

Department of Public Works



200 South President Street  
Post Office Box 17  
Jackson, Mississippi 39205-0017

January 30, 2015

Chief, Environmental Enforcement Section  
Environment and National Resources Division  
U.S. Department of Justice  
Box 7611 Ben Franklin Station  
Washington, D.C. 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., SW  
Atlanta, GA 30303

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

RE: City of Jackson, Mississippi, EPA Consent Decree  
7<sup>th</sup> Quarterly Report, October - December 2014  
Supplemental Environmental Project Semi-Annual Report #4

Dear Gentlemen:

Attached please find the Quarterly Report for the period of October through December 2014. The report was developed and submitted by the City in accordance with the EPA Consent Decree dated March 1, 2013 and your correspondence of May 31, 2013. In that May 31, 2013 Letter, you agreed to change the schedule for the quarterly reports.

Also enclosed is Supplemental Environmental Project Semi-Annual Report #4 for the period of July 2014 through December 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 evaluated 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.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tony T. Yarber".

Tony T. Yarber  
Mayor

cc: Les Herrington, P.E., Mississippi Department of Environmental Quality  
Gus McCoy, Chief Administrative Officer  
Monica Joiner, City Attorney  
Kishia L. Powell, P.E., Director, Department of Public Works  
Mary D. Carter, Deputy Director of Public Works  
Terry Williamson, Consent Decree Manager  
Public Depository, Eudora Welty Public Library



# QUARTERLY REPORT NO. 7

OCTOBER 2014 THROUGH DECEMBER 2014

Department of Public Works  
Wastewater Infrastructure Redevelopment Program



JANUARY 30, 2015

*City of Jackson*  
*Wastewater Infrastructure Redevelopment*  
*Program*

**Quarterly Report No. 7**  
**October 2014 through December 2014**

January 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. 7

### October 2014 through December 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

\_\_\_\_\_  
Date

Kishia L. Powell, Director  
Department of Public Works

1.28.15  
\_\_\_\_\_  
Date

# Quarterly Report No. 7

October 2014 through December 2014

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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 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.

The listing and graphical summaries of the SSOs and prohibited bypasses for October - December 2014 are presented in Section 2 of this report.

#### 1.4 Other Requirements for Quarterly Report

EPA approved the CMOM Training Program, subject to comments, on April 25, 2014. One comment requested that the City include in its quarterly reports its efforts to fill the Training Coordinator position.

A status update for filling the Training Coordinator position is included in Section 3 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 at the Savanna Street Wastewater Treatment Facility (SSWWTF), in periods when they occur, are listed separately.

### 2.1 Collection System SSOs

**Table 1** lists SSOs in the collection system for October through December 2014. Each day of a multiple day event is considered as a separate SSO, in accordance with penalties in 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 quarter 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.

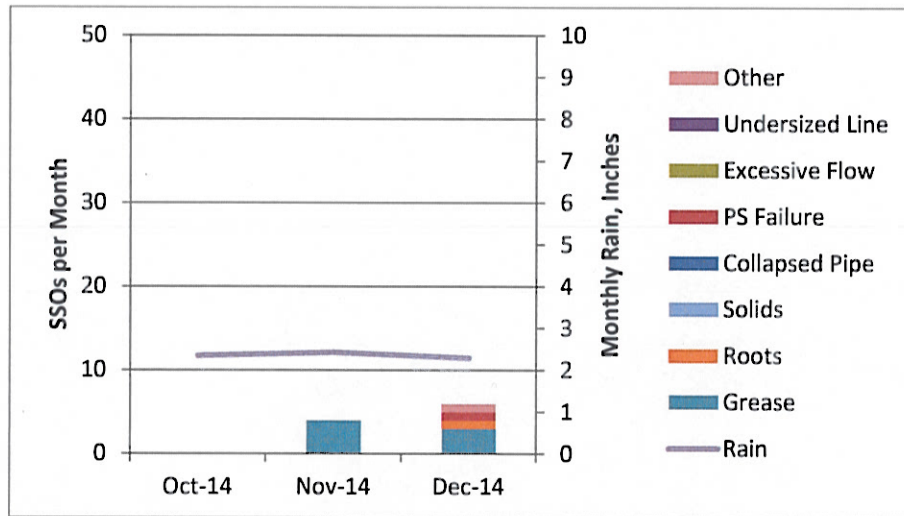
Monthly rainfall is plotted in each graph. It should be noted that there does not appear to be a correlation between rainfall and the number, volume, or duration of SSOs.



