QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

SECOND QUARTER, 2018

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 2018

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

Monthly Operations Report for Combined Sewer System Month: April 2018

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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

				Co	ndition		
Structure		Associated NPDES	Date		Needs]	
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
2^{1}	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
41	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	04/09/18	*			
7	W Street and Railroad Ave, SE	005	04/09/18	*			
81	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	04/09/18	*			
9a ³	13th Street and Ridge Place, SE (Regulator Structure)	007	04/09/18	*			
9b ²	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	See Note				
11	"O" Street Pumping Station	011(a)	04/16/18	*			
12	Storm Pump Discharge at Main Pumping Station	011	04/18/18	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	04/16/18	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	04/16/18	*			
15	South Capitol and E Streets	010	04/26/18	*			
15a	Half and L Streets, SE	010	04/26/18	*			
15b	South Capitol and I Streets	010	04/13/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
15c	South Capitol and I Streets	010	04/13/18	*			
16	North of Main Sewage Pumping Station	012	04/16/18	*			
17	4 th and N Streets, SE, Both Extended	013	04/16/18	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	04/30/18	*			
$17b^2$	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	See Note				
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	04/06/18	*			
18a ²	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	See Note				
19	9 th and M Streets, SE	015	04/13/18	*			
19a	9 th and M Streets, SE	015	04/13/18	*			
19b ²	9 th and M Streets, SE (Diversion Chamber)	015	See Note				
19c ²	9 th and M Streets, SE (Diversion Chamber)	015	See Note				
20	12 th and M Streets, SE	016	04/13/18	*			
20a	12 th and M Streets, SE	016	04/13/18	*			
20b ²	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	See Note				
21	14 th and M Streets, SE	017	04/13/18	*			
21a ²	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	See Note				
22a	Barney Circle and Pennsylvania Ave, SE	018	04/16/18	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	04/16/18	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	04/16/18	*			
22d	Kentucky Ave and Potomac Street, SE	018	04/10/18	*			
22e	14th Street and Kentucky Ave, SE	018	04/10/18	*			
23	Independence Ave, 21st Street, SE, Extended	019	04/13/18	*			
24a	East Capitol St, west of RFK stadium	019	04/13/18	*			
28	21st and Constitution Ave, NW	020	04/03/18	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	04/03/18	*			
30	17 th and D Streets, NW	020	04/03/18	*			
31	15 th Street and Pennsylvania Ave, NW	020	04/03/18	*			
33	10th and F Streets, NW	020	04/03/18	*			
34	23 rd Street, north of Constitution Ave, NW	020	04/26/18	*			
34a	23 rd Street near C Street, NW	020	04/03/18	*			
35	Northeast of Roosevelt Bridge, NW	021	04/25/18	*			
36	27th and I Streets, NW	022	04/03/18	*			
36a	New Hampshire Ave and Eye Street, NW	022	04/03/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
36b	19th and L Streets, NW	022, 034	04/06/18	*			
36d	17th and L Streets, NW	022, 034	04/06/18	*			
36g	18th and M Streets, NW	022, 034	04/06/18	*			
36h	18 th and M Streets, NW	022, 034	04/06/18	*			
37	27 th and Eye Streets, NW	022	04/03/18	*			
38	29 th and K Streets, NW	024	04/06/18	*			
38a	30 th Street, south of K Street, NW	024	04/06/18	*			
39a	30 th and K Streets, NW	024	04/06/18	*			
39b	30th and K Streets, NW	024	04/06/18	*			
41b	31st and K Streets, NW	025	04/06/18	*			
41c	31st and K Streets, NW	025	04/06/18	*			
42	Wisconsin Ave and K Street, NW	026	04/10/18	*			
43	Potomac and Water Streets, NW	027	04/10/18	*			
43a	Potomac and Water Streets, NW	027	04/10/18	*			
44	Water Street, west of Potomac St, NW	027	04/10/18	*			
45	36 th and M Streets, NW	028	04/04/18	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	04/04/18	*			
47	38 th Street and Reservoir Road, NW	029	04/04/18	*			
47a	37th and T Streets, NW	029	04/04/18	*			
47b	37th and T Streets, NW	029	04/04/18	*			
47c	38th and W Streets, NW	029	04/04/18	*			
49 ¹	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	04/13/18	*			
51	N Street Extended, west of 25th Street, NW	033	04/13/18	*			
52	22 nd Street between M and N Streets, NW	034	04/26/18	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	04/26/18	*			
53	22 nd and M Streets, NW	022, 034	04/16/18	*			
53a	22 nd and M Streets, NW	022, 034	04/16/18	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	04/06/18	*			
53c	L and 22 nd Streets, NW	022	04/06/18	*			
54	23 rd and O Streets, NW	034	04/09/18	*			
55	22 nd Street, south of Q Street, NW	035	04/09/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
55a	22 nd Street, south of Q Street, NW	035	04/09/18	*			
56	23 rd and Massachusetts Ave, NW	036	04/09/18	*			
57	23 rd Street, south of Q Street, NW	036	04/09/18	*			
58^{1}	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	04/05/18	*			
60	Connecticut Ave, east of Rock Creek, NW	039	04/05/18	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	04/05/18	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	04/11/18	*			
63	Harvard Street and Rock Creek Parkway, NW	042	04/11/18	*			
64	Adams Mill Road, south of Irving Street, NW	043	04/11/18	*			
65	Kenyon Street and Adams Mill Road, NW	044	04/11/18	*			
65a	Kenyon Street and Adams Mill Road, NW	044	04/11/18	*			
66	Adams Mill Road and Lamont Street, NW	045	04/11/18	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	04/11/18	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	04/11/18	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	04/11/18	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	04/11/18	*			
70i	5 th and Quackenbos Streets, NW	049	04/12/18	*			
71	28th Street, west of Rock Creek Parkway, NW	050	04/04/18	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	04/09/18	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	04/09/18	*			
73	O Street Extended and Rock Creek Parkway, NW	052	04/09/18	*			
74 ¹	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	04/10/18	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	04/10/18	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	04/10/18	*			
78¹	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	04/09/18	*			
84a	26 th and P Streets, NW	060	04/09/18	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	04/20/18	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	04/20/18	*			

				Со	ndition		
Structure		Associated NPDES			Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
89	First and V St, NW (First St Tunnel)	019	04/20/18	*			
90	First and V St, NW (First St Tunnel)	019	04/20/18	*			
91	First and V St, NW (First St Tunnel)	019	04/20/18	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	04/17/18	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	04/17/18	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	04/17/18	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	04/17/18	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	04/17/18	*			
98	Main Pumping Station Diversion (Anacostia River Tunnel)	009 - 012	04/17/18	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	04/17/18	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	04/17/18	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	04/25/18	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	04/25/18	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	04/25/18	*			
104	Poplar Point PS Discharge Chamber	N/A	04/25/18	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	04/25/18	*			

- 1. Noted structures no longer function as a combined sewer overflow regulator structure.
- 2. Noted structures are in operation. The data is captured in a computerized asset management system with the initial inspections scheduled for May 2018.

