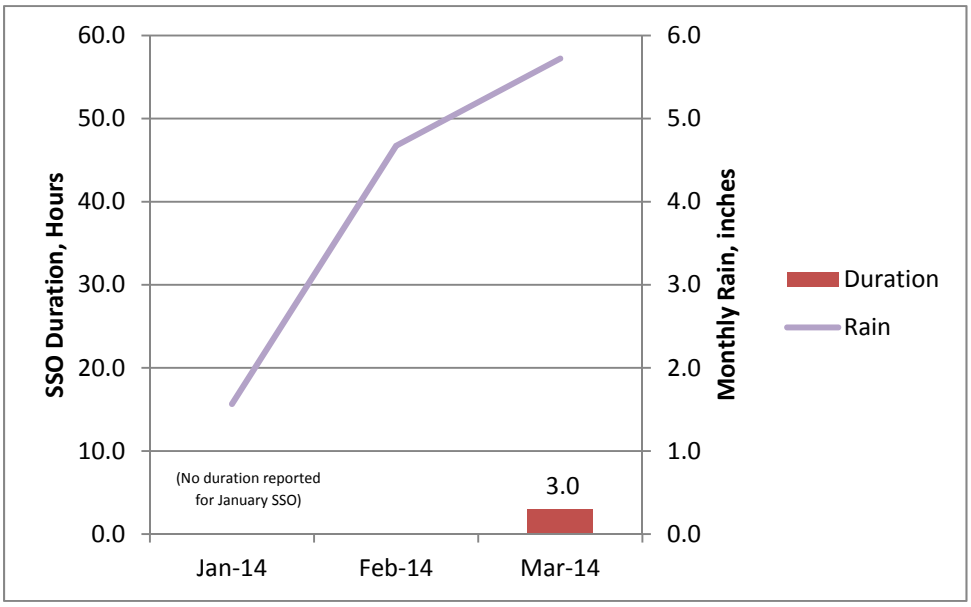


Figure 8: West Bank Interceptor SSO Duration



2.3 Pump Station SSOs

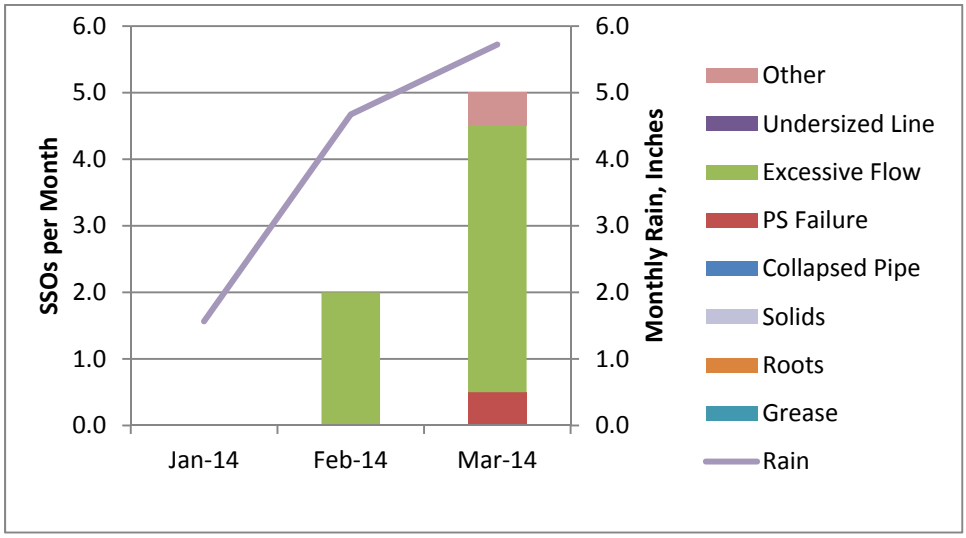
Table 3 lists pump station SSOs for the year.

Figure 9 shows pump station SSO events by month by reported cause, as listed above, as well as monthly rainfall. As above, multiple causes were assigned fractional values, adding up to a total of one cause for each event. **Figure 10** shows percentage of SSOs by cause for the year. **Figure 11** logarithmically plots total volume of pump station SSOs for each month, along with monthly rainfall. **Figure 12** shows total duration of pump station SSOs for each month.