**Table 1**  
**City of Jackson, Mississippi**  
**Quarterly Report No.7 - October 2014 through December 2014**  
**Collection System SSOs**

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
11/3/2014	3:10 PM	3930 OLD CANTON RD	Manhole	0.83	1,180	Eubanks	Grease.
11/4/2014	11:50 AM	308 LIVINGSTON ST	Cleanout	1.83	900	Town	Grease.
11/4/2014	3:40 PM	3956 OLD CANTON RD	Manhole	1.08	1,180	Eubanks	Grease.
11/19/2014	7:45 AM	386 RAYMOND ROAD	Manhole	2.25	4,400	Lynch	Grease.
12/1/2014	9:32 AM	904 E FORTIFICATION ST	Manhole	5.38	130	Belhaven	Grease.
12/9/2014	9:30 AM	BAY ST LIVINGSTON ROAD	Manhole	2.00	5,000	Town	Roots.
12/11/2014	9:45 AM	MITCHELL ST DOWNING ST	Manhole	0.83	3,300	Town	Grease.
12/19/2014	2:05 PM	6013 MCRAVEN ROAD	Manhole	1.58	400	Lynch	Manhole rings knocked off.
12/28/2014	7:27 AM	1976 EDWARD LANE JO ANN DR	Manhole	1.97	5,500	Town	Grease.
12/28/2014	8:00 AM	6548 FRANKLIN D ROOSEVELT DR	Manhole	0.33	5,500	Bogue Chitto	Pump Station Failure.

**Figure 1: Collection System SSOs by Cause**



0.0	0.0	1.0	Other
0.0	0.0	0.0	Undersized Line
0.0	0.0	0.0	Excessive Flow
0.0	0.0	1.0	PS Failure
0.0	0.0	0.0	Collapsed Pipe
0.0	0.0	0.0	Solids
0.0	0.0	1.0	Roots
0.0	4.0	3.0	Grease
0.0	4.0	6.0	Total

