



QUARTERLY REPORT NO. 3

OCTOBER 2013 THROUGH DECEMBER 2013

Department of Public Works
Wastewater Infrastructure Redevelopment Program



JANUARY 30, 2014

Office of the Mayor
Chokwe Lumumba, Mayor



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Jackson, Mississippi 39205-0017
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January 29, 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
3rd Quarterly Report, October – December 2013

Dear Gentlemen:

Attached, please find the Quarterly Report for the period of October through December 2013. The report was developed and submitted by the City in accordance with the EPA Consent Decree dated March 1, 2013. In the May 31, 2013 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,

Chokwe Lumumba, Mayor
City of Jackson Mississippi

Cc: Les Herrington, P.E., Mississippi Department of Environmental Quality
Gail Lowery, City Attorney, City of Jackson
Willie Bell, Interim Public Works Director, City of Jackson
Mary D. Carter, Public Works Deputy Director, City of Jackson
Public Depository, Eudora Welty Public Library

City of Jackson
Wastewater Infrastructure Redevelopment
Program

Quarterly Report No. 3
October 2013 through December 2013

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. 3

October 2013 through December 2013

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.



Chokwe Lumumba

Chokwe Lumumba
Mayor

1-29-14

Date

Willie C. Bell, Jr. *1/27/14*

Willie C. Bell, Jr., Interim Director
Department of Public Works

1/27/14

Date

Quarterly Report No. 2

October 2013 through December 2013

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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

2.1 Collection System SSOs

Table 1 lists SSOs in the collection system for the quarter.

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

Monthly rainfall is also plotted.

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 total volume of SSOs for each month, along with monthly rainfall.

Table 1
City of Jackson, Mississippi
Quarterly Report No. 3 -October 2013 through December 2013
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
10/6/2013	7:00 AM	E I 55 FRONTAGE	Manhole	1.00	25	Eubanks	Strainer on the by pass pump stopped up..
10/9/2013	11:05 AM	MANSHIP ST NORTH ST	Ground Surface (defective pipe underground)	0.42	20	Belhaven	Collapsed Pipe.
10/9/2013	1:46 PM	417 WINDSOR DR	Manhole	1.78	1,500	Lynch	Grease.
10/9/2013	3:45 PM	2402 POWERS AVE	Other	1.25	150	Town	undetermined.
10/10/2013	11:15 AM	173 ELLIS AVE	Cleanout	0.92	9	Lynch	Grease. Roots.
10/11/2013	10:15 AM	5123 BROOKHOLLOW DR	Manhole	2.00	300	Trahan	Grease.
10/11/2013	1:00 PM	428 ARCHER AVE	Cleanout	0.67	15	Cany	Collapsed Pipe.
10/11/2013	3:50 PM	MEADOWBROOK ROAD OLD CANTON RD	Manhole	1.67	4,800	Eubanks	Grease.
10/12/2013	4:03 PM	434 WOODY DR	Manhole	1.28	50	Cany	Grease.
10/15/2013	1:30 PM	2024 BOLING ST	Cleanout	1.00	20	Bogue Chitto	Grease.
10/16/2013	10:30 AM	PETER ST WILLIAMSON AVE	Manhole	1.50	1,500	Town	Grease.
10/18/2013	9:40 AM	5133 GINGER DR	Cleanout	1.08	5	Lynch	Grease.
10/21/2013	2:10 PM	E I 55 FRONTAGE CULLEY DR	Manhole	1.42	4,480	Hanging Moss	Grease.
10/23/2013	8:45 AM	HEMINGWAY CIR MELOAN DR	Manhole	1.00	2,880	Lynch	Grease.
10/23/2013	1:50 PM	1253 WOOD VILLAGE DR	Manhole	1.67	1,180	Lynch	Grease.
10/23/2013	4:25 PM	962 MADISON ST	Ground Surface (defective pipe underground)	2.58	15	Belhaven	Solids.
10/24/2013	9:25 AM	5541 QUEEN ELIZABETH LANE	Manhole	1.17	1,380	Lynch	Grease.
10/27/2013	2:10 PM	302 LIVINGSTON ST	Other	0.58	80	Town	Grease.
10/28/2013	9:45 AM	2010 CHADWICK DR	Manhole	0.92	3,380	Cany	Grease.
10/28/2013	2:20 PM	3003 DOWNING ST E MITCHELL AVE	Manhole	0.33	1,320	Town	Grease.
10/28/2013	5:00 PM	5132 QUEEN ELEANOR LANE	Cleanout	0.83	500	Lynch	Grease. Solids.
10/29/2013	9:25 AM	FREEMONT ST BELVEDERE DR	Manhole	1.17	1,180	Hardy	Grease.
10/29/2013	11:20 AM	863 MONTEREY ST	Manhole	2.17	1,440	Three Mile	Grease.
10/31/2013	4:15 PM	2151 N MILL ST	Manhole	1.42	4,460	Town	Grease.
10/31/2013	6:10 PM	3638 CAVALIER DR	Manhole	0.58	5,540	Eubanks	Excessive Flow.
11/4/2013	8:45 AM	OAK FOREST DR	Manhole	2.50	4,360	Cany	Grease.
11/9/2013	9:50 AM	W CAPITOL ST PRINCETON ST	Manhole	1.02	1,380	Town	Grease.
11/11/2013	2:00 PM	KINDER DRIVE	Cleanout	2.50	60	Purple	Grease. Roots.
11/13/2013	9:15 AM	131 GLENSTONE CIR	Manhole	2.50	3,380	Cany	Grease. And paper towels and rags..
11/13/2013	11:50 AM	5917 QUEEN MARY LANE	Manhole	1.75	1,380	Lynch	Grease.
11/13/2013	1:54 PM	1220 E NORTHSIDE DR	Manhole	1.10	1,430	Eastover	Grease.
11/15/2013	9:15 AM	NORTHSIDE DR	Manhole	0.83	400	Eubanks	Grease.
11/15/2013	11:10 AM	716 PENNSYLVANIA AVE	Manhole	1.17	1,380	Eubanks	Grease.
11/20/2013	8:40 AM	GLENWAY DR	Manhole	3.33	5,120	Eubanks	Grease. Roots.
11/20/2013	9:50 AM	350 SPANISH TRAIL	Cleanout	2.00	1,180	Big Creek	Grease.
11/22/2013	11:15 AM	SMALLWOOD ST WOODY DR	Manhole	1.25	1,180	Cany	Grease.

