



WEI/AJA, LLC

October 30, 2020

Chief, Environmental Enforcement Section
Environment and Natural 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 and Industrial Enforcement
U.S. EPA Region 4
61 Forsyth Street, SW
Atlanta, GA 30303

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

Diane Schober
Office of Pollution Control
Environmental Compliance & Enforcement Div.
P.O. Box 2261
Jackson, MS 39225-2261

Re: City of Jackson, Mississippi, EPA Consent Decree
Quarterly Report No. 30

Dear Lady and Sirs:

On behalf of the City of Jackson, please find enclosed the Jackson Consent Decree Quarterly Report 30. Should you have any questions, please contact me.

Sincerely,

Jennifer Jorge, Ph.D.
Program Manager

Enclosure

cc: Honorable Chokwe Antar Lumumba, Mayor
Timothy C. Howard, City Attorney
Charles Williams, P.E., Ph.D., Director, Public Works Department
Terry Williamson, Legal Counsel
Public Depository, Eudora Welty Public Library



The City of
JACKSON

**QUARTERLY
REPORT NO. 30**

JULY 2020 THROUGH SEPTEMBER 2020

Department of Public Works
Consent Decree Program

City of Jackson
Wastewater Infrastructure Redevelopment
Program

Quarterly Report No. 30
July 2020 through September 2020

October 30, 2020

Prepared for:

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

Prepared by:

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

City of Jackson, Mississippi

Quarterly Report No. 30

July 2020 through September 2020

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 Antar Lumumba
Mayor

10/30/2020

Date

Charles E. Williams, Jr., PhD, P.E., Director/City Engineer
Department of Public Works

10/29/2020

Date

Quarterly Report No. 30
July 2020 through September 2020

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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.

One of the ongoing requirements of the EPA Consent Decree is to submit periodic reports to demonstrate continuing compliance. The specific reporting requirements can be found in Section IX ¶ 57 of the Consent Decree. A copy of the Consent Decree, as well as previous reports, can be found on the City of Jackson website, <http://www.jacksonms.gov/>, under the Public Works Department "Waste Water Consent Decree" link in the Document Library. The website can also be accessed directly at <http://www.cojcd.org/>.

1.2 Authority to Promulgate

WEI/AJA, LLC was retained to assist the City in addressing the requirements of the Consent Decree under a Program Management contract. 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.

The listing and graphical summaries of the SSOs and prohibited bypasses for July 2020 – September 2020 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, pump stations, and West Bank Interceptor. Prohibited bypasses at the Savanna Street Wastewater Treatment Facility (SSWWTF), in periods when they occur, are listed in Section 2.4 of this report.

2.1 Collection System SSOs

Table 1 lists SSOs in the collection system for July through September 2020. Each day of a multiple day event is considered as a separate SSO, in accordance with the Consent Decree.

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

Grease Roots Solids Collapsed Pipe PS Failure Excessive Flow Other

Some SSO events had multiple causes. In these instances, each cause was assigned a fractional value, adding up to one (1) 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.

Figure 4 shows total duration of SSOs for each month.

There are twelve (12) events which occurred in previous reporting periods included in this report. The durations, volumes and causes of these events are included in the July statistics.

Seven (7) events occurred at seven (7) locations on private property reported this period. The cause of these events was determined to be a problem on the private lateral and the crews notified resident.

Eighteen (18) events occurred at cleanouts on private property this period. All events were caused by problems in the City's sewer system. There were six (6) building backups reported this period. Five (5) of these were caused by asphalt blocking the sewer in a manhole. The remaining building backup was reported as being caused by a bypass pump failure.

There were sixteen (16) events for which the duration was not determined because the cause, such as collapsed pipe, has not been resolved or no SSO was occurring but there was evidence of a previous overflow. Once the cause has been resolved, the total durations can be determined and reported. Volumes reported for these events are determined from periodic follow up inspections until the cause has been resolved.

There were six (6) reports for which the volume was not reported.

There were eight (8) events that the causes were reported as "Other" in the graph on Figure 1. Three (3) events were caused by problems at a bypass pump, one (1) event was caused by vandalism of a bypass pump, one (1) event was partially caused by a piece of 4" PVC pipe in the

main and one (1) event was caused by a fallen tree on a service lateral. There were two (2) events the cause was unknown (service lateral) or undetermined (public sewer).