**Figure 2: Percentage of Collection System SSOs by Cause**

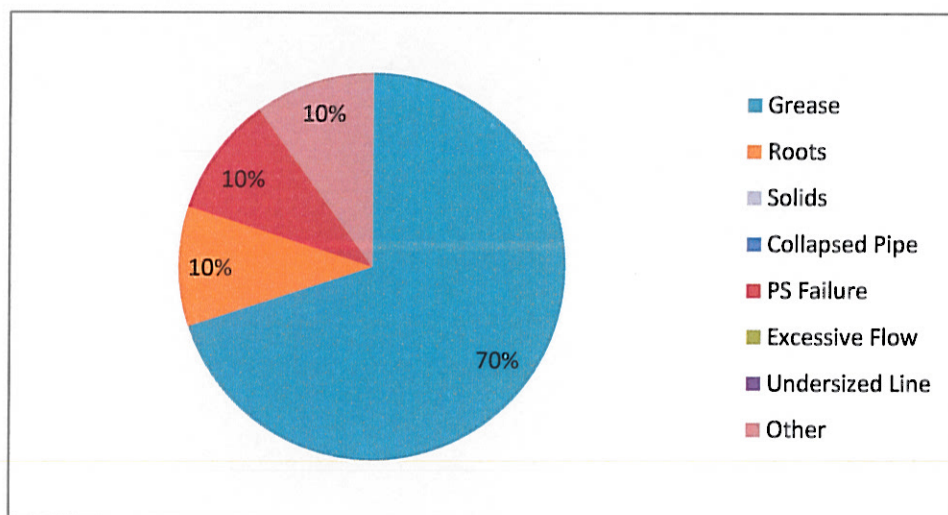


Figure 3: Collection System SSO Volume

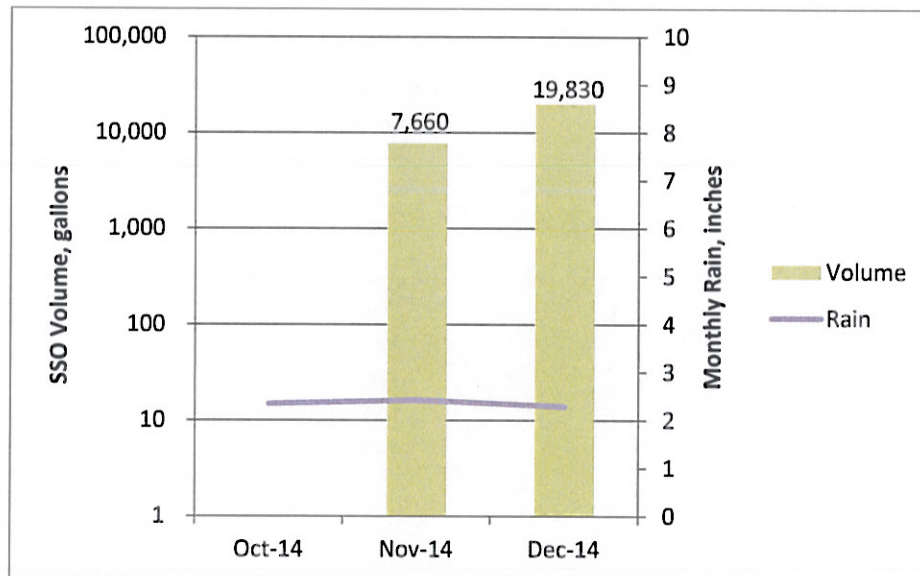
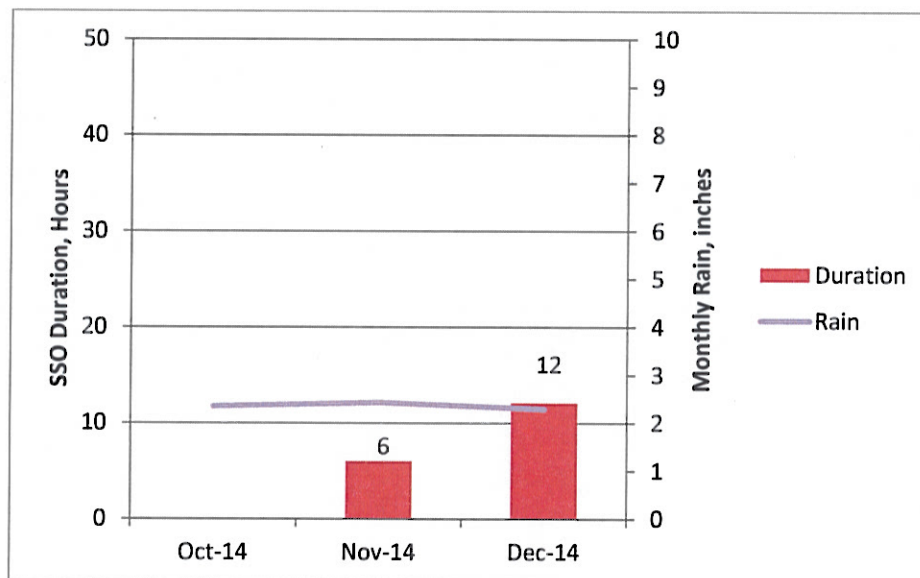


Figure 4: Collection System SSO Duration



## 2.2 West Bank Interceptor SSOs

**Table 2** lists SSOs in the West Bank Interceptor (WBI) for the quarter. Only one SSO was reported. This SSO was caused by the failure of a bypass pump being operated by the contractor on the West Bank Interceptor Rehabilitation Project.