Table 3
City of Jackson, Mississippi
Quarterly Report No. 4 - January 2014 through March 2014
Pump Station SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
2/2/2014	4:00 PM	4210 CHURCH CIR	Pump Station	8.00	80,000	Lynch	Excessive Flow.
2/3/2014	12:00 AM	4210 CHURCH CIR	Pump Station	4.00	40,000	Lynch	Excessive Flow.
3/16/2014	1:30 AM	4210 CHURCH CIR	Manhole	8.00	150,000	Lynch	Excessive Flow.
3/17/2014	3:00 PM	6510 OLD CANTON RD COUNTY LINE ROAD	Manhole	3.00	100,000	Pearl	Pump Station Failure. SSO monitor failure.
3/28/2014	12:30 AM	4210 CHURCH CIR	Manhole	11.00	150,000	Lynch	Excessive Flow.
3/28/2014	10:00 AM	FRANKLIN D ROOSEVELT DR	Manhole	5.00	100,000	Bogue Chitto	Excessive Flow.
3/29/2014	1:50 AM	4210 CHURCH CIR	Manhole	2.17	100,000	Lynch	Excessive Flow.

Figure 9: Pump Station SSOs by Cause



0.0	0.0	0.5	Other
0.0	0.0	0.0	Undersized Line
0.0	2.0	4.0	Excessive Flow
0.0	0.0	0.5	PS Failure
0.0	0.0	0.0	Collapsed Pipe
0.0	0.0	0.0	Solids
0.0	0.0	0.0	Roots
0.0	0.0	0.0	Grease
0.0	2.0	5.0	Total

