

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

SECOND QUARTER, FY 2019

Prepared By:

D.C. Water and Sewer Authority
Department of Sewer Services
2nd & N Streets, SE
Washington, D.C. 20003



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**
Serving the Public • Protecting the Environment

**Monthly Operations Report For
*Combined Sewer System***

Month: April 2019

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Monthly Operations Report for Combined Sewer System
Month: April 2019

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (DC Water) operates a wastewater collection system comprised of separate and combined sewers. Separate storm and sanitary sewers serve two-thirds of the District. In the combined sewer system (CSS), there is a single sewer to convey storm water and sanitary wastes. The area served by combined sewers comprises about one-third of the District.

During dry weather, sanitary wastes collected in the CSS are conveyed to the DC Water’s advanced wastewater treatment plant at Blue Plains (BPAWWTP or the Blue Plains AWWTP). During periods of rainfall, the capacity of a combined sewer may be exceeded and the excess flow, which is a mixture of storm water and sanitary wastes, is discharged directly to the Anacostia River, Rock Creek or the Potomac River or their tributary waters. This report summarizes the operations of the combined sewer system for the month indicated.

2. OPERATION AND MAINTENANCE

2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPAWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to the tunnel system for temporary storage, and CSO outfalls which discharge to receiving waters. The following table summarizes inspections of CSO regulators in the collection system.

**Table 2-1
Regulator Structures**

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 ¹	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	04/08/19	*			
7	W Street and Railroad Ave, SE	005	04/08/19	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	04/08/19	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	04/08/19	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	04/29/19	*			
11	"O" Street Pumping Station	011(a)	04/26/19	*			
12	Storm Pump Discharge at Main Pumping Station	011	04/22/19	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	04/26/19	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	04/18/19	*			
15	South Capitol and E Streets	010	04/08/19	*			
15a	Half and L Streets, SE	010	04/18/19	*			
15b	South Capitol and I Streets	010	04/25/19	*			
15c	South Capitol and I Streets	010	04/25/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	04/08/19	*			
17	4 th and N Streets, SE, Both Extended	013	04/01/19	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	04/25/19	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	04/01/19	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	04/23/19	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	04/01/19	*			
19	9 th and M Streets, SE	015	04/10/19	*			
19a	9 th and M Streets, SE	015	04/10/19	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	04/10/19	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	04/10/19	*			
20	12 th and M Streets, SE	016	04/10/19	*			
20a	12 th and M Streets, SE	016	04/10/19	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	04/10/19	*			
21	14 th and M Streets, SE	017	04/10/19	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	04/10/19	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	04/26/19	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	04/26/19	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	04/26/19	*			
22d	Kentucky Ave and Potomac Street, SE	018	04/09/19	*			
22e	14 th Street and Kentucky Ave, SE	018	04/09/19	*			
23	Independence Ave, 21 st Street, SE, Extended	019	04/17/19	*			
24a	East Capitol St, west of RFK stadium	019	04/17/19	*			
28	21 st and Constitution Ave, NW	020	04/17/19	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	04/17/19	*			
30	17 th and D Streets, NW	020	04/17/19	*			
31	15 th Street and Pennsylvania Ave, NW	020	04/17/19	*			
33	10 th and F Streets, NW	020	04/17/19	*			
34	23 rd Street, north of Constitution Ave, NW	020	04/18/19	*			
34a	23 rd Street near C Street, NW	020	04/17/19	*			
35	Northeast of Roosevelt Bridge, NW	021	04/23/19	*			
36	27 th and I Streets, NW	022	04/17/19	*			
36a	New Hampshire Ave and Eye Street, NW	022	04/17/19	*			
36b	19 th and L Streets, NW	022, 034	04/08/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
36d	17 th and L Streets, NW	022, 034	04/08/19	*			
36g	18 th and M Streets, NW	022, 034	04/08/19	*			
36h	18 th and M Streets, NW	022, 034	04/08/19	*			
37	27 th and Eye Streets, NW	022	04/17/19	*			
38	29 th and K Streets, NW	024	04/01/19	*			
38a	30 th Street, south of K Street, NW	024	04/01/19	*			
39a	30 th and K Streets, NW	024	04/01/19	*			
39b	30 th and K Streets, NW	024	04/01/19	*			
41b	31 st and K Streets, NW	025	04/01/19	*			
41c	31 st and K Streets, NW	025	04/01/19	*			
42	Wisconsin Ave and K Street, NW	026	04/01/19	*			
43	Potomac and Water Streets, NW	027	04/01/19	*			
43a	Potomac and Water Streets, NW	027	04/01/19	*			
44	Water Street, west of Potomac St, NW	027	04/01/19	*			
45	36 th and M Streets, NW	028	04/08/19	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	04/08/19	*			
47	38 th Street and Reservoir Road, NW	029	04/08/19	*			
47a	37 th and T Streets, NW	029	04/08/19	*			
47b	37 th and T Streets, NW	029	04/08/19	*			
47c	38 th and W Streets, NW	029	04/08/19	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	04/22/19	*			
51	N Street Extended, west of 25 th Street, NW	033	04/22/19	*			
52	22 nd Street between M and N Streets, NW	034	04/23/19	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	04/23/19	*			
53	22 nd and M Streets, NW	022, 034	04/23/19	*			
53a	22 nd and M Streets, NW	022, 034	04/23/19	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	04/09/19	*			
53c	L and 22 nd Streets, NW	022	04/09/19	*			
54	23 rd and O Streets, NW	034	04/12/19	*			
55	22 nd Street, south of Q Street, NW	035	04/12/19	*			
55a	22 nd Street, south of Q Street, NW	035	04/12/19	*			
56	23 rd and Massachusetts Ave, NW	036	04/12/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
57	23 rd Street, south of Q Street, NW	036	04/12/19	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	04/08/19	*			
60	Connecticut Ave, east of Rock Creek, NW	039	04/08/19	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	04/08/19	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	04/10/19	*			
63	Harvard Street and Rock Creek Parkway, NW	042	04/10/19	*			
64	Adams Mill Road, south of Irving Street, NW	043	04/10/19	*			
65	Kenyon Street and Adams Mill Road, NW	044	04/10/19	*			
65a	Kenyon Street and Adams Mill Road, NW	044	04/10/19	*			
66	Adams Mill Road and Lamont Street, NW	045	04/10/19	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	04/10/19	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	04/10/19	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	04/10/19	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	04/10/19	*			
70i	5 th and Quackenbos Streets, NW	049	04/01/19	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	04/01/19	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	04/12/19	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	04/12/19	*			
73	O Street Extended and Rock Creek Parkway, NW	052	04/12/19	*			
74 ^l	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	04/09/19	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	04/09/19	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	04/09/19	*			
78 ^l	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ^l	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	04/12/19	*			
84a	26 th and P Streets, NW	060	04/12/19	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	04/24/19	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	04/24/19	*			
89	First and V St, NW (First St Tunnel)	019	04/24/19	*			
90	First and V St, NW (First St Tunnel)	019	04/24/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
91	First and V St, NW (First St Tunnel)	019	04/24/19	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	04/30/19	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	04/26/19	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	04/10/19	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	04/25/19	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	04/25/19	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	04/29/19	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	04/18/19	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	04/18/19	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	04/26/19	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	04/26/19	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	04/26/19	*			
104	Poplar Point PS Discharge Chamber	N/A	04/26/19	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	04/26/19	*			

Notes:

1. Noted structures no longer function as a combined sewer overflow regulator structure.

2.2 Outfalls, Tide Gates and CSO Signs

The following table summarizes inspections, maintenance and work performed on outfall structures, tide gates and CSO signs in the collection system.