**Figure 5** shows WBI SSO events by month by reported cause, as listed above, as well as monthly rainfall.

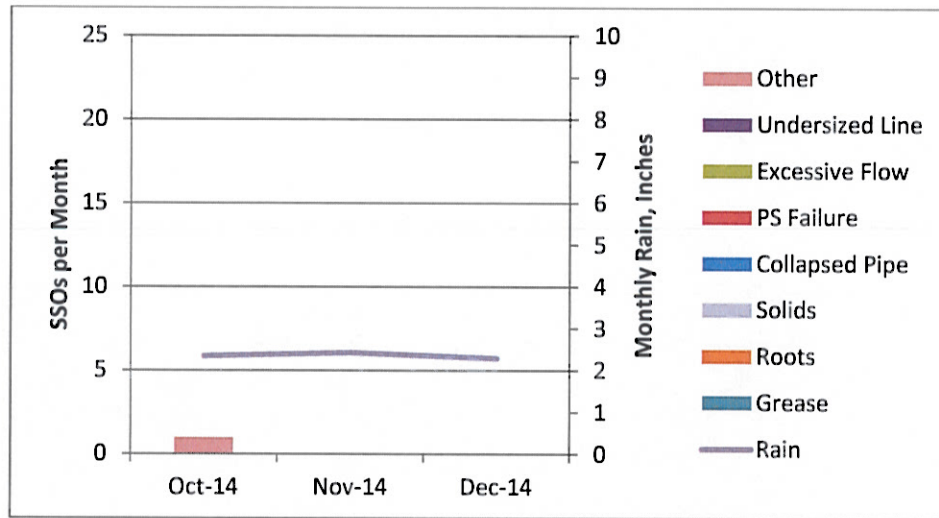
**Figure 6** shows percentage of SSOs by cause for the quarter. **Figure 7** logarithmically plots total volume of SSOs for each month, along with monthly rainfall. **Figure 8** shows total duration SSOs for each month.



**Table 2**  
**City of Jackson, Mississippi**  
**Quarterly Report No. 6 - October 2014 through December 2014**  
**West Bank Interceptor SSOs**

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
10/31/2014	3:00:00 AM	2145 HIGHLAND DR	Manhole	4.50	187,000	Pearl	Bypass Pump failure.

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	0.0	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	0.0	Total