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

				Tide			
NPDES		Date	Outfall	Gate	Tide Gate		
Outfall	Location	Inspected	Condition	Present?	Condition	CSO Sign	Notes, Work Needed or Performed

				Needs				Needs		Needs	
			OK	Work	Yes	No	OK	Work	OK	Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	04/12/18	*		*		*		*		
003a	Joint Base Anacostia Bolling, Macdill and Arnold Ave SW	04/17/18	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	04/02/18	*		*		*		*		
006^{1}	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	04/02/18	*		*		*		*		
009	O St. Sewage Pumping Station, SE	04/18/18	*		*		*		*		
010	O St. Sewage Pumping Station, SE	04/18/18	*			*			*		
011	Main Sewage Pumping Station, SE	04/18/18	*			*			*		
011(a)	Main Sewage Pumping Station, SE	04/18/18	*		*		*		*		
012	Main Sewage Pumping Station, SE	04/18/18	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	04/18/18	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	04/18/18	*		*			*	*		The 7'x7'x4' tidegate is currently being fabricated. We are awaiting construction permit approval from base officials. 18-338766
015	Navy Yard, aligned with 9th Street, SE	04/18/18	*			*			*		
016	12th and O Streets, SE	04/18/18	*		*		*		*		
017	M and Water Street, SE	04/18/18	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	04/18/18	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	04/18/18	*		*		*			*	18-338832 04/18/18 DSS inspectors reported no outfall sign present. Sign was apparently misplaced unknowingly during construction of new facility.
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	04/18/18	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	04/02/18	*		*		*		*		
021	Rock Creek Parkway and C St., NW	04/02/18	*		*		*		*		
022	Rock Creek Parkway and G St., NW	04/02/18	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	04/02/18	*		*		*		*		
025	South of 31st and K Streets, NW	04/02/18	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	04/02/18	*		*		*		*		
027	33 rd and Water Sts., NW	04/02/18	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	04/02/18	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	04/02/18	*			*			*		
0311	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	04/13/18	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	04/13/18	*		*		*		*		

					Tic	de					
				utfall	Ga	ıte		le Gate			
			Co	ndition	Prese	ent?	Co	ndition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	
Outfall	Location	Inspected	OK	Work	Yes	-	OK	Work	OK	Work	Notes, Work Needed or Performed
034	Just west of St. Francis Jr. High and north of N St., NW	04/09/18	*			*			*		
	P St. Bridge and Rock Creek Parkway	04/09/18	*		*	*	*		*		
	22nd Street, South of Q Street NW.	04/20/18	*		*		*		*		
0371	Waterside Dr. and Rock Creek Parkway	N/A									
	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	04/05/18	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	04/05/18	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	04/05/18	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	04/05/18	*		*		*		*		
042	Harvard St. and Beach Dr NW.	04/05/18	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	04/05/18	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	04/05/18	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	04/05/18	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	04/11/18	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	04/11/18	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	04/11/18	*		*			*	*		18-338018 Technician reports a broken tidegate due to fallen tree. Repair assistance requested.
049	North of Piney Branch Parkway and 17th St.	04/11/18	*		*		*		*		
050	Rock Creek Parkway and L St., NW	04/04/18	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	04/20/18	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	04/20/18	*		*		*		*		
053^{1}	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	04/10/18	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	04/10/18	*		*		*		*		
0571	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	04/20/18	*		*		*		*		

^{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

Pumping	No. of	No.	No.	Screens or Pumps			Work Order	
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Number	Schedule to Restore to Service ¹
Main	30	3	4	None	-	-	-	-
Eastside	3	2	4	Screen # 1	04/01/18 -04/30/18	Screen not running	18-208694	Anticipated 05/31/18. Capital improvement project being developed to replace screen.
Poplar Point ²	1	2	4	None	-	-	-	
Potomac ¹	30	4	5	Pump # 4	04/01/18-04/30/18	Phase 3 Upgrade Project	Contractor	Available if needed ³

Notes:

- 1. The age and type of equipment has an impact on the return to service schedule. In some cases, the condition of the equipment and the lack of availability of replacement parts necessitate complete replacement of the unit or element or custom fabrication of needed parts to return the units to service. For these and other reasons, projects are underway for the rehabilitation of the pumping stations, including replacement of mechanical screens. The Potomac Pumping Station Phase 3 upgrade project is currently ongoing and replacement of the mechanical screens, sluice gates, and discharge isolations valves began in September 2016 scheduled for completion in April 2018.
- 2. DC Water certificated on March 20, 2018 that the Poplar Point PS has been placed in operation.
- 3. Pump # 4 No work on equipment but was out of service due to upgrades on ball valve actuator and in wet well # 4.

Table 2-4
Pumping Stations – Preventive Maintenance

		Tumping States Treventry		
	Date	Type of Preventive Maintenance	Work Order	
Pumping Station	Performed	$Performed^{l}$	Number	Comments
Main	04/30/18	Group A	18-304089	Add oil, grease bearings and replace packing if needed.
O St	04/14/18	Group A	18-348884	Add oil, grease bearings and replace packing if needed.
Eastside	04/14/18	Group A	18-244714	Add oil, grease bearings and replace packing if needed.
Poplar Point	See Note 3	See Note 3		
Potomac	04/05/18	Group A	18-244925	Add oil, grease bearings and replace packing if needed.
Rock Creek	04/14/18	Group A	18-247477	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	04/14/18	Group A	18-304103	Add oil, grease bearings and replace packing if needed.
Earl Place	04/14/18	Group A	18-257701	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	04/30/18	Group B ²	18-400756	

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
- 3. DC Water's construction contractor is performing inspection and maintenance activities as part of completion of punch list and closeout activities for Poplar Point Pumping Station

Table 2-5 Pumping Stations – Pumpage

	Sanit Pump		Screenings Collected (units)	Pumpage of CSO from First Street Tunnel back to Sewer System			
Pumping Station	Total Wastewater (mg)	Daily Average Wastewater (mg)		Date	Volume (mg)		
Main ^{1,2}	1531.39	51.05	See Notes	N/A	N/A		
O St ^{1,2}	123.83	4.42	See Notes	N/A	N/A		
Eastside	111.03	3.70	N/A	N/A	N/A		
Poplar Point	244.32	10.18	N/A	N/A	N/A		
Potomac	3346.88	111.56	N/A	N/A	N/A		
Rock Creek	210.85	7.03	N/A	N/A	N/A		
Upper Anacostia	38.36	1.28	N/A	N/A	N/A		
Earl Place	0.143	0.005	N/A	N/A	N/A		
1st Street Tunnel	N/A	N/A	N/A	04/08/18	0.17		
Dewatering				04/16/18	0.62		

- 1. Quantification of captured materials is not possible on monthly basis.
- 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

Inflatable Dam		Was Dam Out of Service			
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Schedule to Restore to Service
14 - East	04/26/18	No	N/A	N/A	N/A
14 - West	04/26/18	No	N/A	N/A	N/A
15	04/26/18	No	N/A	N/A	N/A
15A	04/26/18	No	N/A	N/A	N/A
16 - East	04/26/18	No	N/A	N/A	N/A
16 - West	04/26/18	No	N/A	N/A	N/A
$24 - North^1$	N/A	N/A	N/A	N/A	N/A
$24 - Middle^1$	N/A	N/A	N/A	N/A	N/A
24 - South1	N/A	N/A	N/A	N/A	N/A
34	04/26/18	No	N/A	N/A	N/A
35	04/26/18	No	N/A	N/A	N/A
52	04/26/18	No	N/A	N/A	N/A

1. The Str 24 inflatable dams were decommissioned on March 20, 2018 after the Anacostia Tunnel System from Blue Plains to RFK was placed in service.

Table 2-7
Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow
14 (E & W)	none	N/A
15	4/16/18	1 hr. 0 mins
15A	4/16/18	0 hrs. 50 mins
16 (E & W)	4/16/18	0 hrs. 25 mins
34	None	N/A
35	4/16/18	3 hrs. 0 mins.
	4/27/18	2 hrs. 38 mins.
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow
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
Outfall Sewer Control Gates	Operational Status	Position
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

3	DRV	WEA	THER	OVERFI	OWS

There was no dry weather combined sewer overflow during April 2018.

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

				Inspections	•			Clea	ning		
				Total Anacostia CBs	Total Anacostia CBs	CBs Clear Last M		CB's C This N		Total CBs This Year	
		CBs in	CBs in Anacostia	Inspected Once this	Inspected Twice this						
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1447	1404	650	493	0	10	10	2	2	12	12
2	2774	2584	451	122	2	258	194	10	10	268	204
3	3630	181	0	0	0	24	1	1081	0	1105	1
4	3459	1683	0	0	0	471	228	2213	1208	2684	1436
5	3928	1732	1674	38	2	31	26	36	35	67	61
6	3269	2618	2610	709	33	1209	736	6	4	1215	740
7	3700	35	35	3	0	2625	6	1	0	2626	6
8	2801	210	210	173	0	1878	173	146	0	2024	173
Grand Total	25008 ¹	10447 ²	5630 ²	1538	37	6506	1374	3495	1259	10001	2633
% Cleaned/Inspected to Date				27%	1%	26%	13%			40%	25%

^{1.} The totals have changed due to information that is more accurate. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.