**Table 2-2
Outfalls and Tide Gates**

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003 ¹	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling, Macdill and Arnold Ave SW	04/26/19	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	04/29/19	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	04/29/19	*		*		*		*		
009	O St. Sewage Pumping Station, SE	04/22/19	*		*		*		*		
010	O St. Sewage Pumping Station, SE	04/22/19	*			*			*		
011	Main Sewage Pumping Station, SE	04/22/19	*			*			*		
011(a)	Main Sewage Pumping Station, SE	04/22/19	*		*		*		*		
012	Main Sewage Pumping Station, SE	04/22/19	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	04/22/19	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	04/22/19	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	04/22/19	*			*			*		
016	12th and O Streets, SE	04/22/19	*		*		*		*		
017	M and Water Street, SE	04/22/19	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	04/22/19	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	04/30/19	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	04/30/19	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	04/11/19	*		*		*		*		
021	Rock Creek Parkway and C St., NW	04/11/19	*		*		*		*		
022	Rock Creek Parkway and G St., NW	04/11/19	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	04/11/19	*		*		*		*		
025	South of 31st and K Streets, NW	04/11/19	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	04/11/19	*		*		*		*		
027	33 rd and Water Sts., NW	04/11/19	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	04/11/19	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	04/11/19	*			*			*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	04/22/19	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	04/22/19	*		*		*		*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
034	Just west of St. Francis Jr. High and north of N St., NW	04/12/19	*			*			*		
035	P St. Bridge and Rock Creek Parkway	04/12/19	*			*			*		
036	22nd Street, South of Q Street NW.	04/11/19	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	04/08/19	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	04/08/19	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	04/08/19	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	04/11/19	*		*		*		*		
042	Harvard St. and Beach Dr NW.	04/11/19	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	04/11/19	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	04/11/19	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	04/11/19	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	04/10/19	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	04/10/19	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	04/10/19	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	04/10/19	*		*		*		*		
050	Rock Creek Parkway and L St., NW	04/01/19	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	04/29/19	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	04/29/19	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	04/09/19	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	04/09/19	*		*		*		*		
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	04/11/19	*		*		*		*		

Notes:

1. Outfall no longer functions as a combined sewer outfall.

2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

**Table 2-3
Pumping Stations – Inspections and Equipment in Service**

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	30	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	30	4	5	None	-	-	-	-

Notes:

**Table 2-4
Pumping Stations – Preventive Maintenance**

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	4/08/19	Group A	19-293905	Add oil, grease bearings and replace packing if needed.
O St	4/29/19	Group A	19-372222	Add oil, grease bearings and replace packing if needed.
Eastside	4/13/19	Group A	19-305408	Add oil, grease bearings and replace packing if needed.
Poplar Point	4/28/19	Group A	19-291576	Add oil, grease bearings and replace packing if needed.
Potomac	4/15/19	Group A	19-305605	Add oil, grease bearings and replace packing if needed.
Rock Creek	4/27/19	Group A	19-326978	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	4/13/19	Group A	19-293919	Add oil, grease bearings and replace packing if needed.
Earl Place	4/27/19	Group A	19-325854	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	4/28/19	Group B	19-414001	

Notes:

1. Group A consists of:
 - Exercise bar screens
 - Exercise all sump pumps
 - Drain condensation from air compressor storage tank
 - Check depth of screening in the screen room and schedule Vactor truck as required
 - Check all safety equipment
 - Issue work order requests as required
2. Group B consists of:
 - a. Inspect and manually run CSO Pumps
 - b. Generator:
 - i. Inspection operation and test, inspect oil level, inspect coolant level
 - c. MCC:
 - i. Test gas monitoring system
 - ii. Inspect and test level indicators
 - d. Valve Vault
 - i. Lubricate knife gate valve stem and stem nut
 - ii. Flush air and vacuum release valve

**Table 2-5
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)¹</i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main ^{1,2}	1337.87	44.60	N/A	N/A	N/A
O St ^{1,2}	127.01	4.38	N/A	N/A	N/A
Eastside	113.11	3.77	N/A	N/A	N/A
Poplar Point	331.49	11.05	N/A	N/A	N/A
Potomac	4393.47	146.45	N/A	N/A	N/A
Rock Creek	135.44	4.51	N/A	N/A	N/A
Upper Anacostia	46.26	1.54	N/A	N/A	N/A
Earl Place	0.298	0.010	N/A	N/A	N/A
1 st Street Tunnel Dewatering	N/A	N/A	N/A	4/05/19 4/29/19	0.17 0.16

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.

2.4 Inflatable Dams and SCADA System

DC Water operates and maintains nine inflatable dams at seven different locations. Table 2-6 summarizes the date(s) the inflatable dams were inspected, and their operational status and condition. The inflatable dams consist of multi-ply elastomeric (i.e., “rubber”) fabric dams installed in major overflow conduits within the combined sewer system. The objective of the inflatable dam installation is to increase the effective depth to which the sewage must rise in the combined sewer before overflows occur. The effect of the installation is to retain a greater volume of combined sewage flow resulting from low to moderate intensity storms by maximizing storage within the CSS. During higher intensity storms, when the full carrying capacity of the overflow conduit is required to prevent upstream flooding, the dam is deflated automatically. Inflatable dam operations are summarized below:

**Table 2-6
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	4/18/19	No	N/A	N/A	N/A
14 - West	4/18/19	No	N/A	N/A	N/A
15	4/18/19	No	N/A	N/A	N/A
15A	4/18/19	No	N/A	N/A	N/A
16 - East	4/18/19	No	N/A	N/A	N/A
16 - West	4/18/19	No	N/A	N/A	N/A
34	4/18/19	No	N/A	N/A	N/A
35	4/23/19	No	N/A	N/A	N/A
52	4/23/19	No	N/A	N/A	N/A

Notes:

Table 2-7

Inflatable Dams & SCADA Sites - Wet Weather Operations

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W)	<i>None</i>	<i>N/A</i>
34	<i>04/23/19</i>	<i>1 hrs. 4 mins</i>
35	<i>04/13/19</i>	<i>0 hrs. 15 mins</i>
	<i>04/23/19</i>	<i>0 hrs. 27 mins</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	<i>None</i>	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	<i>None</i>	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	<i>None</i>	<i>N/A</i>
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No.1	<i>Operational</i>	<i>Open</i>
Outfall Sewer Control Gate No.2	<i>Operational</i>	This structure has been bulk headed. Overflows are no longer possible
Outfall Sewer Control Gate No.2	<i>Operational</i>	This structure has been bulk headed. Overflows are no longer possible

Notes:

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during April 2019.

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

The following tables summarize catch basin cleaning in the Anacostia CSO area and in the entire sewer system:

**Table 4-1
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
						Total	In CSS	Total	In CSS	Total	In CSS
1	1449	1426	650	590	19	42	42	4	4	46	46
2	2792	2642	471	132	1	100	47	21	21	121	68
3	3687	187	0	0	0	58	1	1612	0	1670	1
4	3495	1723	0	0	0	276	9	920	3	1196	12
5	4007	1769	1678	52	6	77	54	13	11	90	65
6	3323	2673	2669	1640	63	566	151	16	12	582	163
7	3785	43	42	22	2	1974	6	8	0	1982	6
8	2832	212	210	6	0	1695	9	57	0	1752	9
Grand Total	25370¹	10675¹	5720¹	2442	91	4788	319	2651	51	7439	370
% Cleaned/Inspected to Date				43%	2%					29%	3%

1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.