Proper reporting will be covered in future training sessions as restrictions due to COVID 19 are relaxed.

Table 1
 City of Jackson, Mississippi
 Quarterly Report No. 30 – July 2020 through September 2020
 Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
12/18/2019	7:57 AM	691 A Tifton Dr	Manhole	Ongoing	77,400	Yes	Cany		Grease / Solids
5/29/2020	10:58 PM	410 W Ash St	Manhole	60.37	Not Reported	No	NA	0.03	Grease / Solids
6/1/2020	8:57 AM	E Ridgeway St / N West St	Ground Surface (defective pipe underground)	918.05	7,800	Yes	Town	0.00	Collapsed Pipe
6/3/2020	9:49 AM	749 Nakoma Dr	Cleanout	Ongoing	9,000	No	NA	0.05	Roots
6/5/2020	4:55 PM	Raymond Rd / Scanlon Dr	Manhole	809.33	17,500	Yes	Hardy	0.00	Collapsed Pipe
6/13/2020	2:36 PM	130 Taylor St	Cleanout	747.07	12,800	Yes	Town	0.00	Grease / Solids
6/19/2020	10:16 AM	Will O Wisp Way / Mockingbird Ln	Manhole	314.73	7,000	Yes	Three Mile	0.00	Grease / Solids / Undersized Line
6/20/2020	10:54 AM	611 Chelsea Dr	Private Lateral	Not Reported	1,260	No	NA	0.00	Collapsed Pipe / Roots
6/22/2020	9:34 AM	4256 Richmond Cir	Manhole	582.43	12,500	Yes	Town	0.85	Collapsed Pipe
6/23/2020	10:49 AM	5255 Forest Hill Road	Manhole	Ongoing	Ongoing	Yes	Trahan	0.08	Grease / Solids
6/25/2020	12:11 PM	533 Glendale St	Lateral	Ongoing	Not Reported	Yes	Town	1.11	Collapsed Pipe
6/28/2020	7:49 AM	181 Treehaven Dr	Cleanout	317.18	7,000	Yes	Hardy	0.00	Grease / Roots / Solids
7/1/2020	1:25 PM	510 Briarcliff Cir	Ground Surface (defective pipe underground)	Not Reported	92,000	Yes	Cany	0.00	Grease / Roots / Solids
7/4/2020	8:45 AM	977 Ellis Ave	Building Backup	6.77	10	No	NA	0.14	Grease / Asphalt in Manhole
7/4/2020	10:15 AM	2615 Robinson Road	Building Backup	0.92	5	No	NA	0.14	Grease / Asphalt in Manhole
7/4/2020	8:46 AM	2566 Robinson Road	Building Backup	6.57	Not Reported	No	NA	0.14	Grease / Asphalt in Manhole
7/4/2020	8:46 AM	2560 Robinson Road	Building Backup	6.57	Not Reported	No	NA	0.14	Grease / Asphalt in Manhole