^{2. 127} catch basins in CSS and 44 in Anacostia CSS have been identified as not being part of those areas.

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

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (LB)
Netting System CSO 018	04/05/18	Good	Routine	Routine Cleaning.	None
			Cleaning		
Bar Rack CSO 040	04/05/18	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	04/05/18	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatable 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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	22
Days not Operating	7
Reason not Operating	Maintenance, wind, low water levels, lightning.
# Skimmer in Fleet	4 Skimmers
# Skimmers Out of Service	None (on the last day of the month)
Dates	B33: 4/13 - 4/23
Reason	B33: Number 3 screen drive damaged.
Plan to Restore to Service	B33: Returned to operations on 4/23
Amount Material Collected	60 tons this month. Calendar year to date 180 tons.
Nature of Material	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.

Status: no activities 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

		Date	Conc	lition		Work Performed
Pumping Station	Inspector	Inspected Good Work Work Needed		or Schedule for Completion		
Bar Racks at O						
Street Storm	KW	04/29/18	X			
Pumps (CSO 010)						
Bar Racks at Main						
Storm Pumps	KW	04/29/18	X			
(CSO 011)						

n data from National	Airport and from the ra	in gauges installed in	the CSS are summa	rized below.	

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
4/1/2018	0	0	0	0	0
4/2/2018	0.03	0.04	0.03	0.06	0.02
4/3/2018	0	0.01	0.01	0	0.01
4/4/2018	0	0	0	0	0
4/5/2018	0	0	0	0	0
4/6/2018	0	0	0	0	0
4/7/2018	0	0	0	0	0
4/8/2018	0	0	0	0	0
4/9/2018	0.02	0.01	0.01	0	0.02
4/10/2018	0	0.01	0	0	0
4/11/2018	0	0	0	0	0
4/12/2018	0	0	0	0	0
4/13/2018	0	0	0	0	0
4/14/2018	0	0	0	0	0
4/15/2018	0.18	0.13	0.08	0.21	0.13
4/16/2018	1.69	1.86	1.78	1.90	1.88
4/17/2018	0	0	0	0	0
4/18/2018	0	0	0	0	0
4/19/2018	0.01	0.03	0.03	0.03	0.03
4/20/2018	0	0	0	0	0
4/21/2018	0	0	0	0	0
4/22/2018	0	0	0	0	0
4/23/2018	0	0	0	0	0
4/24/2018	0.26	0.34	0.27	0.40	0.46
4/25/2018	0.49	0.51	0.40	0.42	0.32
4/26/2018	0	0	0.01	0	0
4/27/2018	0.75	0.68	0.66	0.88	0.72
4/28/2018	0.01	0.04	0	0.03	0
4/29/2018	0	0.01	0	0.01	0
4/30/2018	0	0	0	0	0
TOTAL	3.44	3.67	3.28	3.94	3.59

5.3	Wet Weather Overflows
Comb	pined Sewer System Model Results are summarized below

Combined Sewer System Model Results Period: April, May, June 2018 SCENARIO: PCM_QuarterlyReport_2018Q2, revised July 19, 2018

NDDEGN	5	D O	Number of Overflows	CSO Overflow	Total Duration of Overflow	Avg Duration of Overflow	Maximum Duration of Overflow	Minimum Duration of Overflow
NPDES No.	Description	Data Source	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
Anacostia CSO 005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
003	Good Hope Road, West of Nichols	Wodeled	0	0.00	•	0.00	0.00	0.00
006	Ave.,SE				separated		4.05	0.50
007*	13 th Street and Ridge Place,SE 2nd Street, 300 feet North of N Place,	Metered	4	0.62	3.59	0.90	1.25	0.50
009*	SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010*	O Street SewagePumping Station, SE (pumped Overflow)	Metered	5	16.17	4.82	0.96	1.83	0.33
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 SewagePumping Station, SE (gravity overflow)	Metered	3	3.20	1.33	0.44	0.83	0.33
012*	North of Main SewagePumping Station, SE (Tiber Creek)	Metered	6	11.55	4.50	0.75	1.33	0.25
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
015 016	9th and M Streets, SE 12th and M Streets, SE				ated to tunnel ated to tunnel			
017	14th and M Streets, SE				ated to tunnel			
	Barney Circle andPennsylvania Ave,				ated to tunnel			
019*	Northeast Boundary	Metered	7	38.46	33.29	4.76	10.92	0.11
019A*	Northeast Boundary - Tunnel OF	Metered	1	6.46	4.92	4.92	4.92	4.92
	SUBTOTAL			76.46				
otomac CSOs	,							
003A*	JBAB Tunnel OF	Metered	1	9.20	4.75	4.75	4.75	4.75
000	23rd Street, North of Constitution Ave,	Medel	40	F0.00	00.75	0.04	0.00	0.50
	NW (Easby Point) Northeast ofRoosevelt Bridge, NW	Modeled Modeled	12 13	58.92 218.61	33.75 34.75	2.81 2.67	6.00 6.75	0.50
021	27th and K Streets, NW	Modeled	17	41.19	90.75	5.34	41.00	0.50
024	30th and K Streets, NW	Modeled	14	13.62	20.75	1.48	4.00	0.25
025	31st & K St NW	Modeled	7	0.41	5.25	0.75	1.50	0.25
026	Wisconsin Avenue andK St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027 028	Water Street West of Street, NW 36th and M Streets, NW	Modeled Modeled	15 20	15.89 6.91	52.25 151.25	3.48 7.56	17.00 62.50	0.50
	Canal Road 1000 feet east of Rock							
029	Creek,NW SUBTOTAL	Modeled	16	24.16 388.91	56.00	3.50	18.75	0.75
Rock Creek								
	Pennsylvania Avenue, East Rock				separated			
031 032	Creek, NW 26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
032	N Street extendedwest of 25th	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	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
035 036	22nd Street south of Q Street, NW 22nd Street South of Q Street, NW	Modeled Modeled	0 15	0.00 0.872	0.00 32.75	0.00 2.18	7.00	0.00
	Northwest of Belmontand Rock Creek	Wodeled	10	0.072	separated	2.10	7.00	0.20
	and Potomac Parkway North of Belmont Road,east of		1					
038	Kalorama Circle, NW Connecticut Avenue east of Rock	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Creek, NW Biltmore Street extended east of	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	RockCreek, NW Ontario extended and Rock Creek	Modeled	1	0.02	0.25	0.25	0.25	0.25
041	Parkway Harvard Street and RockCreek	Modeled	0	0.00	0.00	0.00	0.00	0.00
	Parkway, NW	Modeled	3	0.07	0.75	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	5	1.42	2.50	0.50	0.50	0.50
	Kenyon Street and Adams Mill Road, NW	Modeled	3	0.006	0.75	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	7	0.14	2.75	0.39	0.50	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	5	0.06	2.00	0.40	0.50	0.25
047	Ingleside Terrace extended and Piney Branch Parkway Mt. Pleasant Street extended and Piney	Modeled	4	0.031	1.75	0.44	0.50	0.25
048	Branch Parkway	Modeled	5	0.26	2.00	0.40	0.50	0.25
049	Piney Branch and LamontStreet, NW	Modeled	15	46.99	39.00	2.60	8.75	0.50
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			
	West Side of Rock Creek300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
054	Normanstone Drive extended west of			0.00	0.00	0.00	0.00	
054					. 0.00	. 0.00	0.00	0.00
056	Rock Creek, NW 28th Street extended west of Rock	Modeled	0	0.00	separated	2.55		
056 057	Rock Creek, NW 28th Street extended west of Rock Creek, NW Connecticut Avenue and Rock Creek	Modeled	0	0.00	separated			
056	Rock Creek, NW 28th Street extended west of Rock Creek, NW	Modeled	0	0.00		0.00	0.00	0.00

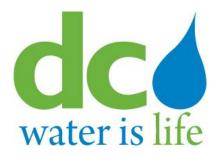
District of Columbia Water and Sewer Authority