Figure 6: Percentage of WBI SSOs by Cause

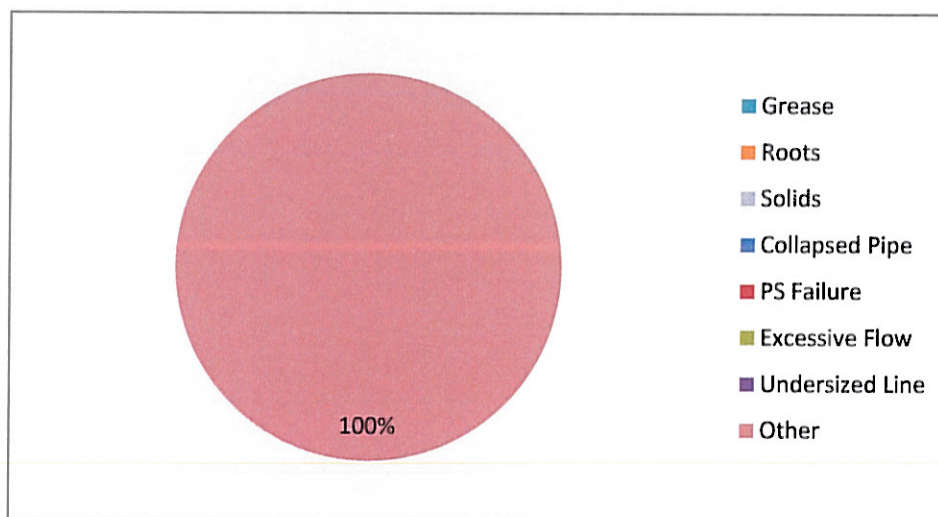


Figure 7: West Bank Interceptor SSO Volume

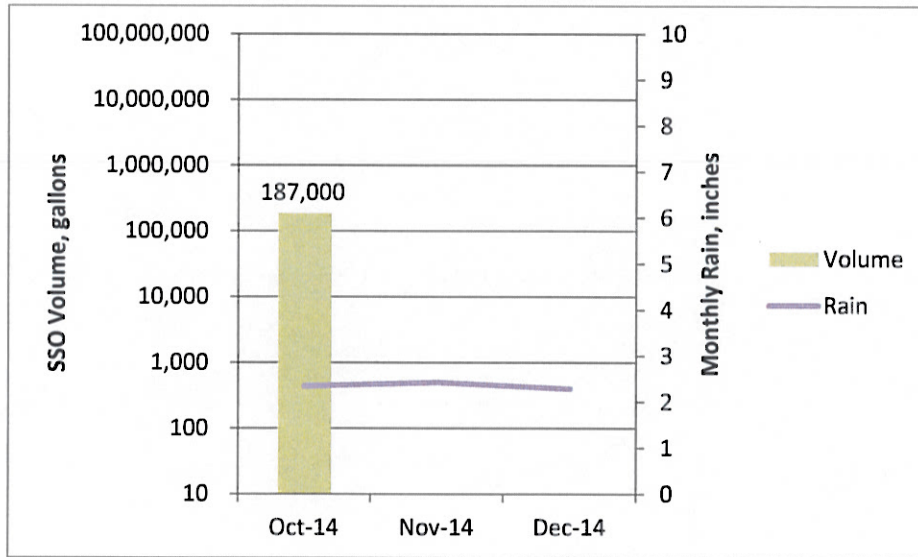
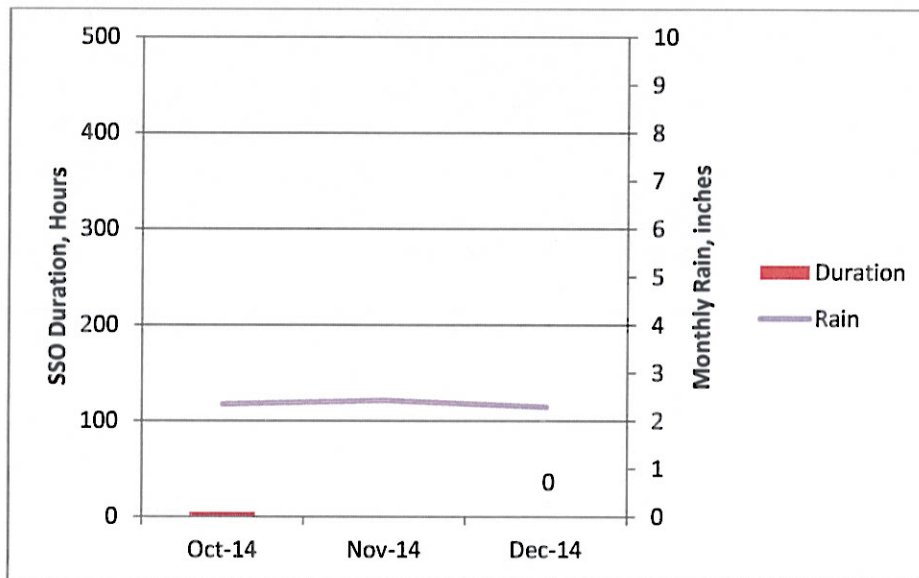


Figure 8: West Bank Interceptor SSO Duration



## 2.3 Pump Station SSOs

No SSOs were recorded in the City's pump stations for the quarter October 2014-December 2014.

## 2.4 Prohibited Bypasses

Only one prohibited bypass was reported in the quarter October 2014-December 2014.

**Table 3** lists prohibited bypasses at the wastewater treatment plants for the quarter. 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 a prohibited bypass.

**Figure 9** shows prohibited bypass events by month by reported cause, as listed above, as well as monthly rainfall. **Figure 10** shows annual percentage by reported cause.