Table 1 cont.
 City of Jackson, Mississippi
 Quarterly Report No. 30 – July 2020 through September 2020
 Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
7/4/2020	8:46 AM	2566 Robinson Road	Building Backup	6.57	Not Reported	No	NA	0.14	Grease / Asphalt in Manhole
7/7/2020	10:53 AM	4612 Belmede Pl	Ground Surface (defective pipe underground)	24.12	200	Yes	Eubanks	0.03	Collapsed Pipe
7/8/2020	9:00 AM	202 E Ridgeway St	Manhole	Ongoing	Ongoing	Yes	Town	0.52	Collapsed Pipe
7/8/2020	10:30 AM	Raymond Rd / Scanlon Dr	Ground Surface (defective pipe underground)	Ongoing	240,000	No	NA	0.75	Collapsed Pipe
7/9/2020	4:53 PM	5745 Gladewood Dr	Cleanout	0.78	300	Yes	White Oak	0.00	Bypass Pump Failure
7/9/2020	4:18 PM	Warwick Dr / Ferncliff Dr	Manhole	1.02	200	Yes	White Oak	0.00	Bypass Pump Failure
7/9/2020	Not Reported	5725 Warwick Dr	Building Backup	Not Reported	Not Reported	No	NA	0.00	Bypass Pump Failure
7/14/2020	9:45 AM	681 Heather Lane	Cleanout	2.33	100	Yes	Eubanks	0.00	Grease / Roots / Solids
7/15/2020	10:47 AM	5735 Gladewood Dr	Cleanout	4.35	175	Yes	White Oak	0.00	Grease
7/15/2020	12:46 PM	330 N Mart Plz	Manhole	25.23	300	Yes	Eubanks	0.00	Collapsed Pipe
7/15/2020	2:59 PM	133 Prentiss St	Private Lateral	Ongoing	2,550	Yes	Town	0.00	Collapsed Pipe / Grease / Solids
7/15/2020	11:35 AM	110 S Green Avenue	Cleanout	72.75	800	Yes	Town	0.00	Grease / Solids
7/15/2020	1:01 PM	Warwick Dr / Ferncliff Dr	Manhole	1.50	100	No	NA	0.00	Grease
7/17/2020	8:01 AM	108 Elcrest St	Manhole	26.65	200	Yes	Lynch	0.48	Collapsed Pipe
7/17/2020	10:28 AM	4457 Wedgewood St	Manhole	458.03	1,600	Yes	Hanging Moss	0.37	Collapsed Pipe
7/20/2020	11:00 AM	448 Queen Theresa Ln	Cleanout	Ongoing	600	No	NA	0.00	Collapsed Pipe / Grease / Solids
7/20/2020	8:58 AM	350 W Northside Dr	Private Lateral	Not Reported-Private	1,200	No	NA	0.00	Grease / Solids

Table 1 cont.
City of Jackson, Mississippi
Quarterly Report No. 30 – July 2020 through September 2020
Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
7/21/2020	11:15 AM	2068 Monaco St	Private Lateral	Ongoing	550	No	NA	0.00	Unknown
7/21/2020	5:00 PM	391 Spanish Ct	Manhole	Ongoing	1,100	No	NA	0.00	Grease / Solids
7/23/2020	4:04 PM	202 E Ridgeway St	Manhole	371.00	250,000	Yes	Town	0.00	Solids
7/24/2020	1:57 PM	111 Joanna Ln	Ground Surface (defective pipe underground)	Ongoing	350	No	NA	0.00	Unknown
7/28/2020	4:20 PM	N Mill St / Whitfield St	Manhole	2.27	200	Yes	Town	0.00	Vandalism. Battery stolen from pump
7/29/2020	3:21 PM	314 Queen Margaret Lane	Private Lateral	0.00	76	No	NA	0.00	Fallen Tree
8/4/2020	Not Reported	5255 Forest Hill Road	Manhole	1,011.93	21,500	Yes	Trahan	0.08	Grease / Solids
8/6/2020	5:02 PM	534 Ellis Ave	Manhole	17.63	1,000	Yes	Lynch	0.00	Grease / PVC pipe in main
8/7/2020	1:45 PM	1204 N Jefferson St	Manhole	2.00	100	Yes	Belhaven	0.00	Grease / Solids
8/8/2020	11:15 AM	Gunda St	Manhole	Ongoing	9,600	Yes	Three Mile	0.00	Grease / Solids
8/10/2020	2:34 PM	629 Fondren Pl	Manhole	Ongoing	2,200	Yes	Town	0.00	Grease
8/16/2020	7:34 AM	4816 Sunnybrook Dr	Abandoned Lateral	1,087.60	23,000	Yes	Lynch	0.63	Grease / Solids
8/17/2020	12:20 PM	4457 Wedgewood St	Manhole	49.67	5,600	Yes	Hanging Moss	0.37	Collapsed Pipe
8/21/2020	4:12 PM	629 Fondren Pl	Manhole	0.38	80	No	NA	0.61	Grease
8/21/2020	3:55 PM	607 Fondren Pl	Manhole	1.02	150	Yes	Town	0.61	Grease / Solids
8/26/2020	12:33 PM	4369 Welota Dr	Manhole	28.95	30,000	No	NA	0.24	Roots
9/1/2020	1:53 PM	North St / Poplar Blvd	Manhole	0.40	125	No	NA	0.00	Grease