Combined Sewer System Model Results Period: April, May, June 2018 SCENARIO: PCM_QuarterlyReport_2018Q2, revised July 19, 2018

			Number of	cso		Avg Duration		Minimum Duration of
			Overflows	Overflow	Overflow	of Overflow	Overflow	Overflow
NPDES No.	Description	Data Source	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
	TOTAL			515.24				

I:\SEWER\CSO QUARTERLY REPORT\CSO 2nd Quarter Report 2018\[Y2018Q2_Report_FINAL.XLSX]Q2Y2018

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 2018

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 2018

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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

				Co	ndition		
Structure		Associated NPDES	Date		Needs]	
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
21	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
41	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
51	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	05/11/18	*			
7	W Street and Railroad Ave, SE	005	05/11/18	*			
81	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	05/11/18	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	05/11/18	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	05/29/18	*			
11	"O" Street Pumping Station	011(a)	05/31/18	*			
12	Storm Pump Discharge at Main Pumping Station	011	05/24/18	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	05/21/18	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	05/21/18	*			
15	South Capitol and E Streets	010	05/10/18	*			
15a	Half and L Streets, SE	010	05/24/18	*	•		
15b	South Capitol and I Streets	010	05/14/18	*			

				Condition			
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
15c	South Capitol and I Streets	010	05/14/18	*			
16	North of Main Sewage Pumping Station	012	05/21/18	*			
17	4th and N Streets, SE, Both Extended	013	05/07/18	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	05/31/18	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	05/25/18	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	05/09/18	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	05/25/18	*			
19	9 th and M Streets, SE	015	05/09/18	*			
19a	9 th and M Streets, SE	015	05/09/18	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	05/25/18	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	05/25/18	*			
20	12 th and M Streets, SE	016	05/07/18	*			
20a	12th and M Streets, SE	016	05/07/18	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	05/25/18	*			
21	14 th and M Streets, SE	017	05/07/18	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	05/25/18	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	05/07/18	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	05/07/18	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	05/07/18	*			
22d	Kentucky Ave and Potomac Street, SE	018	05/15/18	*			
22e	14th Street and Kentucky Ave, SE	018	05/15/18	*			
23	Independence Ave, 21st Street, SE, Extended	019	05/15/18	*			
24a	East Capitol St, west of RFK stadium	019	05/15/18	*			
28	21st and Constitution Ave, NW	020	05/02/18	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	05/02/18	*			
30	17th and D Streets, NW	020	05/02/18	*			
31	15 th Street and Pennsylvania Ave, NW	020	05/02/18	*			
33	10 th and F Streets, NW	020	05/02/18	*			
34	23 rd Street, north of Constitution Ave, NW	020	05/10/18	*			
34a	23 rd Street near C Street, NW	020	05/02/18	*			
35	Northeast of Roosevelt Bridge, NW	021	05/10/18	*			
36	27 th and I Streets, NW	022	05/02/18	*			
36a	New Hampshire Ave and Eye Street, NW	022	05/02/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs	1	
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
36b	19th and L Streets, NW	022, 034	05/09/18	*			
36d	17th and L Streets, NW	022, 034	05/09/18	*			
36g	18th and M Streets, NW	022, 034	05/09/18	*			
36h	18th and M Streets, NW	022, 034	05/09/18	*			
37	27 th and Eye Streets, NW	022	05/02/18	*			
38	29 th and K Streets, NW	024	05/11/18	*			
38a	30 th Street, south of K Street, NW	024	05/11/18	*			
39a	30th and K Streets, NW	024	05/11/18	*			
39b	30th and K Streets, NW	024	05/11/18	*			
41b	31st and K Streets, NW	025	05/11/18	*			
41c	31st and K Streets, NW	025	05/11/18	*			
42	Wisconsin Ave and K Street, NW	026	05/09/18	*			
43	Potomac and Water Streets, NW	027	05/09/18	*			
43a	Potomac and Water Streets, NW	027	05/09/18	*			
44	Water Street, west of Potomac St, NW	027	05/09/18	*			
45	36 th and M Streets, NW	028	05/08/18	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	05/08/18	*			
47	38th Street and Reservoir Road, NW	029	05/08/18	*			
47a	37th and T Streets, NW	029	05/08/18	*			
47b	37th and T Streets, NW	029	05/08/18	*			
47c	38th and W Streets, NW	029	05/08/18	*			
491	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	05/21/18	*			
51	N Street Extended, west of 25 th Street, NW	033	05/21/18	*			
52	22 nd Street between M and N Streets, NW	034	05/24/18	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	05/24/18	*			
53	22 nd and M Streets, NW	022, 034	05/24/18	*			
53a	22 nd and M Streets, NW	022, 034	05/24/18	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	05/14/18	*			
53c	L and 22 nd Streets, NW	022	05/14/18	*			
54	23 rd and O Streets, NW	034	05/14/18	*			
55	22 nd Street, south of Q Street, NW	035	05/14/18	*			
55a	22 nd Street, south of Q Street, NW	035	05/14/18	*			

				Condition			
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
56	23 rd and Massachusetts Ave, NW	036	05/14/18	*			
57	23 rd Street, south of Q Street, NW	036	05/14/18	*			
58 ¹	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	05/21/18	*			
60	Connecticut Ave, east of Rock Creek, NW	039	05/21/18	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	05/21/18	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	05/18/18	*			
63	Harvard Street and Rock Creek Parkway, NW	042	05/18/18	*			
64	Adams Mill Road, south of Irving Street, NW	043	05/18/18	*			
65	Kenyon Street and Adams Mill Road, NW	044	05/18/18	*			
65a	Kenyon Street and Adams Mill Road, NW	044	05/18/18	*			
66	Adams Mill Road and Lamont Street, NW	045	05/18/18	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	05/18/18	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	05/18/18	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	05/18/18	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	05/18/18	*			
70i	5 th and Quackenbos Streets, NW	049	05/22/18	*			
71	28th Street, west of Rock Creek Parkway, NW	050	05/22/18	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	05/11/18	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	05/11/18	*			
73	O Street Extended and Rock Creek Parkway, NW	052	05/11/18	*			
74^{1}	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	05/15/18	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	05/15/18	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	05/15/18	*			
78^{1}	28th Street Extended, west of Rock Creek, NW	057	N/A				
79¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	05/11/18	*			
84a	26 th and P Streets, NW	060	05/11/18	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	05/30/18	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	05/29/18	*			
89	First and V St, NW (First St Tunnel)	019	05/30/18	*			

				Со	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
90	First and V St, NW (First St Tunnel)	019	05/30/18	*			
91	First and V St, NW (First St Tunnel)	019	05/30/18	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	05/25/18	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	05/25/18	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	05/25/18	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	05/29/18	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	05/29/18	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 -012	05/25/18	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	05/25/18	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	05/25/18	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	05/29/18	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	05/29/18	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	05/29/18	*			
104	Poplar Point PS Discharge Chamber	N/A	05/29/18	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	05/29/18	*			

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

	Outling that The Outlet										
					Tic	le					
			C	utfall	Gate 7		Tide Gate				
			Co	ndition Present? 0		Condition		ition CSO S			
NPDE		Date		Needs				Needs		Needs	
Outfal	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
003^{1}	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									

				Outfall ndition	Tio Ga Press	ite		Tide Gate Condition		O Sign	
NPDES		Date		Needs	1705		00.	Needs	CD.	Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK		OK	Work	Notes, Work Needed or Performed
003a	Joint Base Anacostia Bolling, Macdill and Arnold Ave SW	05/29/18	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	05/09/18	*		*		*		*		
006^{1}	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	05/09/18	*		*		*		*		
009	O St. Sewage Pumping Station, SE	05/24/18	*		*		*		*		
010	O St. Sewage Pumping Station, SE	05/24/18	*			*			*		
011	Main Sewage Pumping Station, SE	05/24/18	*			*			*		
011(a)	Main Sewage Pumping Station, SE	05/24/18	*		*		*		*		
012	Main Sewage Pumping Station, SE	05/24/18	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	05/24/18	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	05/24/18	*		*			*	*		The 7'x7'x4' tidegate is currently being fabricated. We are awaiting construction permit approval from base officials. 18-390123
015	Navy Yard, aligned with 9th Street, SE	05/24/18	*			*			*		
016	12 th and O Streets, SE	05/03/18	*		*		*		*		
017	M and Water Street, SE	05/03/18	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	05/03/18	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	05/25/18	*		*		*			*	18-390189 SAM 101 foreman has ordered a new sign. Proposed install scheduled for June 2018.
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	05/25/18	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	05/01/18	*		*		*		*		
021	Rock Creek Parkway and C St., NW	05/01/18	*		*		*		*		
022	Rock Creek Parkway and G St., NW	05/01/18	*		*		*		*		
024	South of 30th and K Streets, NW ¹	05/01/18	*		*		*		*		
025	South of 31st and K Streets, NW	05/01/18	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	05/01/18	*		*		*		*		
027	33 rd and Water Sts., NW	05/01/18	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	05/01/18	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	05/01/18	*			*			*		
	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	05/21/18	*			*			*		