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City of Jackson, Mississippi
Quarterly Report No. 3 -October 2013 through December 2013
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
11/22/2013	1:50 PM	408 S JEFFERSON ST	Manhole	0.33	5,500	Pearl River	Excessive Flow.
11/24/2013	9:35 AM	3856 NOBLE ST	Manhole	1.17	3,340	Lynch	Grease.
11/25/2013	9:30 AM	DORGAN ST		0.50	50	Hardy	Rain water.
11/26/2013	9:15 AM	408 S JEFFERSON ST	Manhole	0.75	5,580	Pearl River	Excessive Flow. Due to heavy rain.
11/27/2013	4:00 PM	RUTLEDGE AVE	Manhole	1.08	20	Town	Grease. Solids.
11/27/2013	5:50 PM	3228 MEDGAR EVERS BLVD	Manhole	2.58	200	Town	Grease. Solids.
11/29/2013	10:45 AM	5449 WILLIAM DR	Cleanout	2.25	1,000	Lynch	Grease.
12/1/2013	9:20 PM	1651 FOREST AVE	Cleanout	0.92	250	Eubanks	Pump Station Failure.
12/5/2013	6:00 PM	1439 TERRY ROAD	Manhole	0.92	50	Lynch	Grease.
12/17/2013	10:40 AM	646 CHELSEA DR	Manhole	0.92	2,230	Cany	Grease.
12/17/2013	12:45 PM	CAMBRIDGE LANE	Manhole	1.92	3,380	Trahan	Grease. Roots.
12/17/2013	4:30 PM	710 POPLAR BLVD	Manhole	2.00	25	Belhaven	Grease. Solids.
12/17/2013	7:40 PM	4301 PATANN ST	Manhole	0.92	100	Bogue Chitto	Grease. Solids.
12/19/2013	1:25 AM	124 GLENSTONE CIR	Manhole	13.25	3,380	Cany	Grease.
12/29/2013	4:30 PM	404 ROBINSON ROAD	Cleanout	1.00	25	Eubanks	Solids.