4.2 BMP Demonstration for Solid and Floatable Control

DC WATER operates the following demonstration projects designed to remove solids and floatables from CSO prior to discharge.

- Netting system at CSO 018 to Anacostia River
- Bar Rack at CSO 040 and 041 to Rock Creek

**Table 4-2
BMP Demonstration Projects – Report**

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Netting System CSO 018	4/2/2019	Good	Replace nets	Routine cleaning	None
	4/17/2019	Good	Replace nets	Nets replaced	50 pounds
Bar Rack CSO 040	4/8/2019	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	4/11/2019	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatables are conveyed to Blue Plains for treatment.

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

**Table 4-3
Anacostia River Floating Debris Removal Program – Summary**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	23
<i>Days not Operating</i>	7
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightning.
<i># Skimmer in Fleet</i>	4 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer
<i>Dates</i>	B33: 4/1 - 4/15.
<i>Reason</i>	B33: metal fatigue fractures.
<i>Plan to Restore to Service</i>	B33: Returned to operations on 4/15.
<i>Amount Material Collected</i>	40 tons this month. Calendar year to date 130 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

This section describes DC WATER's efforts to coordinate litter control efforts with the National Park Service and D.C. Department of Public Works to maximize litter control efforts in the combined sewer system.

No Activity this month.

5. MONITORING

5.1 Condition Report Bar Racks at Main and O Street Storm Pumps

DC Water performs visual surveys of the bar racks at Main and O Street Pumping Stations to characterize the quantity and nature of floatable discharge. The physical condition of the bar racks and any maintenance requirements are also noted.

**Table 5-1
Bar Racks at Main & O Street Pumping Stations**

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	4/28/19	X		19-373341		
Bar Racks at Main Storm Pumps (CSO 011)	KW	4/28/19	X		19-373334		

5.2 Rain Data

Rain data from National Airport and from the rain gauges installed in the CSS are summarized below.

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
4/1/2019	0	0	0	0	0
4/2/2019	0	0.01	0.02	0.01	0.04
4/3/2019	0	0	0	0	0
4/4/2019	0	0	0	0	0
4/5/2019	0.02	0.04	0.06	0.06	0.09
4/6/2019	0	0	0	0	0
4/7/2019	0	0	0	0	0
4/8/2019	0	0	0.01	0	0.03
4/9/2019	0.02	0.04	0.01	0.06	0.01
4/10/2019	0	0	0	0	0
4/11/2019	0	0	0	0	0
4/12/2019	0	0.06	0.02	0.04	0.05
4/13/2019	0.59	0.52	0.30	0.64	0.37
4/14/2019	0	0	0	0	0
4/15/2019	0.50	0.28	0.70	0.31	0.72
4/16/2019	0	0	0	0	0
4/17/2019	0	0	0	0	0
4/18/2019	0	0	0	0	0
4/19/2019	0.14	0.24	0.22	0.28	0.31
4/20/2019	0	0	0	0	0
4/21/2019	0	0	0	0	0
4/22/2019	0	0	0	0	0
4/23/2019	0	0	0	0	0
4/24/2019	0	0	0	0	0
4/25/2019	0	0	0	0	0
4/26/2019	0.60	0.32	0.84	0.36	0.59
4/27/2019	0	0	0	0	0.03
4/28/2019	0.04	0.06	0.02	0.06	0
4/29/2019	0	0	0	0	0
4/30/2019	0	0	0	0	0
TOTAL	1.91	1.57	2.20	1.82	2.24

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
 Period: April, May, June 2019

SCENARIO: QuarterlyReport_2019Q3, revised July 22, 2019

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave., SE	separated						
007	13 th Street and Ridge Place, SE	Metered	5	0.22	0.92	0.18	0.25	0.08
009	2nd Street, 300 feet North of N Place, SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010	O Street Sewage Pumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Metered	3	0.96	1.17	0.39	0.42	0.33
013	4th and N Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
014	6th and M Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			1.18				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	10	8.01	9.75	0.98	2.00	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	11	52.87	12.25	1.11	2.50	0.25
022	27th and K Streets, NW	Modeled	19	6.15	24.00	1.26	3.25	0.25
024	30th and K Streets, NW	Modeled	14	4.68	14.75	1.05	2.75	0.25
025	31st & K St NW	Modeled	5	0.15	2.50	0.50	1.00	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	Modeled	17	4.96	22.75	1.34	4.00	0.25
028	36th and M Streets, NW	Modeled	19	3.26	79.75	4.20	15.50	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	Modeled	19	7.87	26.50	1.39	4.00	0.25
	SUBTOTAL			87.93				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	28th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extended west of 25th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	14	0.252	13.75	0.98	2.25	0.25
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road, east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and Rock Creek Parkway, NW	Modeled	1	0.01	0.25	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	2	0.34	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.0001	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	2	0.05	0.50	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	2	0.02	0.50	0.25	0.25	0.25
047	Ingliside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	2	0.08	0.50	0.25	0.25	0.25
049	Piney Branch and Lamont Street, NW	Modeled	15	9.61	15.00	1.00	2.50	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			10.35				
	TOTAL			99.46				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: April, May, June 2019

SCENARIO: QuarterlyReport_2019Q3, revised July 22, 2019

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
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Prepared by: Greeley and Hansen LLC and Limno-Tech, Inc.



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**
Serving the Public • Protecting the Environment

**Monthly Operations Report For
*Combined Sewer System***

Month: May 2019

Prepared By:
District of Columbia
Water and Sewer Authority
Department of Sewer Services
Washington, D.C. 20003

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
Washington, D.C.

*Monthly Operations Report for Combined Sewer System
Month: May 2019*

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (DC Water) operates a wastewater collection system comprised of separate and combined sewers. Separate storm and sanitary sewers serve two-thirds of the District. In the combined sewer system (CSS), there is a single sewer to convey storm water and sanitary wastes. The area served by combined sewers comprises about one-third of the District.

During dry weather, sanitary wastes collected in the CSS are conveyed to the DC Water’s advanced wastewater treatment plant at Blue Plains (BPAWWTP or the Blue Plains AWWTP). During periods of rainfall, the capacity of a combined sewer may be exceeded and the excess flow, which is a mixture of storm water and sanitary wastes, is discharged directly to the Anacostia River, Rock Creek or the Potomac River or their tributary waters. This report summarizes the operations of the combined sewer system for the month indicated.

2. OPERATION AND MAINTENANCE

2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPAWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to the tunnel system for temporary storage, and CSO outfalls which discharge to receiving waters. The following table summarizes inspections of CSO regulators in the collection system.