				Tide Outfall Gate		T: a	le Gate				
				uijaii ndition	Pres				CSO Sign		
NPDES		Date		Needs	1 705			Needs	CD	Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK		Notes, Work Needed or Performed
033	Across street from St. Francis Jr. High and aligned with N St., NW.	05/21/18	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	05/14/18	*			*			*		
035	P St. Bridge and Rock Creek Parkway	05/14/18	*			*			*		
036	22nd Street, South of Q Street NW.	05/17/18	*		*		*		*		
037^{1}	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	05/21/18	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	05/21/18	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	05/21/18	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	05/17/18	*		*		*		*		
042	Harvard St. and Beach Dr NW.	05/17/18	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	05/17/18	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	05/17/18	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	05/17/18	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	05/18/18	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	05/18/18	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	05/18/18	*		*			*	*		05/18/18 Foremen met with contractor to discuss gate repair. 18-389375
049	North of Piney Branch Parkway and 17 th St.	05/18/18	*		*		*		*		
050	Rock Creek Parkway and L St., NW	05/22/18	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	05/30/18	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	05/30/18	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	05/15/18	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	05/15/18	*		*		*		*		
0571	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	05/17/18	*		*		*		*		

^{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

Pumping	No. of	No.	No.	Screens or Pumps			Work Order	
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Number	Schedule to Restore to Service
Main	31	3	4	None	-	-	-	-
Eastside	3	2	4	Screen # 1	05/01/18 -05/31/18	Screen not running	18-208694	Anticipated 06/30/18. Capital improvement project being developed to replace screen.
Poplar Point	1	2	4	None	-	-	-	
Potomac	31	4	5	Screen # 2	05/07/18-05/31/18	Bent Scraper		Screen is under warranty and awaiting repair.

Notes:

Table 2-4
Pumping Stations – Preventive Maintenance

	Date	Type of Preventive Maintenance	Work Order	
Pumping Station	Performed	Performed ¹	Number	Comments
Main	05/30/18	Group A	18-375137	Add oil, grease bearings and replace packing if needed.
O St	05/21/18	Group A	18-403297	Add oil, grease bearings and replace packing if needed.
Eastside	05/07/18	Group A	18-330190	Add oil, grease bearings and replace packing if needed.
Poplar Point	See Note 3	See Note 3		
Potomac	05/07/18	Group A	18-330341	Add oil, grease bearings and replace packing if needed.
Rock Creek	05/04/18	Group A	18-333744	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	05/30/18	Group A	18-304103	Add oil, grease bearings and replace packing if needed.
Earl Place	05/16/18	Group A	18-375165	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	05/26/18	Group B	N/A	

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
- 3. DC Water's construction contractor is performing inspection and maintenance activities as part of completion of punch list and closeout activities for Poplar Point Pumping Station

Table 2-5
Pumping Stations – Pumpage

	Sanitary Pumpage		Screenings Collected (units)	Pumpage of CSO from First Street Tunnel back to Sewer System		
Pumping Station	Total Wastewater (mg)	Daily Average Wastewater (mg)		Date	Volume (mg)	
Main ^{1,2}	1762.04	56.84	See Notes	N/A	N/A	
O St ^{1,2}	164.37	5.30	See Notes	N/A	N/A	
Eastside	149.47	4.82	N/A	N/A	N/A	
Poplar Point	433.59	13.99	N/A	N/A	N/A	
Potomac	5675.97	183.10	N/A	N/A	N/A	
Rock Creek	396.43	12.79	N/A	N/A	N/A	
Upper Anacostia	48.54	1.57	N/A	N/A	N/A	
Earl Place	0.274	0.009	N/A	N/A	N/A	
1 st Street Tunnel	N/A	N/A	N/A	05/03/18	0.15	
Dewatering				05/14/18	0.63	
				05/16/18	0.14	
				05/17/18	0.39	
				05/19/18	0.34	
				05/24/18	0.14	

- 1. Quantification of captured materials is not possible on monthly basis.
- 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

Inflatable Dam		Was Dam Out of Service			
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Schedule to Restore to Service
14 - East	05/14/18	No	N/A	N/A	N/A
14 - West	05/14/18	No	N/A	N/A	N/A
15	05/10/18	No	N/A	N/A	N/A
15A	05/10/18	No	N/A	N/A	N/A
16 - East	05/14/18	No	N/A	N/A	N/A
16 - West	05/14/18	No	N/A	N/A	N/A
34	05/10/18	No	N/A	N/A	N/A
35	05/10/18	No	N/A	N/A	N/A
52	05/10/18	No	N/A	N/A	N/A

Table 2-7

Inflatable Dams & SCADA Sites - Wet Weather Operations

initiative bains & SCHDIT Sites Wet Weather Operations					
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow			
14 (E & W)	5/17/18	0 hr. 18 mins			
	5/29/18	0 hr. 29 mins			
	5/30/18	0 hr. 11 mins			
15	None	N/A			
15A	5/22/18	0 hr. 16 mins			
	5/31/18	0 hrs. 12 mins.			
16 (E & W)	5/22/18	0 hr. 23 mins			
	5/31/18	0 hr. 20 mins			
34	None	N/A			
35	5/04/18	0 hr. 43 mins			
	5/14/18	0 hr. 16 mins			
	5/18/18	0 hr. 0 mins. 17 secs			
	5/19/18	0 hr. 10 mins.			
	5/22/18	0 hrs. 17 mins.			
	5/31/18	0 hrs. 52 mins.			
52	5/22/18	0 hrs. 16 mins.			
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow			
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			
Outfall Sewer Control Gates	Operational Status	Position			
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			

3	DRY WE	TATHED	OVEDEL	$\mathbf{O}\mathbf{W}\mathbf{C}$
J.	1718 1 99 12	'A	. , , , , , , , , ,	A) VV (7

There was no dry weather combined sewer overflow during May 2018.

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

				Inspections	•			Clea	ning		
				Total Anacostia CBs	Total Anacostia CBs	CBs Clear Last M		CB's C		Total CBs This Year	
		CBs in	CBs in Anacostia	Inspected Once this	Inspected Twice this						
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1447	1404	650	592	130	12	12	454	439	466	451
2	2774	2584	451	315	105	268	204	115	109	383	313
3	3630	181	0	0	0	1105	1	1252	2	2357	3
4	3459	1683	0	0	0	2684	1436	271	91	2955	1527
5	3928	1732	1674	576	17	67	61	565	557	632	618
6	3269	2618	2610	763	65	1215	740	85	84	1300	824
7	3700	35	35	10	1	2626	6	11	0	2637	6
8	2801	210	210	173	1	2024	173	17	1	2041	174
Grand Total	25008 ¹	10447 ²	5630 ²	2429	319	10001	2633	2770	1283	12771	3916
% Cleaned/Inspected to Date				43%	6%	40%	25%			51%	37%

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

^{2. 127} catch basins in CSS and 44 in Anacostia CSS have been identified as not being part of those areas.