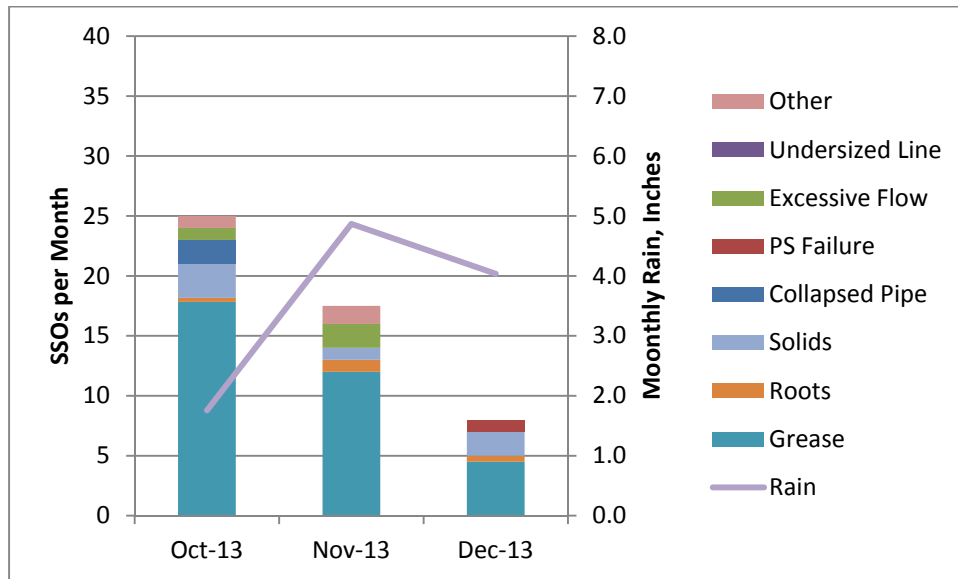


Figure 1: Collection System SSO Events by Cause

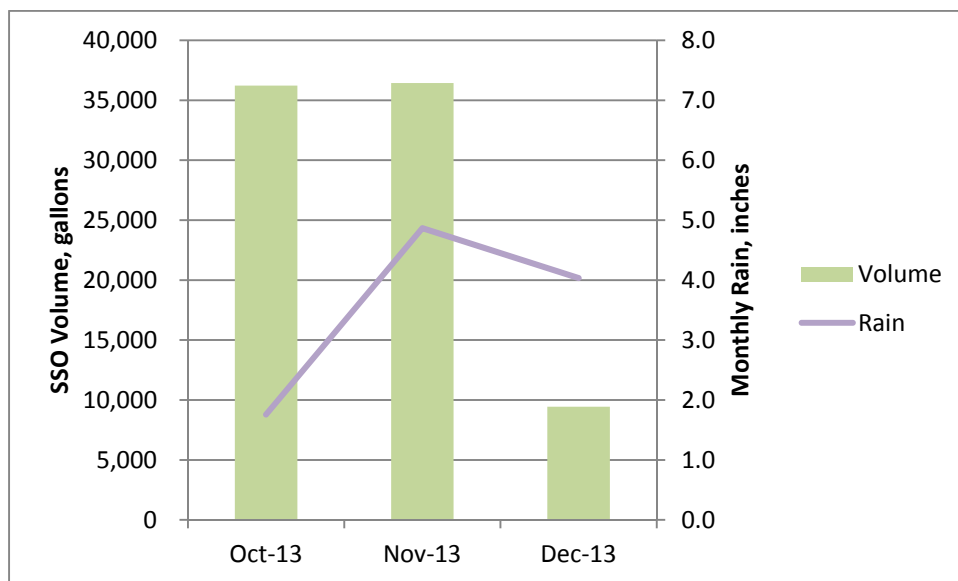


Figure 2: Collection System SSO Volumes

2.2 Pump Station SSOs

Table 2 lists pump station SSOs for the quarter. Note that there were no pump station SSOs in December.

Figure 3 shows pump station SSO events by month by cause, as listed above, as well as monthly rainfall. As above, multiple causes were assigned fractional value, adding up to a total of one cause for each event.

Figure 4 shows total volume of pump station SSOs for each month, along with monthly rainfall.

Table 2
City of Jackson, Mississippi
Quarterly Report No. 3 -October 2013 through December 2013
Pump Station SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Receiving Water	Reported Cause
10/31/2013	3:00 PM	1452 COUNTRY CLUB DR	Pump Station	5.00	20,000	Bogue Chitto	Pump Station Failure. Excessive Flow.
10/31/2013	5:00 PM	4210 CHURCH CIR	Manhole	1.50	60,000	Lynch	Excessive Flow.
11/22/2013	10:00 AM	4210 CHURCH CIR	Pump Station	2.00	8,000	Lynch	Excessive Flow.