**Table 2-1
Regulator Structures**

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 ¹	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	05/03/19	*			
7	W Street and Railroad Ave, SE	005	05/03/19	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	05/03/19	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	05/06/19	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	05/17/19	*			
11	"O" Street Pumping Station	011(a)	05/23/19	*			
12	Storm Pump Discharge at Main Pumping Station	011	05/23/19	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	05/23/19	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	05/23/19	*			
15	South Capitol and E Streets	010	05/09/19	*			
15a	Half and L Streets, SE	010	05/09/19	*			
15b	South Capitol and I Streets	010	05/01/19	*			
15c	South Capitol and I Streets	010	05/01/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	05/09/19	*			
17	4 th and N Streets, SE, Both Extended	013	05/15/19	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	05/15/19	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	05/15/19	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	05/01/19	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	05/20/19	*			
19	9 th and M Streets, SE	015	05/22/19	*			
19a	9 th and M Streets, SE	015	05/22/19	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	05/22/19	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	05/22/19	*			
20	12 th and M Streets, SE	016	05/17/19	*			
20a	12 th and M Streets, SE	016	05/17/19	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	05/17/19	*			
21	14 th and M Streets, SE	017	05/17/19	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	05/17/19	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	05/14/19	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	05/14/19	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	05/14/19	*			
22d	Kentucky Ave and Potomac Street, SE	018	05/13/19	*			
22e	14 th Street and Kentucky Ave, SE	018	05/13/19	*			
23	Independence Ave, 21 st Street, SE, Extended	019	05/15/19	*			
24a	East Capitol St, west of RFK stadium	019	05/15/19	*			
28	21 st and Constitution Ave, NW	020	05/06/19	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	05/06/19	*			
30	17 th and D Streets, NW	020	05/06/19	*			
31	15 th Street and Pennsylvania Ave, NW	020	05/06/19	*			
33	10 th and F Streets, NW	020	05/06/19	*			
34	23 rd Street, north of Constitution Ave, NW	020	05/16/19	*			
34a	23 rd Street near C Street, NW	020	05/06/19	*			
35	Northeast of Roosevelt Bridge, NW	021	05/16/19	*			
36	27 th and I Streets, NW	022	05/06/19	*			
36a	New Hampshire Ave and Eye Street, NW	022	05/06/19	*			
36b	19 th and L Streets, NW	022, 034	05/10/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
36d	17 th and L Streets, NW	022, 034	05/10/19	*			
36g	18 th and M Streets, NW	022, 034	05/10/19	*			
36h	18 th and M Streets, NW	022, 034	05/10/19	*			
37	27 th and Eye Streets, NW	022	05/06/19	*			
38	29 th and K Streets, NW	024	05/03/19	*			
38a	30 th Street, south of K Street, NW	024	05/03/19	*			
39a	30 th and K Streets, NW	024	05/03/19	*			
39b	30 th and K Streets, NW	024	05/03/19	*			
41b	31 st and K Streets, NW	025	05/03/19	*			
41c	31 st and K Streets, NW	025	05/03/19	*			
42	Wisconsin Ave and K Street, NW	026	05/03/19	*			
43	Potomac and Water Streets, NW	027	05/03/19	*			
43a	Potomac and Water Streets, NW	027	05/03/19	*			
44	Water Street, west of Potomac St, NW	027	05/03/19	*			
45	36 th and M Streets, NW	028	05/01/19	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	05/01/19	*			
47	38 th Street and Reservoir Road, NW	029	05/01/19	*			
47a	37 th and T Streets, NW	029	05/01/19	*			
47b	37 th and T Streets, NW	029	05/01/19	*			
47c	38 th and W Streets, NW	029	05/01/19	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	05/15/19	*			
51	N Street Extended, west of 25 th Street, NW	033	05/15/19	*			
52	22 nd Street between M and N Streets, NW	034	05/16/19	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	05/16/19	*			
53	22 nd and M Streets, NW	022, 034	05/16/19	*			
53a	22 nd and M Streets, NW	022, 034	05/16/19	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	05/15/19	*			
53c	L and 22 nd Streets, NW	022	05/15/19	*			
54	23 rd and O Streets, NW	034	05/13/19	*			
55	22 nd Street, south of Q Street, NW	035	05/13/19	*			
55a	22 nd Street, south of Q Street, NW	035	05/13/19	*			
56	23 rd and Massachusetts Ave, NW	036	05/13/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
57	23 rd Street, south of Q Street, NW	036	05/13/19	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	05/01/19	*			
60	Connecticut Ave, east of Rock Creek, NW	039	05/01/19	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	05/01/19	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	05/08/19	*			
63	Harvard Street and Rock Creek Parkway, NW	042	05/08/19	*			
64	Adams Mill Road, south of Irving Street, NW	043	05/08/19	*			
65	Kenyon Street and Adams Mill Road, NW	044	05/08/19	*			
65a	Kenyon Street and Adams Mill Road, NW	044	05/08/19	*			
66	Adams Mill Road and Lamont Street, NW	045	05/08/19	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	05/08/19	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	05/08/19	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	05/08/19	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	05/08/19	*			
70i	5 th and Quackenbos Streets, NW	049	05/06/19	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	05/15/19	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	05/13/19	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	05/13/19	*			
73	O Street Extended and Rock Creek Parkway, NW	052	05/13/19	*			
74 ^l	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	05/01/19	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	05/10/19	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	05/10/19	*			
78 ^l	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ^l	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	05/13/19	*			
84a	26 th and P Streets, NW	060	05/13/19	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	05/24/19	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	05/24/19	*			
89	First and V St, NW (First St Tunnel)	019	05/24/19	*			
90	First and V St, NW (First St Tunnel)	019	05/24/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
91	First and V St, NW (First St Tunnel)	019	05/24/19	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	05/22/19	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	05/17/19	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	05/17/19	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	05/17/19	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	05/17/19	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	05/23/19	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	05/23/19	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	05/09/19	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	05/20/19	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	05/20/19	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	05/20/19	*			
104	Poplar Point PS Discharge Chamber	N/A	05/20/19	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	05/20/19	*			

Notes:

1. Noted structures no longer function as a combined sewer overflow regulator structure.

2.2 Outfalls, Tide Gates and CSO Signs

The following table summarizes inspections, maintenance and work performed on outfall structures, tide gates and CSO signs in the collection system.

**Table 2-2
Outfalls and Tide Gates**

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003 ¹	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling, Macdill and Arnold Ave SW	05/20/19	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	05/21/19	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	05/21/19	*		*		*		*		
009	O St. Sewage Pumping Station, SE	05/23/19	*		*		*		*		
010	O St. Sewage Pumping Station, SE	05/23/19	*			*			*		
011	Main Sewage Pumping Station, SE	05/23/19	*			*			*		
011(a)	Main Sewage Pumping Station, SE	05/23/19	*		*		*		*		
012	Main Sewage Pumping Station, SE	05/23/19	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	05/23/19	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	05/23/19	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	05/23/19	*			*			*		
016	12th and O Streets, SE	05/21/19	*		*		*		*		
017	M and Water Street, SE	05/21/19	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	05/21/19	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	05/22/19	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	05/22/19	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	05/14/19	*		*		*		*		
021	Rock Creek Parkway and C St., NW	05/14/19	*		*		*		*		
022	Rock Creek Parkway and G St., NW	05/14/19	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	05/14/19	*		*		*		*		
025	South of 31st and K Streets, NW	05/14/19	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	05/14/19	*		*		*		*		
027	33 rd and Water Sts., NW	05/14/19	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	05/14/19	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	05/14/19	*			*			*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	05/15/19	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	05/15/19	*		*		*		*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
034	Just west of St. Francis Jr. High and north of N St., NW	05/13/19	*			*			*		
035	P St. Bridge and Rock Creek Parkway	05/13/19	*			*			*		
036	22nd Street, South of Q Street NW.	05/15/19	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	05/01/19	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	05/01/19	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	05/01/19	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	05/21/19	*		*		*		*		
042	Harvard St. and Beach Dr NW.	05/21/19	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	05/21/19	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	05/21/19	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	05/21/19	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	05/08/19	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	05/08/19	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	05/08/19	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	05/08/19	*		*		*		*		
050	Rock Creek Parkway and L St., NW	05/15/19	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	05/21/19	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	05/21/19	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	05/10/19	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	05/10/19	*		*		*		*		
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	05/15/19	*		*		*		*		

Notes:

1. Outfall no longer functions as a combined sewer outfall.

2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

**Table 2-3
Pumping Stations – Inspections and Equipment in Service**

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	31	3	4	Screen #2	05/10/19 – 05/13/19	Broken Rakes	19-432873	Rakes were repaired and screen returned to service on 5/14/19.
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	None	-	-	-	-