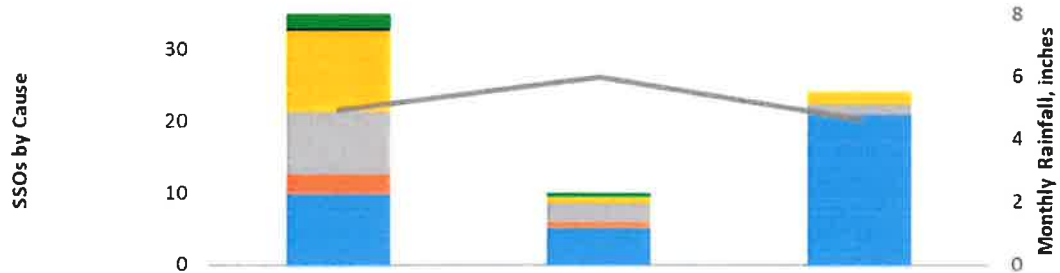
Table 1 cont.
 City of Jackson, Mississippi
 Quarterly Report No. 30 – July 2020 through September 2020
 Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
9/8/2020	1:08 PM	441 Fielding Ave	Cleanout	1.53	20	No	NA	0.00	Grease
9/8/2020	2:48 PM	2909 Greenview Dr	Cleanout	0.70	30	No	NA	0.00	Grease
9/8/2020	2:48 PM	2913 Greenview Dr	Cleanout	0.70	30	No	NA	0.00	Grease
9/9/2020	9:33 AM	179 James St	Cleanout	1.00	20	No	NA	0.00	Grease
9/9/2020	11:03 AM	175 Riverpark Dr	Cleanout	0.77	20	No	NA	0.00	Grease
9/11/2020	10:05 AM	1309 Canterbury Ln	Cleanout	1.33	20	No	NA	0.33	Grease
9/11/2020	11:37 AM	3542 Valley Dr	Manhole	1.10	20	No	NA	0.33	Grease
9/13/2020	12:08 PM	1310 Rockdale Dr	Private Lateral	1.03	20	No	NA	0.00	Grease
9/16/2020	10:32 AM	1710 Casteel St	Ground Surface (defective pipe underground)	1.38	300	Yes	Lynch	0.00	Grease
9/16/2020	12:04 PM	Raymond Rd / Scanlon Dr	Manhole	Ongoing	300	Yes	Hardy	0.00	Grease
9/17/2020	9:26 AM	313 Catherine Ln	Constructed Bypass	1.60	20	No	NA	0.00	Grease
9/17/2020	12:15 PM	1519 Westhaven Blvd	Constructed Bypass	1.42	20	No	NA	0.00	Grease
9/21/2020	2:58 PM	179 James St	Cleanout	1.45	60	No	NA	0.00	Grease
9/21/2020	11:08 AM	414-419 Marcus L Butler Dr	Manhole	Ongoing	1,200	No	NA	0.00	Collapsed Pipe
9/21/2020	1:12 PM	1504 St Charles St	Private Lateral	1.55	60	No	NA	0.00	Grease
9/22/2020	1:56 PM	220 Gaylyn Dr	Cleanout	1.38	20	No	NA	0.00	Grease
9/22/2020	3:39 PM	1034 Meadow Heights Dr	Cleanout	0.68	10,000	No	NA	0.00	Grease

Table 1 cont.
 City of Jackson, Mississippi
 Quarterly Report No. 30 – July 2020 through September 2020
 Collection System SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waters of the State	Receiving Water	Rainfall, Inches	Reported Cause
9/22/2020	10:53 AM	423-502 Willaman St	Manhole	Ongoing	730	No	NA	0.00	Collapsed Pipe / Grease
9/23/2020	10:42 AM	1915 Catalina Dr	Ground Surface (defective pipe underground)	1.07	20	No	NA	1.66	Collapsed Pipe / Grease
9/23/2020	2:25 PM	844 Combs St	Manhole	0.83	200	No	NA	1.66	Grease
9/27/2020	2:12 PM	155 Parkhurst Dr	Cleanout	0.43	20	No	NA	0.01	Grease
9/28/2020	6:48 PM	N State St / E Ridgeway St	Manhole	15.03	160	Yes	Eubanks	0.02	Solids
9/28/2020	12:06 PM	West St / Wesley Ave	Ground Surface (defective pipe underground)	2.90	150	Yes	Town	0.02	Grease / Solids

Figure 1: Collection System SSOs by Cause



	Jul-20	Aug-20	Sep-20
Other	7.0	0.5	0.0
Excessive Flow	0.3	0	0
Collapsed Pipe	11.2	1	1.5
Solids	9.0	2.5	1.5
Roots	2.5	1	0
Grease	10.0	5	21
Rainfall	4.94	5.95	4.60

* July includes 12 reports from prior periods.