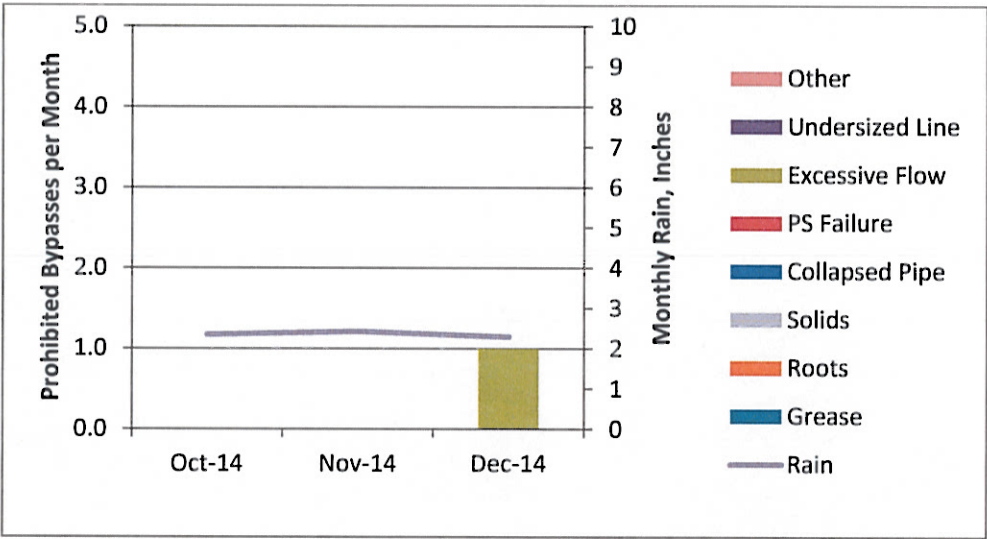
**Figure 11** shows total volume of prohibited bypasses for each month plotted logarithmically, along with monthly rainfall. **Figure 12** shows total duration for the month. Note that duration of prohibited bypasses is plotted in days.



Table 3  
City of Jackson, Mississippi  
Quarterly No.7 - October 2014 through December 2014  
Prohibited Bypasses

Date Began	Time Began	Location	Source	Estimated Duration, Days	Estimated Volume, Million Gallons	Receiving Water	Reported Cause
10/31/14	3:00 AM	Savanna St WWTP	WWTP	1	28.89	Pearl	Excessive Flow.