Notes:

**Table 2-4
Pumping Stations – Preventive Maintenance**

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	5/08/19	Group A	19-353300	Add oil, grease bearings and replace packing if needed.
O St	5/29/19	Group A	19-429218	Add oil, grease bearings and replace packing if needed.
Eastside	5/15/19	Group A	19-361390	Add oil, grease bearings and replace packing if needed.
Poplar Point	5/8/19	Group A	19-351071	Add oil, grease bearings and replace packing if needed.
Potomac	5/15/19	Group A	19-361468	Add oil, grease bearings and replace packing if needed.
Rock Creek	5/24/19	Group A	19-372236	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	5/8/19	Group A	19-353314	Add oil, grease bearings and replace packing if needed.
Earl Place	5/27/19	Group A	19-370938	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	5/29/19	Group B	19-474459	

Notes:

1. Group A consists of:
 - Exercise bar screens
 - Exercise all sump pumps
 - Drain condensation from air compressor storage tank
 - Check depth of screening in the screen room and schedule Vactor truck as required
 - Check all safety equipment
 - Issue work order requests as required
2. Group B consists of:
 - a. Inspect and manually run CSO Pumps
 - b. Generator:
 - i. Inspection operation and test, inspect oil level, inspect coolant level
 - c. MCC:
 - i. Test gas monitoring system
 - ii. Inspect and test level indicators
 - d. Valve Vault
 - i. Lubricate knife gate valve stem and stem nut
 - ii. Flush air and vacuum release valve

**Table 2-5
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)¹</i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main ^{1,2}	1659.60	53.54	N/A	N/A	N/A
O St ^{1,2}	166.52	5.37	N/A	N/A	N/A
Eastside	129.76	4.19	N/A	N/A	N/A
Poplar Point	375.85	12.12	N/A	N/A	N/A
Potomac	4919.76	158.70	N/A	N/A	N/A
Rock Creek	151.17	4.88	N/A	N/A	N/A
Upper Anacostia	49.11	1.58	N/A	N/A	N/A
Earl Place	0.517	0.017	N/A	N/A	N/A
1 st Street Tunnel Dewatering	N/A	N/A	N/A	5/02/19 5/23/19	0.25 0.19

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.

2.4 Inflatable Dams and SCADA System

DC Water operates and maintains nine inflatable dams at seven different locations. Table 2-6 summarizes the date(s) the inflatable dams were inspected, and their operational status and condition. The inflatable dams consist of multi-ply elastomeric (i.e., “rubber”) fabric dams installed in major overflow conduits within the combined sewer system. The objective of the inflatable dam installation is to increase the effective depth to which the sewage must rise in the combined sewer before overflows occur. The effect of the installation is to retain a greater volume of combined sewage flow resulting from low to moderate intensity storms by maximizing storage within the CSS. During higher intensity storms, when the full carrying capacity of the overflow conduit is required to prevent upstream flooding, the dam is deflated automatically. Inflatable dam operations are summarized below:

**Table 2-6
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	5/24/19	No	N/A	N/A	N/A
14 - West	5/24/19	No	N/A	N/A	N/A
15	5/9/19	No	N/A	N/A	N/A
15A	5/9/19	No	N/A	N/A	N/A
16 - East	5/9/19	No	N/A	N/A	N/A
16 - West	5/9/19	No	N/A	N/A	N/A
34	5/16/19	No	N/A	N/A	N/A
35	5/16/19	No	N/A	N/A	N/A
52	5/16/19	No	N/A	N/A	N/A

Notes:

Table 2-7

Inflatable Dams & SCADA Sites - Wet Weather Operations

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W)	<i>05/10/19</i>	<i>1 hr. 48 mins</i>
	<i>05/11/19</i>	<i>0 hrs. 37 mins</i>
	<i>05/24/19</i>	<i>1 hrs. 58 mins</i>
	<i>05/28/19</i>	<i>4 hrs. 35 mins</i>
34	<i>05/11/19</i>	<i>2 hrs. 50 mins</i>
35	<i>05/02/19</i>	<i>0 hrs. 15 mins</i>
	<i>05/23/19</i>	<i>0 hrs. 21 mins</i>
	<i>05/28/19</i>	<i>0 hrs. 24 mins</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	N/A
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No.1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible

Notes:

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during May 2019.

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

The following tables summarize catch basin cleaning in the Anacostia CSO area and in the entire sewer system:

**Table 4-1
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
						Total	In CSS	Total	In CSS	Total	In CSS
1	1449	1426	650	644	25	46	46	26	12	72	58
2	2792	2642	471	390	60	121	68	54	46	175	114
3	3687	187	0	0	0	1670	1	666	1	2336	2
4	3495	1723	0	0	0	1196	12	1044	816	2240	828
5	4007	1769	1678	1124	34	90	65	59	45	149	110
6	3323	2673	2669	2176	111	582	163	34	31	616	194
7	3785	43	42	32	3	1982	6	3	2	1985	8
8	2832	212	210	198	7	1752	9	2	1	1754	10
Grand Total	25370¹	10675¹	5720¹	4564	240	7439	370	1888	954	9327	1324
% Cleaned/Inspected to Date				80%	4%					37%	12%

1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.

4.2 BMP Demonstration for Solid and Floatable Control

DC WATER operates the following demonstration projects designed to remove solids and floatables from CSO prior to discharge.

- Netting system at CSO 018 to Anacostia River
- Bar Rack at CSO 040 and 041 to Rock Creek

**Table 4-2
BMP Demonstration Projects – Report**

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Netting System CSO 018	5/3/2019	Good	Routine cleaning	Routine cleaning	None
Bar Rack CSO 040	05/01/19	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	05/21/19	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatables are conveyed to Blue Plains for treatment.

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

**Table 4-3
Anacostia River Floating Debris Removal Program – Summary**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	22
<i>Days not Operating</i>	5
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightning.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer
<i>Dates</i>	B34: 5/9 - 5/14 and 5/17 - 5/31.
<i>Reason</i>	B34: wing screen off track and #1 one screen stopped working.
<i>Plan to Restore to Service</i>	B34: ETR unknow. Fleet waiting for parts.
<i>Amount Material Collected</i>	50 tons this month. Calendar year to date 180 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

This section describes DC WATER's efforts to coordinate litter control efforts with the National Park Service and D.C. Department of Public Works to maximize litter control efforts in the combined sewer system.

No Activity this month.

5. MONITORING

5.1 Condition Report Bar Racks at Main and O Street Storm Pumps

DC Water performs visual surveys of the bar racks at Main and O Street Pumping Stations to characterize the quantity and nature of floatable discharge. The physical condition of the bar racks and any maintenance requirements are also noted.

**Table 5-1
Bar Racks at Main & O Street Pumping Stations**

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	5/28/19	X		19-441370		
Bar Racks at Main Storm Pumps (CSO 011)	KW	5/28/19	X		19-441363		

5.2 Rain Data

Rain data from National Airport and from the rain gauges installed in the CSS are summarized below.