Figure 2: Percentage of Collection System SSOs by Cause

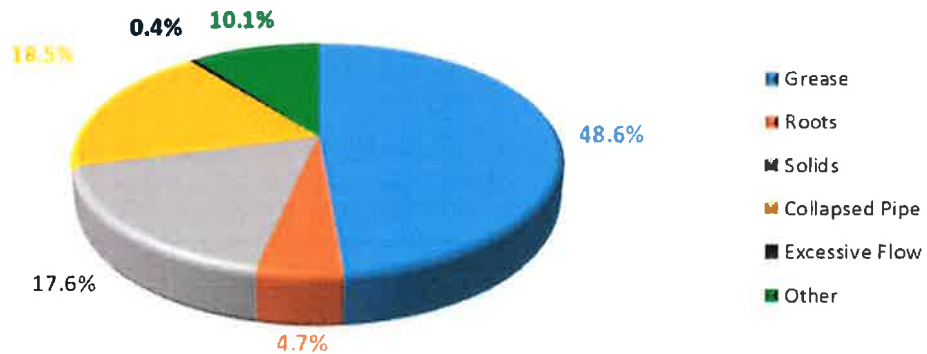
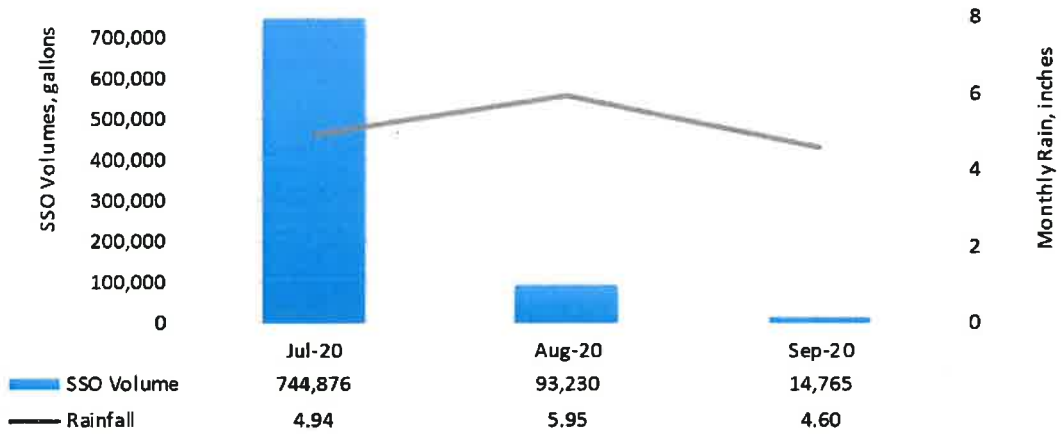
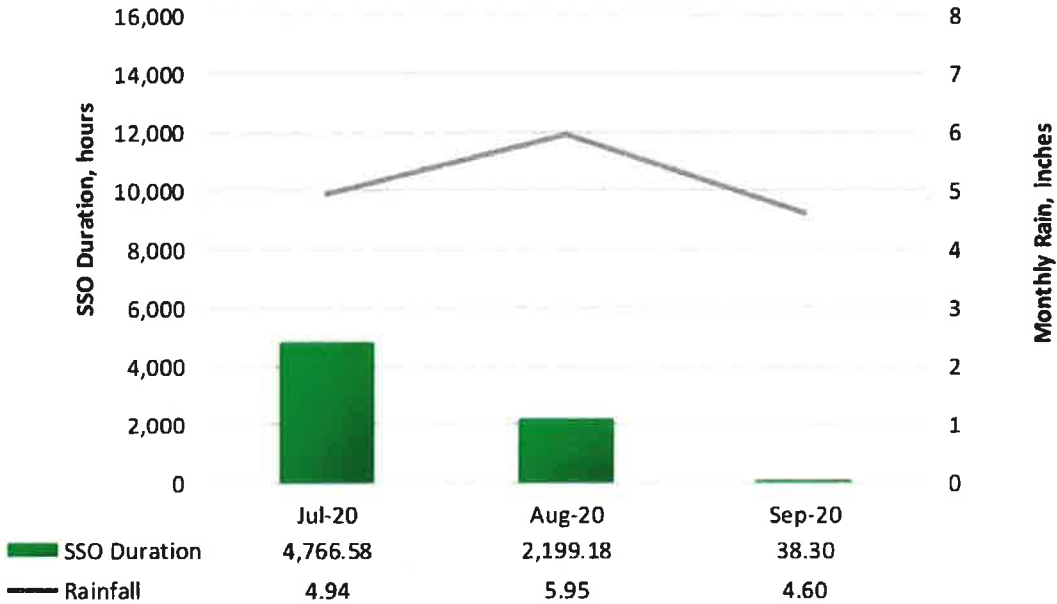