Figure 10: Percentage of PS SSOs by Cause

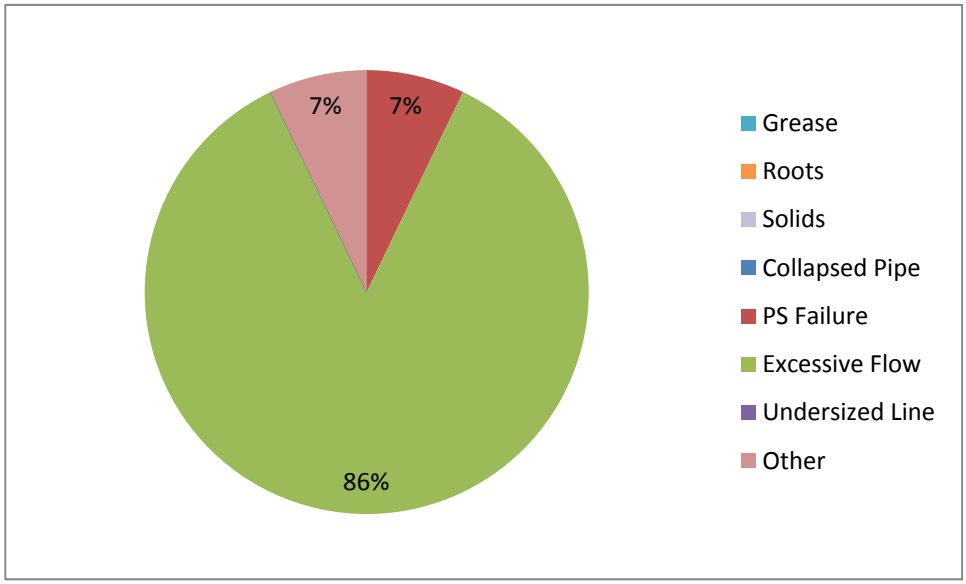


Figure 11: Pump Station SSO Volume

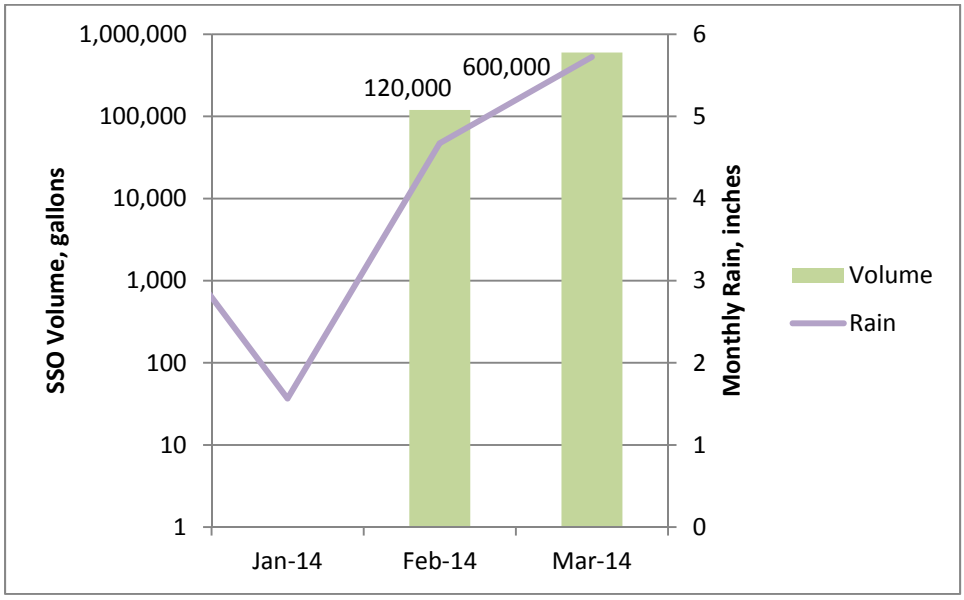
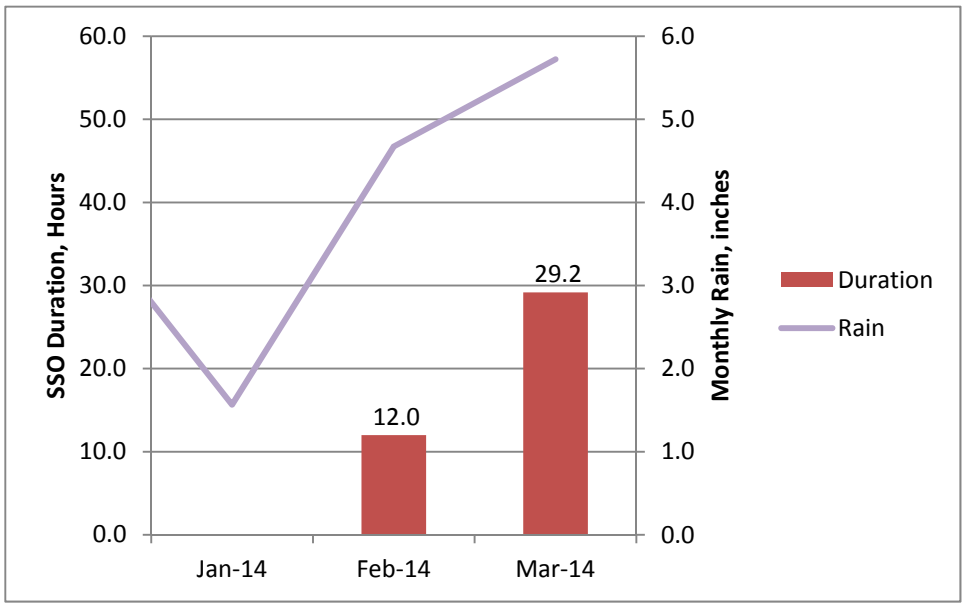


Figure 12: Pump Station SSO Duration



2.4 Prohibited Bypasses

Table 4 lists prohibited bypasses at the wastewater treatment plants for the year. Unlike SSOs, each event is considered as one bypass from the day it begins to the day it ends. Only the Savanna Street plant had prohibited bypasses.

Figure 13 shows prohibited bypass events by month by reported cause, as listed above, as well as monthly rainfall. **Figure 14** shows annual percentage by reported cause.

Figure 15 shows total volume of prohibited bypasses for each month plotted logarithmically, along with monthly rainfall. **Figure 16** shows total duration for the month. Norte that duration of prohibited bypasses is plotted in days.