Figure 9: Prohibited Bypasses by Cause



0.0	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
0.0	0.0	1.0	Total

Figure 10: Percentage of Prohibited Bypasses by Cause

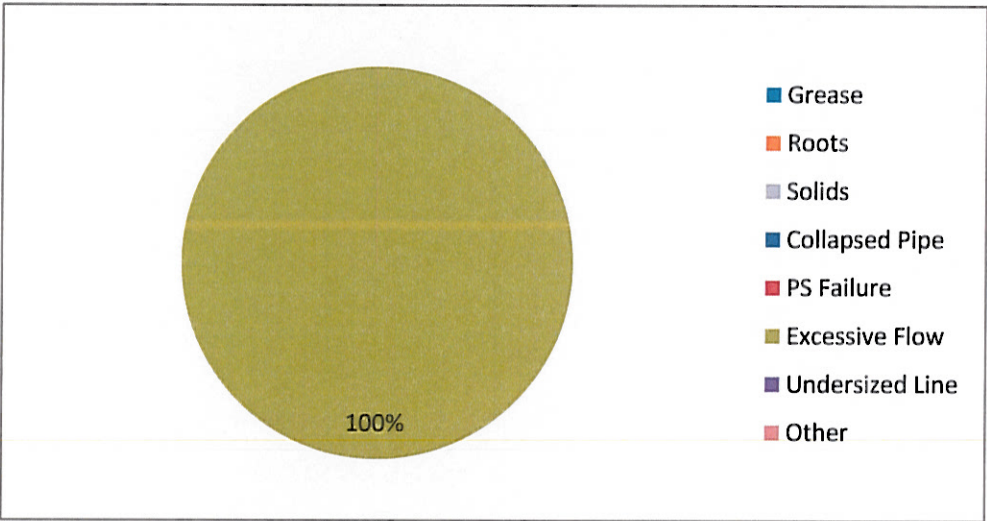


Figure 11: Prohibited Bypass Volume

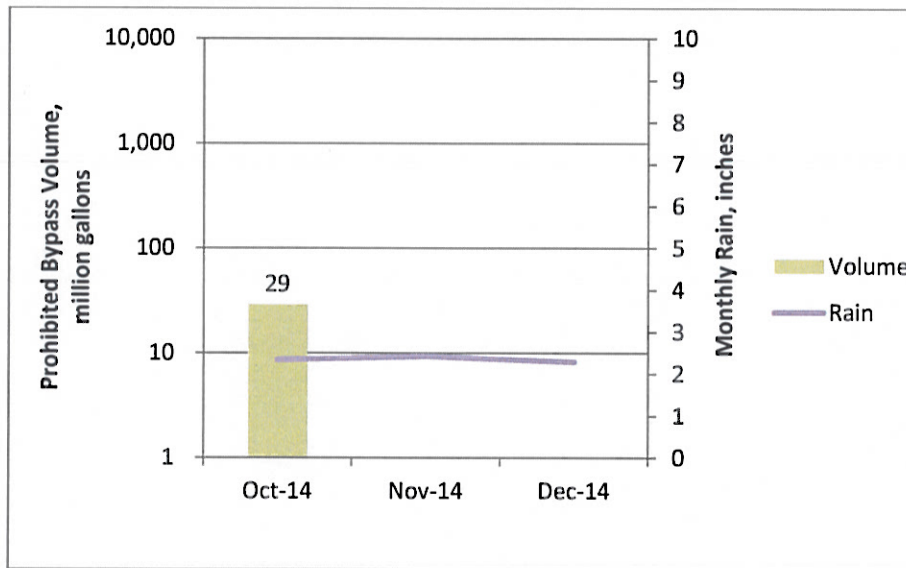
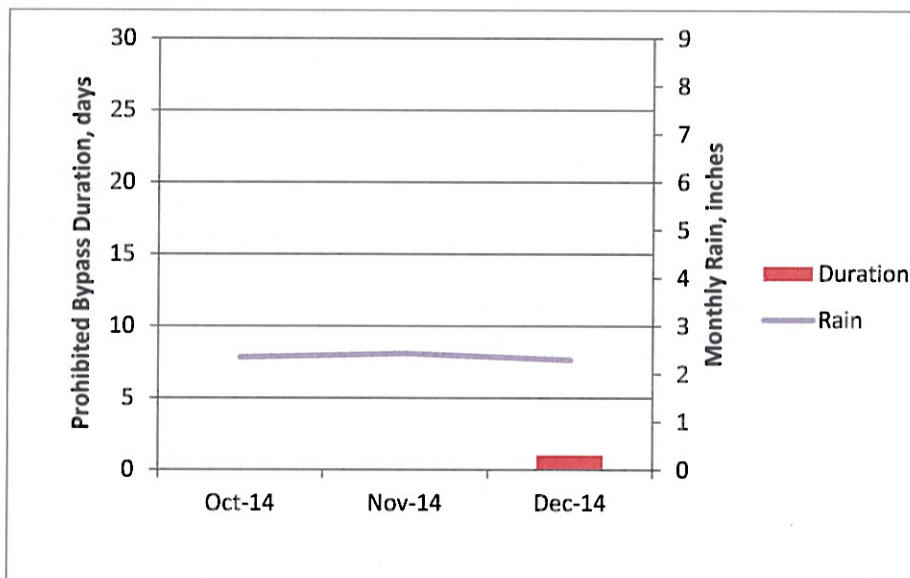


Figure 12: Prohibited Bypass Duration



## **3.0 Training Coordinator**

### **3.1 Progress Update**

After reviewing the qualifications and duties for the Training Coordinator position, the Department of Public Works has determined that the qualifications and duties of a training coordinator should be combined with a department human resources position to provide human resources support and department-wide training, in addition to the training coordination required by the City's approved Training Plan. The Department of Public Works has identified a potential candidate for this position.

### **3.2 Next steps**

- The Department of Public Works will confirm the salary range and all responsibilities for this position.
- The Department of Public Works will move forward with the City hiring process to fill the position.