Figure 3: Collection System SSO Volume



* Volume is high due to 12 SSO reports from prior report period submitted in current period.

Figure 4: Collection System SSO Duration



* Duration is high due to 12 SSO reports from prior report period submitted in current period.

2.2 Pump Station SSOs

Table 2 lists pump station SSOs for July through September 2020.

Figures 5 through 7 are not used in this report because **no** SSOs were reported at pump stations this quarter.

Table 2
City of Jackson, Mississippi
Quarterly Report No. 30 – July 2020 through September 2020
Pump Station SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waterway	Receiving Water	Rainfall, Inches	Reported Cause
NO PUMP STATION SSOs REPORTED - July 2020									
NO PUMP STATION SSOs REPORTED - August 2020									
NO PUMP STATION SSOs REPORTED - September 2020									

2.3 West Bank Interceptor SSOs

West Bank Interceptor SSOs at the Jefferson Street location are generally caused when flow to the Savanna WWTP exceeds the facility's pumping capacity. This creates the need to restrict influent flow to the facility in order to protect the facility from flooding and catastrophic damage. Insufficient pumping capacity can be caused by equipment failures at the facility, excessive flow caused by rain events, high river levels or a combination of all the above.

Table 3 lists West Bank Interceptor SSOs for July through September 2020.

Figures 8 through 12 are not used in this report because **no** SSOs were reported on the West Bank Interceptor this quarter.

Table 3
City of Jackson, Mississippi
Quarterly Report No. 30 – July 2020 through September 2020
West Bank Interceptor SSOs

Date Began	Time Began	Location	Source	Estimated Duration, Hours	Estimated Volume, Gallons	Reached Waterway	Receiving Water	Rainfall, Inches	Reported Cause
NO WEST BANK INTERCEPTOR SSOs REPORTED - July 2020									
NO WEST BANK INTERCEPTOR SSOs REPORTED - August 2020									
NO WEST BANK INTERCEPTOR SSOs REPORTED - September 2020									

2.4 Prohibited Bypasses

This quarterly report does not include a graphical representation of the number of bypasses for each cause, since most bypasses at the Savanna Street WWTP are caused by excessive flow or specific causes explained below.

Table 4 lists prohibited bypasses at the wastewater treatment plant for the quarter. Unlike SSOs, each event is considered as one bypass from the day it begins to the day it ends. The event is reported in the month the bypass ends.

Figure 13 shows total volume of prohibited bypasses for each month plotted logarithmically, along with monthly rainfall.

Figure 14 shows volume and river stages.

Figures 15 and 16 plot total duration for the month, first compared to rainfall and then compared to river stages. River stages are shown as monthly average daily maximum river stage and as the monthly maximum day river stage. Note that duration of prohibited bypasses is plotted in days.

There was one (1) bypass event this reporting period. The event was caused by excessive flow and high Storm Cell levels due to rainfall. Following this event, Veolia, the City's contract WWTP operator, was able to reduce Storm Cell levels to a point that excessive flows caused by higher than normal rainfall events in August and September could be temporarily stored and then returned to the plant for treatment. The Jackson area (National Weather Service-Jackson) received 16.89" of rainfall, or 39.82% above normal during the reporting period with August and September being 87% and 33% above normal, respectively. For the calendar year, Jackson area has received 60.57" of rainfall, or 50.26% above normal.