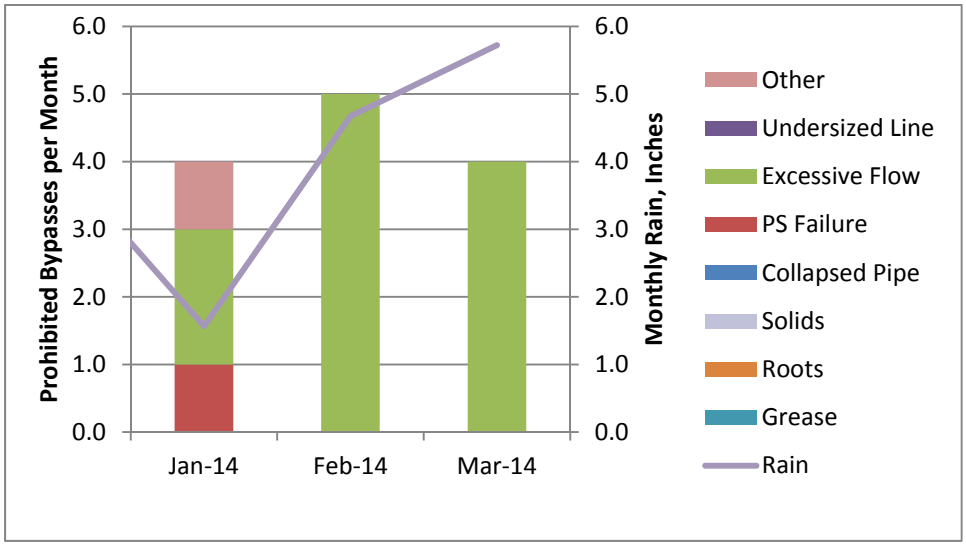
Table 4
City of Jackson, Mississippi
Quarterly No. 4 - January 2014 through March 2014
Prohibited Bypasses

Date Began	Time Began	Location	Source	Estimated Duration, Days	Estimated Volume, Million Gallons	Receiving Water	Reported Cause
01/01/14	4:47 PM	Savanna St WWTP	WWTP	3	16.90	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
01/11/14	11:30 AM	Savanna St WWTP	WWTP	7	80.00	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
01/19/14	10:30 PM	Savanna St WWTP	WWTP	5	35.59	Pearl	Two of the temporary pumps used to pump around the influent pump station failed. The remaining pumps could not keep up with the influent flow. The bypass pumps were then turned on to avoid flooding the plant and to reduce SSOs at the Entergy manhole and at the fairgrounds.
01/27/14	9:16 AM	Savanna St WWTP	WWTP	1	10.95	Pearl	UW personnel were instructed by CO personnel to reduce the level in the storm cells to accommodate the dredging operation, and to reduce the SSPs at the Entergy manhole and at the fairgrounds. The sluice gate at cell #3 was opened. When the desired level was reached in the lagoons, the gate was closed.
02/02/14	3:35 PM	Savanna St WWTP	WWTP	8	43.73	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
02/10/14	7:00 AM	Savanna St WWTP	WWTP	4	58.81	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
02/14/14	12:56 PM	Savanna St WWTP	WWTP	4	7.16	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
02/20/14	11:30 PM	Savanna St WWTP	WWTP	3	90.93	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
02/28/14	8:20 AM	Savanna St WWTP	WWTP	1	10.75	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.

Table 4
City of Jackson, Mississippi
Quarterly No. 4 - January 2014 through March 2014
Prohibited Bypasses

Date Began	Time Began	Location	Source	Estimated Duration, Days	Estimated Volume, Million Gallons	Receiving Water	Reported Cause
03/03/14		Savanna St WWTP	WWTP	1	16.04	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
03/06/14		Savanna St WWTP	WWTP	1	21.89	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
03/11/14		Savanna St WWTP	WWTP	2	13.69	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.
03/15/14		Savanna St WWTP	WWTP	7	116.17	Pearl	Heavy rainfall generated influent flow in excess of mechanical plant's capacity.