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

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (LB)
Netting System CSO 018	05/04/18	Good	Net replacement	None. Waiting for	None
				crane services.	
Bar Rack CSO 040	05/21/18	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	05/17/18	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatable 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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	22
Days not Operating	3
Reason not Operating	Maintenance, wind, low water levels, lightning.
# Skimmer in Fleet	4 Skimmers
# Skimmers Out of Service	None (on the last day of the month)
Dates	N/A
Reason	N/A
Plan to Restore to Service	N/A
Amount Material Collected	70 tons this month. Calendar year to date 250 tons.
Nature of Material	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.

Status: no activities 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

		Date	Condition			Work Performed
Pumping Station	Inspector	Inspected	Good	Needs Work	Work Needed	or Schedule for Completion
Bar Racks at O						
Street Storm	KW	05/17/18	X			
Pumps (CSO 010)						
Bar Racks at Main						
Storm Pumps	KW	05/17/18	X			
(CSO 011)						

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

Rain Data

5.2

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
5/1/2018	0	0	0	0	0
5/2/2018	0	0	0	0	0
5/3/2018	0	0	0	0	0
5/4/2018	0.08	0.07	0.06	0.08	0
5/5/2018	0	0.01	0.01	0	0
5/6/2018	0	0	0	0	0
5/7/2018	0	0	0	0	0
5/8/2018	0	0	0	0	0
5/9/2018	0	0	0	0	0
5/10/2018	0	0	0	0	0
5/11/2018	0	0	0	0	0
5/12/2018	0.02	0	0.03	0	0.15
5/13/2018	0.41	0.54	0.49	0.42	0.52
5/14/2018	1.24	1.09	1.08	1.16	1.49
5/15/2018	0.79	0.83	0.86	1.25	0.41
5/16/2018	0.99	1.07	0.93	0.92	0.82
5/17/2018	1.16	1.08	1.29	1.30	0.97
5/18/2018	1.20	1.31	1.12	1.15	1.01
5/19/2018	0.79	0.83	0.73	1.05	0.77
5/20/2018	0	0	0	0	0
5/21/2018	0	0	0	0	0
5/22/2018	1.22	1.12	1.12	1.36	1.23
5/23/2018	0	0	0	0	0
5/24/2018	0	0	0	0	0
5/25/2018	0	0	0	0	0
5/26/2018	0	0	0.02	0.01	0.03
5/27/2018	0.10	0.02	0.02	0.07	0
5/28/2018	0.01	0.01	0.04	0.02	0.01
5/29/2018	0	0	0	0	0
5/30/2018	0.01	0.01	0.01	0	0
5/31/2018	1.27	1.19	1.29	0.91	1.32
TOTAL	8.01	7.98	7.80	8.79	7.41

5.3	Wet Weather Overflows
Comb	pined Sewer System Model Results are summarized below
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Combined Sewer System Model Results Period: April, May, June 2018 SCENARIO: PCM_QuarterlyReport_2018Q2, revised July 19, 2018

NDDEGN	5	D O	Number of Overflows	CSO Overflow	Total Duration of Overflow	Avg Duration of Overflow	Maximum Duration of Overflow	Minimum Duration of Overflow
NPDES No.	Description	Data Source	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
Anacostia CSO 005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
003	Good Hope Road, West of Nichols	Wodeled	0	0.00	•	0.00	0.00	0.00
006	Ave.,SE				separated		4.05	0.50
007*	13 th Street and Ridge Place,SE 2nd Street, 300 feet North of N Place,	Metered	4	0.62	3.59	0.90	1.25	0.50
009*	SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010*	O Street SewagePumping Station, SE (pumped Overflow)	Metered	5	16.17	4.82	0.96	1.83	0.33
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 SewagePumping Station, SE (gravity overflow)	Metered	3	3.20	1.33	0.44	0.83	0.33
012*	North of Main SewagePumping Station, SE (Tiber Creek)	Metered	6	11.55	4.50	0.75	1.33	0.25
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
015 016	9th and M Streets, SE 12th and M Streets, SE				ated to tunnel ated to tunnel			
017	14th and M Streets, SE				ated to tunnel			
	Barney Circle andPennsylvania Ave,				ated to tunnel			
019*	Northeast Boundary	Metered	7	38.46	33.29	4.76	10.92	0.11
019A*	Northeast Boundary - Tunnel OF	Metered	1	6.46	4.92	4.92	4.92	4.92
	SUBTOTAL			76.46				
otomac CSOs	,							
003A*	JBAB Tunnel OF	Metered	1	9.20	4.75	4.75	4.75	4.75
000	23rd Street, North of Constitution Ave,	Medel	40	F0.00	00.75	0.04	0.00	0.50
	NW (Easby Point) Northeast ofRoosevelt Bridge, NW	Modeled Modeled	12 13	58.92 218.61	33.75 34.75	2.81 2.67	6.00 6.75	0.50
021	27th and K Streets, NW	Modeled	17	41.19	90.75	5.34	41.00	0.50
024	30th and K Streets, NW	Modeled	14	13.62	20.75	1.48	4.00	0.25
025	31st & K St NW	Modeled	7	0.41	5.25	0.75	1.50	0.25
026	Wisconsin Avenue andK St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027 028	Water Street West of Street, NW 36th and M Streets, NW	Modeled Modeled	15 20	15.89 6.91	52.25 151.25	3.48 7.56	17.00 62.50	0.50
	Canal Road 1000 feet east of Rock							
029	Creek,NW SUBTOTAL	Modeled	16	24.16 388.91	56.00	3.50	18.75	0.75
Rock Creek								
	Pennsylvania Avenue, East Rock				separated			
031 032	Creek, NW 26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
032	N Street extendedwest of 25th	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	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
035 036	22nd Street south of Q Street, NW 22nd Street South of Q Street, NW	Modeled Modeled	0 15	0.00 0.872	0.00 32.75	0.00 2.18	7.00	0.00
	Northwest of Belmontand Rock Creek	Wodeled	10	0.072	separated	2.10	7.00	0.20
	and Potomac Parkway North of Belmont Road,east of		1					
038	Kalorama Circle, NW Connecticut Avenue east of Rock	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Creek, NW Biltmore Street extended east of	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	RockCreek, NW Ontario extended and Rock Creek	Modeled	1	0.02	0.25	0.25	0.25	0.25
041	Parkway Harvard Street and RockCreek	Modeled	0	0.00	0.00	0.00	0.00	0.00
	Parkway, NW	Modeled	3	0.07	0.75	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	5	1.42	2.50	0.50	0.50	0.50
	Kenyon Street and Adams Mill Road, NW	Modeled	3	0.006	0.75	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	7	0.14	2.75	0.39	0.50	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	5	0.06	2.00	0.40	0.50	0.25
047	Ingleside Terrace extended and Piney Branch Parkway Mt. Pleasant Street extended and Piney	Modeled	4	0.031	1.75	0.44	0.50	0.25
048	Branch Parkway	Modeled	5	0.26	2.00	0.40	0.50	0.25
049	Piney Branch and LamontStreet, NW	Modeled	15	46.99	39.00	2.60	8.75	0.50
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			
	West Side of Rock Creek300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
054	Normanstone Drive extended west of			0.00	0.00	0.00	0.00	
054					. 0.00	. 0.00	0.00	0.00
056	Rock Creek, NW 28th Street extended west of Rock	Modeled	0	0.00	separated	2.55		
056 057	Rock Creek, NW 28th Street extended west of Rock Creek, NW Connecticut Avenue and Rock Creek	Modeled	0	0.00	separated			
056	Rock Creek, NW 28th Street extended west of Rock Creek, NW	Modeled	0	0.00		0.00	0.00	0.00

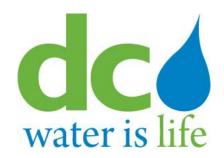
District of Columbia Water and Sewer Authority

Combined Sewer System Model Results Period: April, May, June 2018 SCENARIO: PCM_QuarterlyReport_2018Q2, revised July 19, 2018

			Number of	cso		Avg Duration		Minimum Duration of
			Overflows	Overflow	Overflow	of Overflow	Overflow	Overflow
NPDES No.	Description	Data Source	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
	TOTAL			515.24				

I:\SEWER\CSO QUARTERLY REPORT\CSO 2nd Quarter Report 2018\[Y2018Q2_Report_FINAL.XLSX]Q2Y2018