The following major equipment was unavailable for service during the reporting period;

- Aeration Blower #3
- Clarifier #2
- Effluent Screw Pump #2
- Return Activated Sludge Pump #2 (September only)
- Return Activated Sludge Pump #6
- Raw Sewage Pump #4 Motor
- 54" Raw Sewage Isolation Valve
- West Rankin Force Main and Diversion valve

The current construction project and ongoing maintenance will address these issues.

All bypassed volume is chlorinated, de-chlorinated and required samples taken prior to blending with the mechanical plant effluent and subsequently discharged to the Pearl River.

Table 4
City of Jackson, Mississippi
Quarterly Report No. 30 – July 2020 through September 2020
Prohibited Bypasses

Date Began	Time Began	Location	Source	Estimated Duration, Days	Estimated Volume, Million Gallons	Reached Waterway	Receiving Water	Rainfall, Inches	Reported Cause
07/09/20	12:30 AM	3810 I 55 S	WWTP	5	121.76	Yes	Pearl	1.96	Excessive flow / High River level

The total duration and volume bypassed for each event is shown in the table above. The July 9, 2020 event ended on July 13, 2020.

*Total rainfall is shown for the duration of each event.

Figure 13: Monthly Prohibited Bypass Volume vs. Rainfall

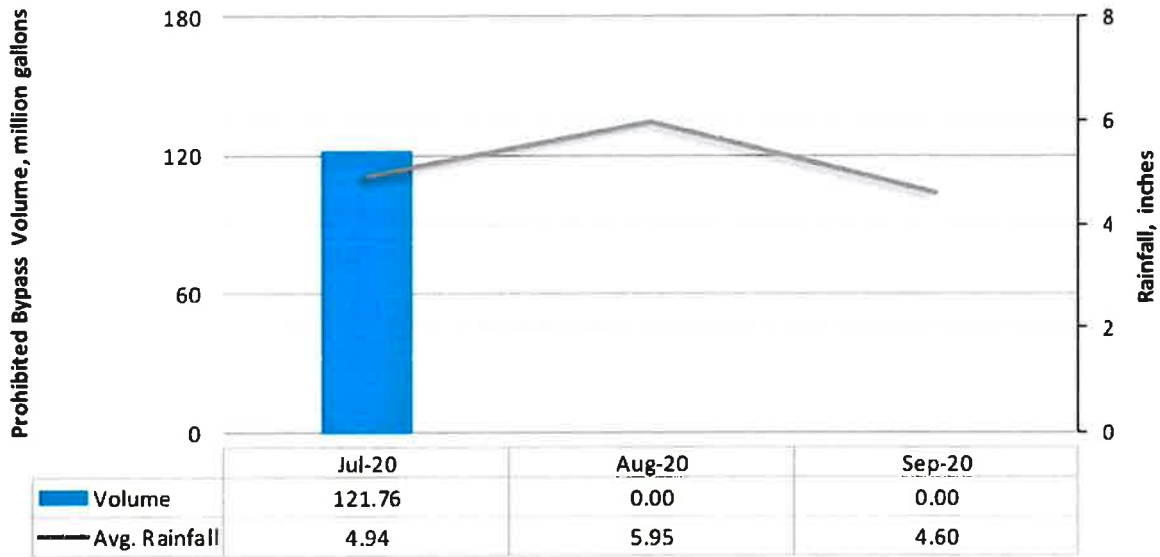


Figure 14: Monthly Prohibited Bypass Volume vs. River Stage

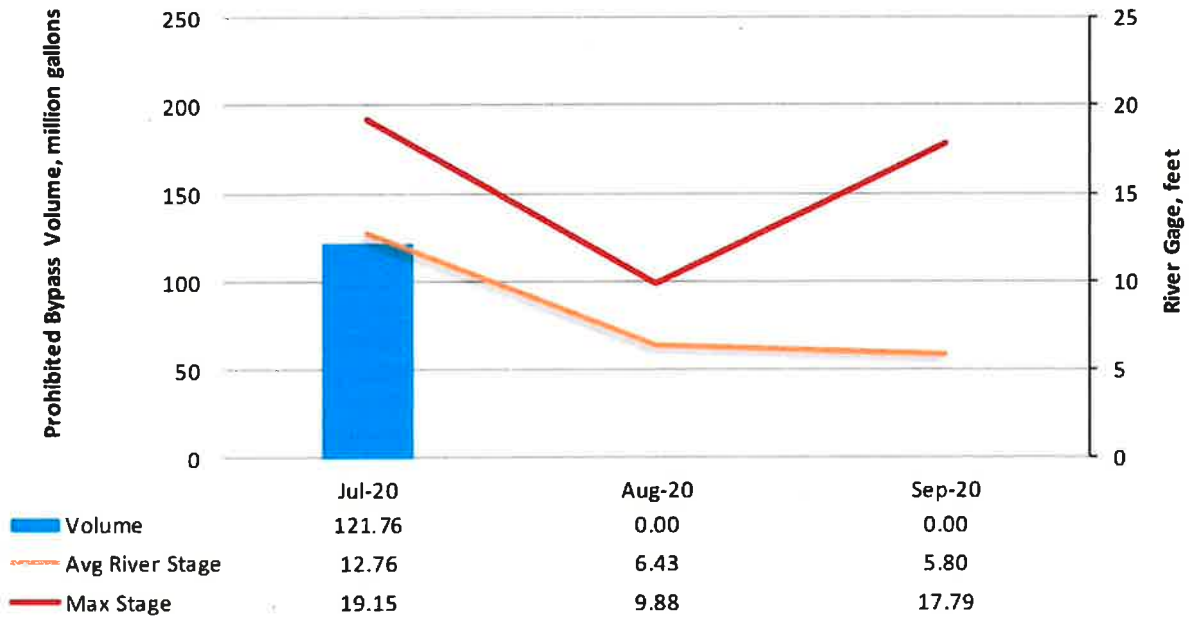


Figure 15: Monthly Prohibited Bypass Duration vs. Rainfall

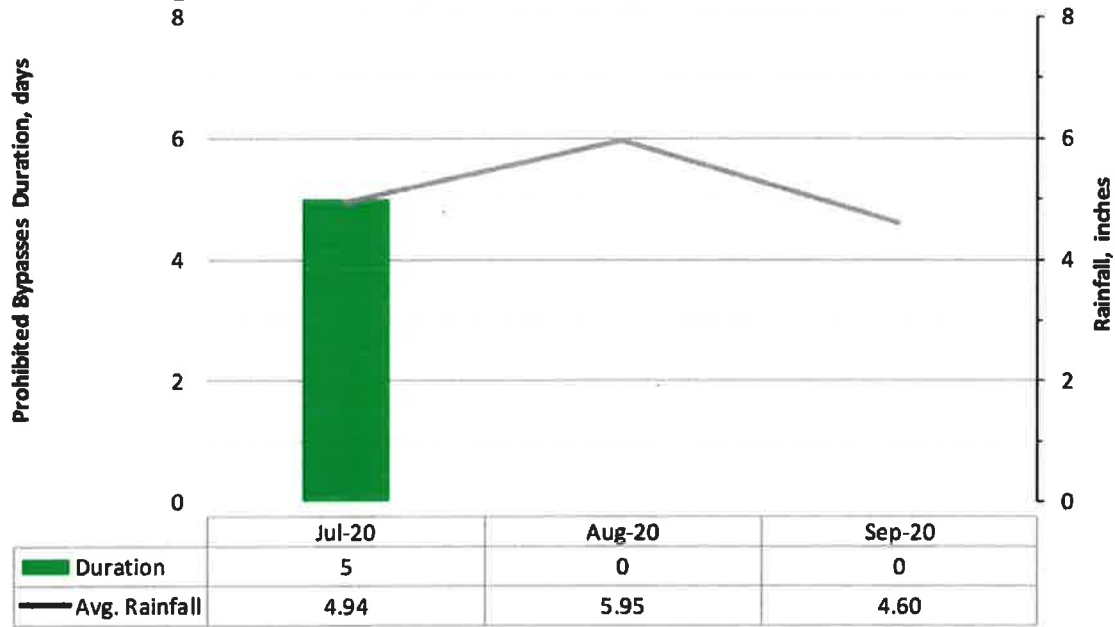


Figure 16: Monthly Prohibited Bypass Duration vs. River Stage