Figure 13: Prohibited Bypasses by Cause



1.0	0.0	0.0	Other
0.0	0.0	0.0	Undersized Line
2.0	5.0	4.0	Excessive Flow
1.0	0.0	0.0	PS Failure
0.0	0.0	0.0	Collapsed Pipe
0.0	0.0	0.0	Solids
0.0	0.0	0.0	Roots
0.0	0.0	0.0	Grease
4.0	5.0	4.0	Total

Figure 14: Percentage of Prohibited Bypasses by Cause

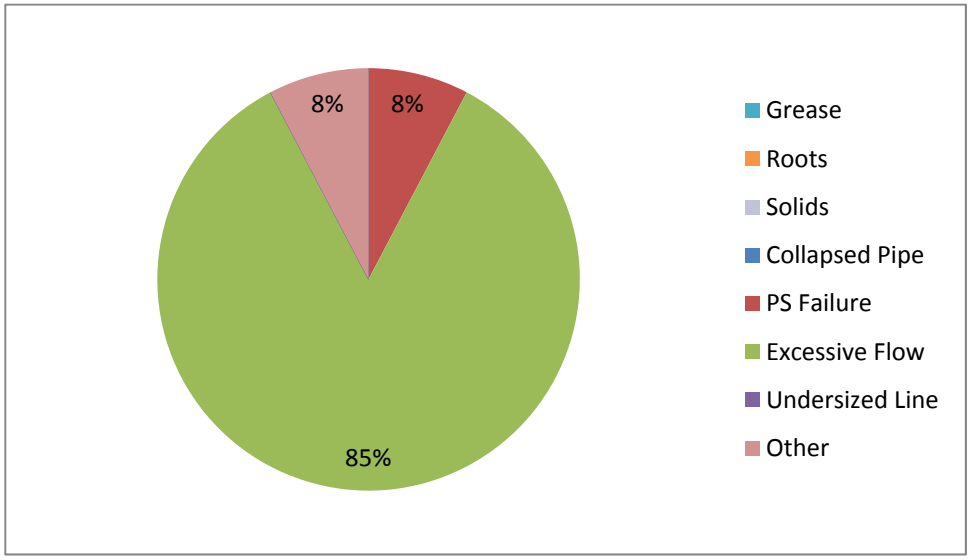


Figure 15: Prohibited Bypass Volume

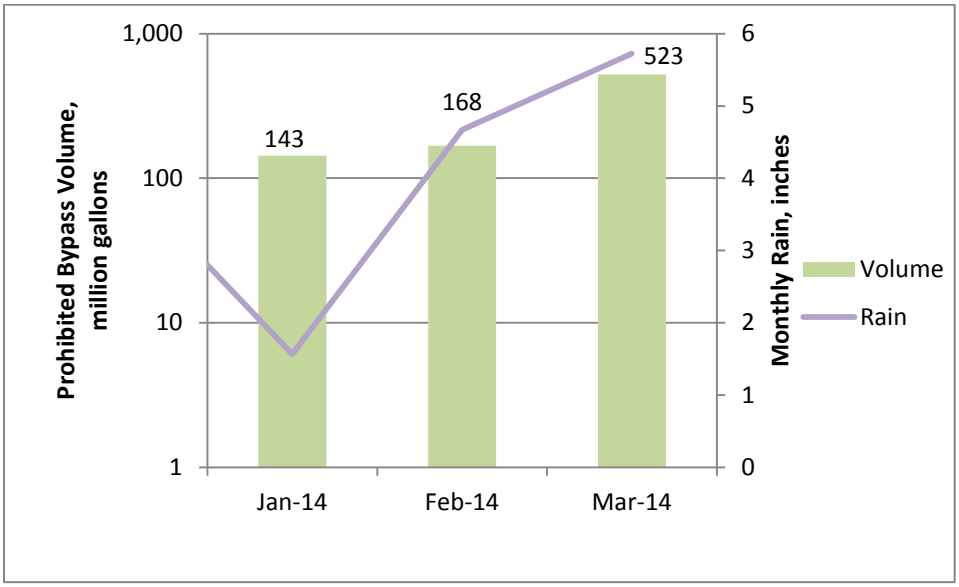


Figure 16: Prohibited Bypass Duration