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
5/1/2019	0	0	0	0	0
5/2/2019	1.20	1.08	0.84	1.49	0.48
5/3/2019	0.01	0	0	0	0
5/4/2019	0.06	0.16	0.13	0.26	0.55
5/5/2019	0.90	0.85	0.81	0.92	0.65
5/6/2019	0	0	0	0	0
5/7/2019	0	0	0	0	0
5/8/2019	0	0	0	0	0
5/9/2019	0	0	0	0	0
5/10/2019	0.74	0.62	0.68	0.80	0.52
5/11/2019	0.38	0.38	0.36	0.44	0.41
5/12/2019	0.48	0.60	0.52	0.62	0.49
5/13/2019	0.46	0.41	0.54	0.36	0.59
5/14/2019	0	0	0	0	0
5/15/2019	0	0	0	0	0
5/16/2019	0	0	0	0	0.01
5/17/2019	0	0	0	0	0
5/18/2019	0	0	0	0	0
5/19/2019	0	0	0.18	0	0.24
5/20/2019	0	0	0	0	0
5/21/2019	0	0	0	0	0
5/22/2019	0	0	0	0	0
5/23/2019	0.65	0.45	0.59	0.47	0.31
5/24/2019	0	0	0	0	0
5/25/2019	0.01	0.04	0.04	0.06	0
5/26/2019	0	0	0.10	0	0.24
5/27/2019	0	0	0	0	0
5/28/2019	0.68	0.44	0.43	0.45	0.19
5/29/2019	0	0	0	0	0
5/30/2019	0.14	0.12	0.21	0.16	0.29
5/31/2019	0	0	0	0	0
TOTAL	5.71	5.15	5.43	6.03	4.97

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
 Period: April, May, June 2019

SCENARIO: QuarterlyReport_2019Q3, revised July 22, 2019

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave., SE	separated						
007	13 th Street and Ridge Place, SE	Metered	5	0.22	0.92	0.18	0.25	0.08
009	2nd Street, 300 feet North of N Place, SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010	O Street Sewage Pumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Metered	3	0.96	1.17	0.39	0.42	0.33
013	4th and N Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
014	6th and M Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			1.18				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	10	8.01	9.75	0.98	2.00	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	11	52.87	12.25	1.11	2.50	0.25
022	27th and K Streets, NW	Modeled	19	6.15	24.00	1.26	3.25	0.25
024	30th and K Streets, NW	Modeled	14	4.68	14.75	1.05	2.75	0.25
025	31st & K St NW	Modeled	5	0.15	2.50	0.50	1.00	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	Modeled	17	4.96	22.75	1.34	4.00	0.25
028	36th and M Streets, NW	Modeled	19	3.26	79.75	4.20	15.50	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	Modeled	19	7.87	26.50	1.39	4.00	0.25
	SUBTOTAL			87.93				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	28th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extended west of 25th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	14	0.252	13.75	0.98	2.25	0.25
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road, east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and Rock Creek Parkway, NW	Modeled	1	0.01	0.25	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	2	0.34	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.0001	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	2	0.05	0.50	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	2	0.02	0.50	0.25	0.25	0.25
047	Ingliside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	2	0.08	0.50	0.25	0.25	0.25
049	Piney Branch and Lamont Street, NW	Modeled	15	9.61	15.00	1.00	2.50	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			10.35				
	TOTAL			99.46				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: April, May, June 2019

SCENARIO: QuarterlyReport_2019Q3, revised July 22, 2019

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
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Prepared by: Greeley and Hansen LLC and Limno-Tech, Inc.



**DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY**
Serving the Public • Protecting the Environment

**Monthly Operations Report For
*Combined Sewer System***

Month: June 2019

Prepared By:
District of Columbia
Water and Sewer Authority
Department of Sewer Services
Washington, D.C. 20003

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
Washington, D.C.

Monthly Operations Report for Combined Sewer System
Month: June 2019

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (DC Water) operates a wastewater collection system comprised of separate and combined sewers. Separate storm and sanitary sewers serve two-thirds of the District. In the combined sewer system (CSS), there is a single sewer to convey storm water and sanitary wastes. The area served by combined sewers comprises about one-third of the District.

During dry weather, sanitary wastes collected in the CSS are conveyed to the DC Water’s advanced wastewater treatment plant at Blue Plains (BPAWWTP or the Blue Plains AWWTP). During periods of rainfall, the capacity of a combined sewer may be exceeded and the excess flow, which is a mixture of storm water and sanitary wastes, is discharged directly to the Anacostia River, Rock Creek or the Potomac River or their tributary waters. This report summarizes the operations of the combined sewer system for the month indicated.

2. OPERATION AND MAINTENANCE

2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPAWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to the tunnel system for temporary storage, and CSO outfalls which discharge to receiving waters. The following table summarizes inspections of CSO regulators in the collection system.

**Table 2-1
Regulator Structures**

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 ¹	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	06/05/19	*			
7	W Street and Railroad Ave, SE	005	06/05/19	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	06/05/19	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	06/05/19	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	06/26/19	*			
11	"O" Street Pumping Station	011(a)	06/26/19	*			
12	Storm Pump Discharge at Main Pumping Station	011	06/27/19	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	06/26/19	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	06/18/19	*			
15	South Capitol and E Streets	010	06/18/19	*			
15a	Half and L Streets, SE	010	06/18/19	*			
15b	South Capitol and I Streets	010	06/19/19	*			
15c	South Capitol and I Streets	010	06/19/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	06/18/19	*			
17	4 th and N Streets, SE, Both Extended	013	06/11/19	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	06/25/19	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	06/25/19	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	06/24/19	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	06/11/19	*			
19	9 th and M Streets, SE	015	06/11/19	*			
19a	9 th and M Streets, SE	015	06/11/19	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	06/11/19	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	06/11/19	*			
20	12 th and M Streets, SE	016	06/11/19	*			
20a	12 th and M Streets, SE	016	06/11/19	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	06/11/19	*			
21	14 th and M Streets, SE	017	06/11/19	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	06/11/19	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	06/11/19	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	06/11/19	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	06/11/19	*			
22d	Kentucky Ave and Potomac Street, SE	018	06/24/19	*			
22e	14 th Street and Kentucky Ave, SE	018	06/24/19	*			
23	Independence Ave, 21 st Street, SE, Extended	019	06/24/19	*			
24a	East Capitol St, west of RFK stadium	019	06/24/19	*			
28	21 st and Constitution Ave, NW	020	06/05/19	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	06/05/19	*			
30	17 th and D Streets, NW	020	06/05/19	*			
31	15 th Street and Pennsylvania Ave, NW	020	06/05/19	*			
33	10 th and F Streets, NW	020	06/05/19	*			
34	23 rd Street, north of Constitution Ave, NW	020	06/20/19	*			
34a	23 rd Street near C Street, NW	020	06/05/19	*			
35	Northeast of Roosevelt Bridge, NW	021	06/25/19	*			
36	27 th and I Streets, NW	022	06/05/19	*			
36a	New Hampshire Ave and Eye Street, NW	022	06/05/19	*			
36b	19 th and L Streets, NW	022, 034	06/17/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
36d	17 th and L Streets, NW	022, 034	06/17/19	*			
36g	18 th and M Streets, NW	022, 034	06/17/19	*			
36h	18 th and M Streets, NW	022, 034	06/17/19	*			
37	27 th and Eye Streets, NW	022	06/05/19	*			
38	29 th and K Streets, NW	024	06/14/19	*			
38a	30 th Street, south of K Street, NW	024	06/14/19	*			
39a	30 th and K Streets, NW	024	06/14/19	*			
39b	30 th and K Streets, NW	024	06/14/19	*			
41b	31 st and K Streets, NW	025	06/14/19	*			
41c	31 st and K Streets, NW	025	06/14/19	*			
42	Wisconsin Ave and K Street, NW	026	06/14/19	*			
43	Potomac and Water Streets, NW	027	06/14/19	*			
43a	Potomac and Water Streets, NW	027	06/14/19	*			
44	Water Street, west of Potomac St, NW	027	06/14/19	*			
45	36 th and M Streets, NW	028	06/03/19	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	06/03/19	*			
47	38 th Street and Reservoir Road, NW	029	06/03/19	*			
47a	37 th and T Streets, NW	029	06/03/19	*			
47b	37 th and T Streets, NW	029	06/03/19	*			
47c	38 th and W Streets, NW	029	06/03/19	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	06/24/19	*			
51	N Street Extended, west of 25 th Street, NW	033	06/24/19	*			
52	22 nd Street between M and N Streets, NW	034	06/20/19	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	06/20/19	*			
53	22 nd and M Streets, NW	022, 034	06/20/19	*			
53a	22 nd and M Streets, NW	022, 034	06/20/19	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	06/21/19	*			
53c	L and 22 nd Streets, NW	022	06/21/19	*			
54	23 rd and O Streets, NW	034	06/17/19	*			
55	22 nd Street, south of Q Street, NW	035	06/17/19	*			
55a	22 nd Street, south of Q Street, NW	035	06/17/19	*			
56	23 rd and Massachusetts Ave, NW	036	06/17/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
57	23 rd Street, south of Q Street, NW	036	06/17/19	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	06/21/19	*			
60	Connecticut Ave, east of Rock Creek, NW	039	06/21/19	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	06/21/19	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	06/19/19	*			
63	Harvard Street and Rock Creek Parkway, NW	042	06/19/19	*			
64	Adams Mill Road, south of Irving Street, NW	043	06/19/19	*			
65	Kenyon Street and Adams Mill Road, NW	044	06/19/19	*			
65a	Kenyon Street and Adams Mill Road, NW	044	06/19/19	*			
66	Adams Mill Road and Lamont Street, NW	045	06/19/19	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	06/19/19	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	06/19/19	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	06/19/19	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	06/19/19	*			
70i	5 th and Quackenbos Streets, NW	049	06/24/19	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	06/21/19	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	06/17/19	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	06/17/19	*			
73	O Street Extended and Rock Creek Parkway, NW	052	06/17/19	*			
74 ^l	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	06/21/19	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	06/21/19	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	06/21/19	*			
78 ^l	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ^l	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	06/17/19	*			
84a	26 th and P Streets, NW	060	06/17/19	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	06/27/19	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	06/27/19	*			
89	First and V St, NW (First St Tunnel)	019	06/27/19	*			
90	First and V St, NW (First St Tunnel)	019	06/27/19	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
91	First and V St, NW (First St Tunnel)	019	06/27/19	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	06/26/19	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	06/26/19	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	06/11/19	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	06/26/19	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	06/26/19	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	06/26/19	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	06/18/19	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	06/18/19	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	06/25/19	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	06/25/19	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	06/25/19	*			
104	Poplar Point PS Discharge Chamber	N/A	06/25/19	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	06/25/19	*			