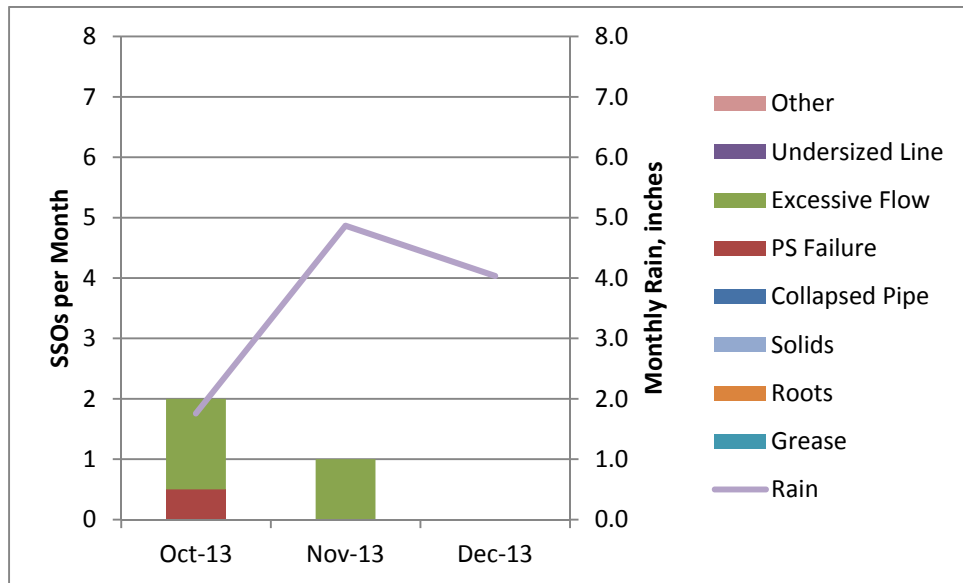


Figure 3: Pump Station SSO Events by Cause

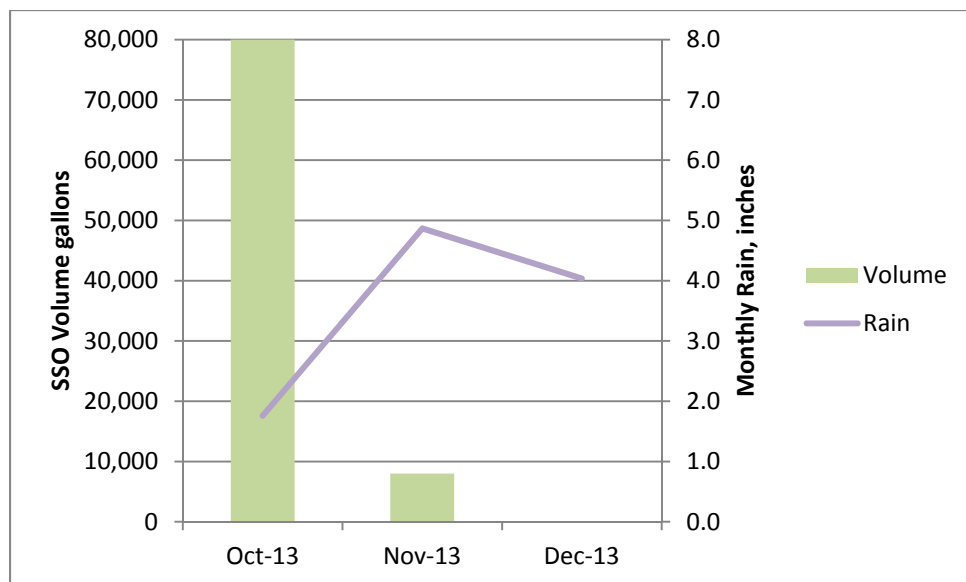


Figure 4: Pump Station SSO Volumes

2.3 Prohibited Bypasses

Table 3 lists prohibited bypasses at the wastewater treatment plants for the quarter. Only the Savanna Street plant had prohibited bypasses.

Figure 5 shows prohibited bypass events by month by cause, as listed above, as well as monthly rainfall.

Figure 6 shows total volume of prohibited bypasses for each month, along with monthly rainfall.

Table 3
City of Jackson, Mississippi
Quarterly Report No. 3 -October 2013 through December 2013
Prohibited Bypasses