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 2018

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 2018

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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

		Condition		ndition			
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
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	06/01/18	*			
7	W Street and Railroad Ave, SE	005	06/01/18	*			
81	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	06/01/18	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	06/01/18	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	06/26/18	*			
11	"O" Street Pumping Station	011(a)	06/29/18	*			
12	Storm Pump Discharge at Main Pumping Station	011	06/18/18	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	06/22/18	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	06/22/18	*			
15	South Capitol and E Streets	010	06/14/18	*			
15a	Half and L Streets, SE	010	06/14/18	*			
15b	South Capitol and I Streets	010	06/11/18	*			
15c	South Capitol and I Streets	010	06/11/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	06/14/18	*			
17	4 th and N Streets, SE, Both Extended	013	06/04/18	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	06/27/18	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	06/11/18	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	06/04/18	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	06/11/18	*			
19	9 th and M Streets, SE	015	06/11/18	*			
19a	9 th and M Streets, SE	015	06/11/18	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	06/11/18	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	06/11/18	*			
20	12 th and M Streets, SE	016	06/26/18	*			
20a	12 th and M Streets, SE	016	06/26/18	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	06/26/18	*			
21	14 th and M Streets, SE	017	06/04/18	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	06/04/18	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	06/04/18	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	06/04/18	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	06/04/18	*			
22d	Kentucky Ave and Potomac Street, SE	018	06/04/18	*			
22e	14th Street and Kentucky Ave, SE	018	06/04/18	*			
23	Independence Ave, 21st Street, SE, Extended	019	06/04/18	*			
24a	East Capitol St, west of RFK stadium	019	06/04/18	*			
28	21st and Constitution Ave, NW	020	06/06/18	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	06/06/18	*			
30	17 th and D Streets, NW	020	06/06/18	*			
31	15 th Street and Pennsylvania Ave, NW	020	06/06/18	*			
33	10 th and F Streets, NW	020	06/06/18	*			
34	23 rd Street, north of Constitution Ave, NW	020	06/14/18	*			
34a	23 rd Street near C Street, NW	020	06/06/18	*			
35	Northeast of Roosevelt Bridge, NW	021	06/14/18	*			
36	27th and I Streets, NW	022	06/06/18	*			
36a	New Hampshire Ave and Eye Street, NW	022	06/06/18	*			
36b	19th and L Streets, NW	022, 034	06/05/18	*			

				Ca	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
36d	17 th and L Streets, NW	022, 034	06/05/18	*			
36g	18 th and M Streets, NW	022, 034	06/05/18	*			
36h	18 th and M Streets, NW	022, 034	06/05/18	*			
37	27 th and Eye Streets, NW	022	06/06/18	*			
38	29 th and K Streets, NW	024	06/08/18	*			
38a	30 th Street, south of K Street, NW	024	06/08/18	*			
39a	30 th and K Streets, NW	024	06/08/18	*			
39b	30 th and K Streets, NW	024	06/08/18	*			
41b	31st and K Streets, NW	025	06/08/18	*			
41c	31st and K Streets, NW	025	06/08/18	*			
42	Wisconsin Ave and K Street, NW	026	06/05/18	*			
43	Potomac and Water Streets, NW	027	06/05/18	*			
43a	Potomac and Water Streets, NW	027	06/05/18	*			
44	Water Street, west of Potomac St, NW	027	06/05/18	*			
45	36 th and M Streets, NW	028	06/01/18	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	06/01/18	*			
47	38th Street and Reservoir Road, NW	029	06/01/18	*			
47a	37th and T Streets, NW	029	06/01/18	*			
47b	37th and T Streets, NW	029	06/01/18	*			
47c	38th and W Streets, NW	029	06/01/18	*			
491	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	06/15/18	*			
51	N Street Extended, west of 25th Street, NW	033	06/15/18	*			
52	22 nd Street between M and N Streets, NW	034	06/16/18	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	06/19/18	*			
53	22 nd and M Streets, NW	022, 034	06/15/18	*			
53a	22 nd and M Streets, NW	022, 034	06/15/18	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	06/11/18	*			
53c	L and 22 nd Streets, NW	022	06/11/18	*			
54	23 rd and O Streets, NW	034	06/11/18	*			
55	22 nd Street, south of Q Street, NW	035	06/11/18	*			
55a	22 nd Street, south of Q Street, NW	035	06/11/18	*			
56	23 rd and Massachusetts Ave, NW	036	06/11/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
57	23 rd Street, south of Q Street, NW	036	06/11/18	*			
58 ¹	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	06/06/18	*			
60	Connecticut Ave, east of Rock Creek, NW	039	06/06/18	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	06/06/18	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	06/13/18	*			
63	Harvard Street and Rock Creek Parkway, NW	042	06/13/18	*			
64	Adams Mill Road, south of Irving Street, NW	043	06/13/18	*			
65	Kenyon Street and Adams Mill Road, NW	044	06/13/18	*			
65a	Kenyon Street and Adams Mill Road, NW	044	06/13/18	*			
66	Adams Mill Road and Lamont Street, NW	045	06/13/18	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	06/13/18	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	06/13/18	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	06/13/18	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	06/13/18	*			
70i	5 th and Quackenbos Streets, NW	049	06/01/13	*			
71	28th Street, west of Rock Creek Parkway, NW	050	06/01/18	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	06/08/18	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	06/08/18	*			
73	O Street Extended and Rock Creek Parkway, NW	052	06/08/18	*			
74 ¹	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	06/12/18	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	06/12/18	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	06/12/18	*			
78^{1}	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	06/08/18	*			
84a	26 th and P Streets, NW	060	06/08/18	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	06/18/18	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	06/18/18	*			
89	First and V St, NW (First St Tunnel)	019	06/18/18	*			
90	First and V St, NW (First St Tunnel)	019	06/18/18	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
91	First and V St, NW (First St Tunnel)	019	06/18/18	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	06/20/18	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	06/26/18	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	06/26/18	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	06/26/18	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	06/26/18	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 -012	06/26/18	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	06/20/18	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	06/20/18	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	06/27/18	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	06/27/18	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	06/27/18	*			
104	Poplar Point PS Discharge Chamber	N/A	06/27/18	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	06/27/18	*			

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

					Tia	le					
			O	utfall	Ga	te	Tid	e Gate			
			Co	ndition	Prese	ent?	Cor	ndition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
003 ¹	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling, Macdill and Arnold Ave SW	06/28/18	*		*		*		*		

				Outfall	Tio Ga	ite		le Gate			
		_	Co	ndition	Pres	ent?	Co.	ndition	CS	O Sign	
NPDES	7	Date	OV	Needs	37	NT.	OIZ	Needs	OK	Needs	N. WIN II D.C. I
Outfall	Location Across from Navy Yard, aligned with Parsons Ave., SE	<i>Inspected</i> 06/07/18	OK *	Work	Yes *	NO	OK *	Work	*	Work	Notes, Work Needed or Performed
$005 \ 006^{1}$	•										
	Good Hope Road and Welsh Memorial Bridge	N/A	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	06/07/18	*		*		*		*		
010	O St. Sewage Pumping Station, SE O St. Sewage Pumping Station, SE	06/18/18	*		-,-	*	7,1		*		
	Main Sewage Pumping Station, SE	06/18/18	*			*			*		
	Main Sewage Pumping Station, SE Main Sewage Pumping Station, SE	06/18/18	*		*		*		*		
` ′	Main Sewage Pumping Station, SE Main Sewage Pumping Station, SE	06/18/18	*		*		*		*		
012	Southeast Federal Center, aligned with 4 th St.	06/18/18	*		*		*		*		
	Navy Yard, aligned with 6 th St., SE	06/18/18	*		*		*		*		06/16/18 Contractors completed gate repair operations 18-172766
015	Navy Yard, aligned with 9th Street, SE	06/18/18	*			*			*		
016	12th and O Streets, SE	06/18/18	*		*		*		*		
017	M and Water Street, SE	06/18/18	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	06/18/18	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	06/29/18	*		*		*			*	18-435560 Displaced sign installed 06/29/18 without outfall labels. Outfall labels were ordered, proposed install scheduled for July 2018.
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	06/29/18	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	06/07/18	*		*		*		*		
021	Rock Creek Parkway and C St., NW	06/07/18	*		*		*		*		
022	Rock Creek Parkway and G St., NW	06/07/18	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	06/07/18	*		*		*		*		
025	South of 31st and K Streets, NW	06/17/18	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	06/07/18	*		*		*		*		
027	33 rd and Water Sts., NW	06/17/18	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	06/07/18	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	06/07/18	*			*			*		
0311	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	06/15/18	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	06/15/18	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	06/11/18	*			*			*		
035	P St. Bridge and Rock Creek Parkway	06/11/18	*			*			*		