Notes:

1. Noted structures no longer function as a combined sewer overflow regulator structure.

2.2 Outfalls, Tide Gates and CSO Signs

The following table summarizes inspections, maintenance and work performed on outfall structures, tide gates and CSO signs in the collection system.

**Table 2-2
Outfalls and Tide Gates**

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003 ¹	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling, Macdill and Arnold Ave SW	06/25/19	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	06/06/19	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	06/06/19	*		*		*		*		
009	O St. Sewage Pumping Station, SE	06/27/19	*		*		*		*		
010	O St. Sewage Pumping Station, SE	06/27/19	*			*			*		
011	Main Sewage Pumping Station, SE	06/27/19	*			*			*		
011(a)	Main Sewage Pumping Station, SE	06/27/19	*		*		*		*		
012	Main Sewage Pumping Station, SE	06/27/19	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	06/27/19	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	06/27/19	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	06/27/19	*			*			*		
016	12th and O Streets, SE	06/27/19	*		*		*		*		
017	M and Water Street, SE	06/27/19	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	06/27/19	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	06/26/19	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	06/26/19	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	06/06/19	*		*		*		*		
021	Rock Creek Parkway and C St., NW	06/06/19	*		*		*		*		
022	Rock Creek Parkway and G St., NW	06/06/19	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	06/06/19	*		*		*		*		
025	South of 31st and K Streets, NW	06/06/19	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	06/06/19	*		*		*		*		
027	33 rd and Water Sts., NW	06/06/19	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	06/06/19	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	06/06/19	*			*			*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
032	26th and M Street, NW.	06/24/19	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	06/24/19	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	06/17/19	*			*			*		
035	P St. Bridge and Rock Creek Parkway	06/17/19	*			*			*		
036	22nd Street, South of Q Street NW.	06/27/19	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	06/21/19	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	06/21/19	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	06/21/19	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	06/13/19	*		*		*		*		
042	Harvard St. and Beach Dr NW.	06/13/19	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	06/13/19	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	06/13/19	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	06/13/19	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	06/19/19	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	06/19/19	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	06/19/19	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	06/19/19	*		*		*		*		
050	Rock Creek Parkway and L St., NW	06/21/19	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	06/27/19	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	06/27/19	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	06/21/19	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	06/21/19	*		*		*		*		
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	06/27/19	*		*		*		*		

Notes:

1. Outfall no longer functions as a combined sewer outfall.

2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

**Table 2-3
Pumping Stations – Inspections and Equipment in Service**

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	30	3	4	Pump #1	06/08/19 – 06/30/19	Cracked Coupling on Shaft	19-486292	Anticipated 07/31/19. Coupling is being repaired by contractor.
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	30	4	5	None	-	-	-	-

Notes:

**Table 2-4
Pumping Stations – Preventive Maintenance**

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	6/10/19	Group A	19-353300	Add oil, grease bearings and replace packing if needed.
O St	6/22/19	Group A	19-548560	Add oil, grease bearings and replace packing if needed.
Eastside	6/17/19	Group A	19-361390	Add oil, grease bearings and replace packing if needed.
Poplar Point	6/10/19	Group A	19-351071	Add oil, grease bearings and replace packing if needed.
Potomac	6/17/19	Group A	19-361468	Add oil, grease bearings and replace packing if needed.
Rock Creek	6/24/19	Group A	19-372236	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	6/10/19	Group A	19-353314	Add oil, grease bearings and replace packing if needed.
Earl Place	6/27/19	Group A	19-370938	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	6/22/19	Group B	19-474459	

Notes:

1. Group A consists of:
 - Exercise bar screens
 - Exercise all sump pumps
 - Drain condensation from air compressor storage tank
 - Check depth of screening in the screen room and schedule Vactor truck as required
 - Check all safety equipment
 - Issue work order requests as required
2. Group B consists of:
 - a. Inspect and manually run CSO Pumps
 - b. Generator:
 - i. Inspection operation and test, inspect oil level, inspect coolant level
 - c. MCC:
 - i. Test gas monitoring system
 - ii. Inspect and test level indicators
 - d. Valve Vault
 - i. Lubricate knife gate valve stem and stem nut
 - ii. Flush air and vacuum release valve

**Table 2-5
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)¹</i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main ^{1,2}	1361.09	45.37	N/A	N/A	N/A
O St ^{1,2}	147.79	4.93	N/A	N/A	N/A
Eastside	120.74	4.02	N/A	N/A	N/A
Poplar Point	307.81	10.26	N/A	N/A	N/A
Potomac	3886.07	129.54	N/A	N/A	N/A
Rock Creek	129.10	4.30	N/A	N/A	N/A
Upper Anacostia	41.87	1.40	N/A	N/A	N/A
Earl Place	0.325	0.011	N/A	N/A	N/A
1 st Street Tunnel Dewatering	N/A	N/A	N/A	6/02/19	0.38

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.