Date Began	Time Began	Location	Source	Estimated Duration	Estimated Volume, Gallons	Receiving Water	Reported Cause
10/28/13		Savanna St WWTP	WWTP	9 days	71.54 million	Pearl River	Influent pump station failure
11/07/13		Savanna St WWTP	WWTP	4 days	23.84 million	Pearl River	Influent pump station failure
11/22/13		Savanna St WWTP	WWTP	8 days	290.85 million	Pearl River	Influent pump station failure
12/09/13	1:00 PM	Savanna St WWTP	WWTP	1 day	21.12 million	Pearl River	Heavy rainfall caused influent flows in excess of the mechanical pump's capacity and there was limited freeboard in the storm cells.
12/11/13		Savanna St WWTP	WWTP	2 days	11.94 million	Pearl River	Excess influent flow
12/14/13	1:00 PM	Savanna St WWTP	WWTP	1 day	7.53 million	Pearl River	Heavy rainfall caused a sudden surge in influent flows in excess of the mechanical pump's capacity and there was limited freeboard in the storm cells.
12/21/13		Savanna St WWTP	WWTP	3 days	56.24 million	Pearl River	Excess influent flow
12/28/13	9:00 PM	Savanna St WWTP	WWTP	4 days	65.27 million	Pearl River	Heavy rainfall caused influent flows in excess of the mechanical pump's capacity.

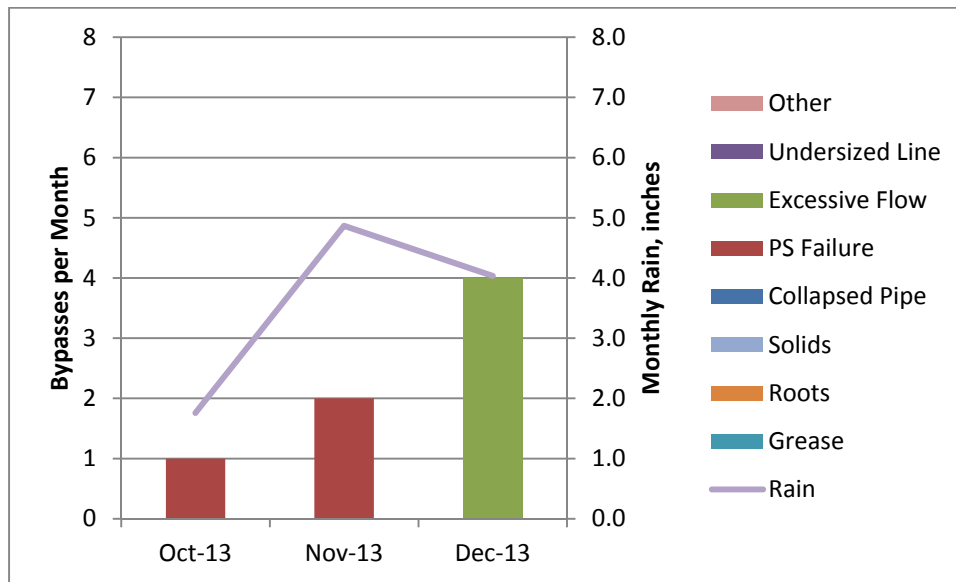


Figure 5: Prohibited Bypasses by Cause

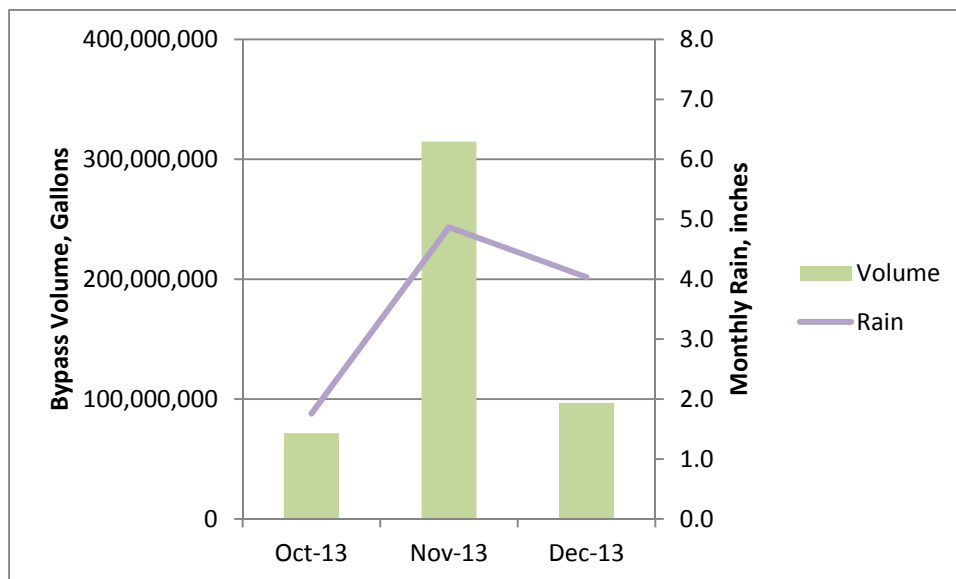


Figure 6: Prohibited Bypass Volumes