2.4 Inflatable Dams and SCADA System

DC Water operates and maintains nine inflatable dams at seven different locations. Table 2-6 summarizes the date(s) the inflatable dams were inspected, and their operational status and condition. The inflatable dams consist of multi-ply elastomeric (i.e., “rubber”) fabric dams installed in major overflow conduits within the combined sewer system. The objective of the inflatable dam installation is to increase the effective depth to which the sewage must rise in the combined sewer before overflows occur. The effect of the installation is to retain a greater volume of combined sewage flow resulting from low to moderate intensity storms by maximizing storage within the CSS. During higher intensity storms, when the full carrying capacity of the overflow conduit is required to prevent upstream flooding, the dam is deflated automatically. Inflatable dam operations are summarized below:

**Table 2-6
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	6/18/19	No	N/A	N/A	N/A
14 - West	6/18/19	No	N/A	N/A	N/A
15	6/18/19	No	N/A	N/A	N/A
15A	6/18/19	No	N/A	N/A	N/A
16 - East	6/18/19	No	N/A	N/A	N/A
16 - West	6/18/19	No	N/A	N/A	N/A
34	6/20/19	No	N/A	N/A	N/A
35	6/25/19	No	N/A	N/A	N/A
52	6/20/19	No	N/A	N/A	N/A

Notes:

Table 2-7

Inflatable Dams & SCADA Sites - Wet Weather Operations

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W)	<i>06/18/19</i>	<i>0 hrs. 22 mins</i>
34	<i>None</i>	<i>N/A</i>
35	<i>None</i>	<i>N/A</i>
52	<i>06/14/19</i>	<i>0 hrs. 19 mins</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	N/A
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No.1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible

Notes:

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during June 2019.

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

The following tables summarize catch basin cleaning in the Anacostia CSO area and in the entire sewer system:

**Table 4-1
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	650	650	29	72	58	636	636	708	694
2	2792	2642	471	468	63	175	114	430	430	605	544
3	3687	187	0	0	0	2336	2	134	132	2470	134
4	3495	1723	0	0	0	2240	828	696	688	2936	1516
5	4007	1769	1678	1672	65	149	110	133	132	282	242
6	3323	2673	2669	2661	148	616	194	20	9	636	203
7	3785	43	42	41	3	1985	8	0	0	1985	8
8	2832	212	210	209	7	1754	10	4	0	1758	10
Grand Total	25370¹	10675¹	5720¹	5701	315	9327	1324	2053	2027	11380	3351
% Cleaned/Inspected to Date				99.7%	6%					45%	31%

1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.

4.2 BMP Demonstration for Solid and Floatable Control

DC WATER operates the following demonstration projects designed to remove solids and floatables from CSO prior to discharge.

- Netting system at CSO 018 to Anacostia River
- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Netting System CSO 018	6/4/2019	Good	Routine cleaning	Routine cleaning	None
Bar Rack CSO 040	06/21/19	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	06/13/19	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatables are conveyed to Blue Plains for treatment.

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

**Table 4-3
Anacostia River Floating Debris Removal Program – Summary**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	20
<i>Days not Operating</i>	5
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightning.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer
<i>Dates</i>	B34: 6/1 – 6/30
<i>Reason</i>	B34: #1 one screen stopped working.
<i>Plan to Restore to Service</i>	B34: ETR unknown. Fleet waiting for parts.
<i>Amount Material Collected</i>	10 tons this month. Calendar year to date 190 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

This section describes DC WATER's efforts to coordinate litter control efforts with the National Park Service and D.C. Department of Public Works to maximize litter control efforts in the combined sewer system.

No Activity this month.

5. MONITORING

5.1 Condition Report Bar Racks at Main and O Street Storm Pumps

DC Water performs visual surveys of the bar racks at Main and O Street Pumping Stations to characterize the quantity and nature of floatable discharge. The physical condition of the bar racks and any maintenance requirements are also noted.

**Table 5-1
Bar Racks at Main & O Street Pumping Stations**

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	6/28/19	X		19-480265		
Bar Racks at Main Storm Pumps (CSO 011)	KW	6/28/19	X		19-480258		

5.2 Rain Data

Rain data from National Airport and from the rain gauges installed in the CSS are summarized below.

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
6/1/2019	0	0	0	0	0
6/2/2019	0.59	0.71	0.01	0.11	0.01
6/3/2019	0	0	0	0	0
6/4/2019	0	0	0	0	0
6/5/2019	0.05	0.10	0	0.05	0.01
6/6/2019	0	0	0	0	0
6/7/2019	0	0	0	0	0
6/8/2019	0	0	0	0	0
6/9/2019	0.03	0.06	0.06	0.05	0.13
6/10/2019	0.30	0.28	0.45	0.50	0.37
6/11/2019	0.04	0.04	0.09	0.04	0.14
6/12/2019	0.05	0.08	0.07	0.06	0.08
6/13/2019	0.72	0.62	0.85	0.65	1.05
6/14/2019	0	0	0	0	0
6/15/2019	0	0	0	0	0
6/16/2019	0	0	0	0	0
6/17/2019	0.33	0.33	0.78	0.22	0.99
6/18/2019	0.82	0.37	0.85	0.63	1.16
6/19/2019	0.01	0	0.02	0	0
6/20/2019	0.01	0.01	0.04	0.03	0.08
6/21/2019	0	0	0	0	0
6/22/2019	0	0	0	0	0
6/23/2019	0	0	0	0	0
6/24/2019	0	0	0	0	0.02
6/25/2019	0.48	0.24	0.28	0.31	0.19
6/26/2019	0	0	0	0	0
6/27/2019	0.01	0.01	0	0.01	0
6/28/2019	0	0	0.01	0	0
6/29/2019	0	0	0.05	0.06	0.04
6/30/2019	0	0	0.01	0.01	0
TOTAL	3.44	2.85	3.57	2.73	4.27

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
 Period: April, May, June 2019

SCENARIO: QuarterlyReport_2019Q3, revised July 22, 2019

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave., SE	separated						
007	13 th Street and Ridge Place, SE	Metered	5	0.22	0.92	0.18	0.25	0.08
009	2nd Street, 300 feet North of N Place, SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010	O Street Sewage Pumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Metered	3	0.96	1.17	0.39	0.42	0.33
013	4th and N Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
014	6th and M Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			1.18				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	10	8.01	9.75	0.98	2.00	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	11	52.87	12.25	1.11	2.50	0.25
022	27th and K Streets, NW	Modeled	19	6.15	24.00	1.26	3.25	0.25
024	30th and K Streets, NW	Modeled	14	4.68	14.75	1.05	2.75	0.25
025	31st & K St NW	Modeled	5	0.15	2.50	0.50	1.00	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	Modeled	17	4.96	22.75	1.34	4.00	0.25
028	36th and M Streets, NW	Modeled	19	3.26	79.75	4.20	15.50	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	Modeled	19	7.87	26.50	1.39	4.00	0.25
	SUBTOTAL			87.93				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	28th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extended west of 25th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	14	0.252	13.75	0.98	2.25	0.25
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road, east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and Rock Creek Parkway, NW	Modeled	1	0.01	0.25	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	2	0.34	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.0001	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	2	0.05	0.50	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	2	0.02	0.50	0.25	0.25	0.25
047	Ingliside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	2	0.08	0.50	0.25	0.25	0.25
049	Piney Branch and Lamont Street, NW	Modeled	15	9.61	15.00	1.00	2.50	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			10.35				
	TOTAL			99.46				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: April, May, June 2019

SCENARIO: QuarterlyReport_2019Q3, revised July 22, 2019

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
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Prepared by: Greeley and Hansen LLC and Limno-Tech, Inc.