					Tic						
				utfall	Ga			le Gate			
		_	Co	ndition	Pres	ent?	Co.	ndition	CS	O Sign	
NPDES	Location	Date In an a stad	ОК	Needs Work	Vac	Mo	OV	Needs Work	OK	Needs	Notes Work Nooded on Denformed
Outfall 036	22nd Street, South of Q Street NW.	<i>Inspected</i> 06/18/19	*	WOIK	1 es	NO	*	WOIK	*	WOIK	Notes, Work Needed or Performed
030° 037^{1}	Waterside Dr. and Rock Creek Parkway	N/A					-		*		
037	•										
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	06/06/18	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	06/06/18	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	06/06/18	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	06/12/18	*		*		*		*		
042	Harvard St. and Beach Dr NW.	06/12/18	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	06/12/18	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	06/12/18	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	06/12/18	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	06/13/18	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	06/13/18	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	06/13/18	*		*		*		*		06/15/18 Wood Forms were removed. All repair operations complete. 18-419628
049	North of Piney Branch Parkway and 17th St.	06/13/18	*		*		*		*		
050	Rock Creek Parkway and L St., NW	06/01/18	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	06/19/18	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	06/19/18	*		*		*		*		
053^{1}	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	06/12/18	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	06/12/18	*		*		*		*		
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	06/18/18	*		*		*		*		

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

Pumping	No. of	No.	No.	Screens or Pumps			Work Order	
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Number	Schedule to Restore to Service
Main	31	3	4	None	-	-	-	-
Eastside	3	2	4	Screen # 1	06/01/18 -06/30/18	Screen not running		Anticipated 08/31/18. Capital improvement project being developed to replace screen.
Poplar Point	1	2	4	None	-	-	-	
Potomac	31	4	5	Screen # 2	06/01/18-06/30/18	Bent Scraper		Anticipated 08/31/18. Screen is awaiting repair by vendor, parts not in stock.

Table 2-4
Pumping Stations – Preventive Maintenance

	•	T amping stations Treveners		
	Date	Type of Preventive Maintenance	Work Order	
Pumping Station	Performed	$Performed^{l}$	Number	Comments
Main	06/09/18	Group A	18-521762	Add oil, grease bearings and replace packing if needed.
O St	06/21/18	Group A	18-453425	Add oil, grease bearings and replace packing if needed.
Eastside	06/07/18	Group A	18-381775	Add oil, grease bearings and replace packing if needed.
Poplar Point	See Note 3	See Note 3		
Potomac	06/07/18	Group A	18-382088	Add oil, grease bearings and replace packing if needed.
Rock Creek	06/04/18	Group A	18-375151	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	06/23/18	Group A	18-521870	Add oil, grease bearings and replace packing if needed.
Earl Place	06/18/18	Group A	18-400742	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	06/22/18	Group B	18-521431	

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
- 3. DC Water's construction contractor is performing inspection and maintenance activities as part of completion of punch list and closeout activities for Poplar Point Pumping Station

Table 2-5
Pumping Stations – Pumpage

	Sanit Pump	•	Screenings Collected (units)	First Stre	of CSO from eet Tunnel wer System
Pumping Station	Total Wastewater (mg)	Daily Average Wastewater (mg)		Date	Volume (mg)
Main ^{1,2}	1567.76	52.26	See Notes	N/A	N/A
O St ^{1,2}	166.15	5.54	See Notes	N/A	N/A
Eastside	142.46	4.75	N/A	N/A	N/A
Poplar Point	379.30	12.64	N/A	N/A	N/A
Potomac	4583.99	152.80	N/A	N/A	N/A
Rock Creek	205.80	6.86	N/A	N/A	N/A
Upper Anacostia	50.02	1.67	N/A	N/A	N/A
Earl Place	0.324	0.011	N/A	N/A	N/A
1st Street Tunnel	N/A	N/A	N/A	06/03/18	0.81
Dewatering				06/04/18	0.15
				06/19/18	0.16

- 1. Quantification of captured materials is not possible on monthly basis.
- 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

Inflatable Dam		Was Dam Out of Service			
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Schedule to Restore to Service
14 - East	06/14/18	No	N/A	N/A	N/A
14 - West	06/14/18	No	N/A	N/A	N/A
15	06/14/18	No	N/A	N/A	N/A
15A	06/14/18	No	N/A	N/A	N/A
16 - East	06/14/18	No	N/A	N/A	N/A
16 - West	06/14/18	No	N/A	N/A	N/A
34	06/14/18	No	N/A	N/A	N/A
35	06/14/18	No	N/A	N/A	N/A
52	06/14/18	No	N/A	N/A	N/A

Table 2-7

Inflatable Dams & SCADA Sites - Wet Weather Operations

I CL , II D CL , N	0	
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow
14 (E & W)	6/13/18	0 hr. 21 mins
	6/14/18	0 hr. 53 mins
	6/18/18	0 hr. 2 mins
	6/19/18	0 hr. 1 min
	6/21/18	0 hr. 20 min
15	None	N/A
15A	None	N/A
16 (E & W)	None	N/A
34	None	N/A
35	6/09/18	0 hr. 9 mins
	6/11/18	0 hr. 14 mins
	6/19/18	0 hr. 30 mins
	6/20/18	0 hr. 1 min
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow
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
Outfall Sewer Control Gates	Operational Status	Position
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

2	DDV W	FATHED	OVERFI	OWC
.7	IJK Y VV	r.a i Hr.k	UVEREL	

There was no dry weather combined sewer overflow during June 2018.

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

			Inspections Clea				Clea	aning				
			CD :	Total Anacostia CBs	Total Anacostia CBs	CBs Cleaned Thru Last Month					Total CBs Cleaned This Year to Date	
		CBs in	CBs in Anacostia	Inspected Once this	Inspected Twice this							
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS	
1	1447	1404	650	643	565	466	451	764	763	1230	1214	
2	2774	2584	451	435	226	383	313	81	79	464	392	
3	3630	181	0	0	0	2357	3	8	0	2365	3	
4	3459	1683	0	0	0	2955	1527	48	40	3003	1567	
5	3928	1732	1674	1453	22	632	618	901	888	1533	1506	
6	3269	2618	2610	2517	218	1300	824	429	429	1729	1253	
7	3700	35	35	35	22	2637	6	16	0	2653	6	
8	2801	210	210	203	1	2041	174	33	30	2074	204	
Grand Total	25008 ¹	10447 ²	5630 ²	5286	1054	12771	3916	2280	2229	15051	6145	
% Cleaned/Inspected to Date				94%	19%	51%	37%			60%	59%	

- 1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.
- 2. 127 catch basins in CSS and 44 in Anacostia CSS have been identified as not being part of those areas.

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

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (LB)
Netting System CSO 018	6/7/2018	Good	Net replacement	Routine cleaning	None
	6/13/2018	Good	None	Nets replaced	350 pounds
Bar Rack CSO 040	6/06/18	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	6/12/18	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatable 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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	5
Reason not Operating	Maintenance, wind, low water levels, lightning.
# Skimmer in Fleet	4 Skimmers
# Skimmers Out of Service	None (on the last day of the month)
Dates	N/A
Reason	N/A
Plan to Restore to Service	N/A
Amount Material Collected	220 tons this month. Calendar year to date 470 tons.
Nature of Material	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.

Status: no activities 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

		Date	Condition		Work Order		Work Performed or
Pumping Station	Inspector	Inspected	Good	Needs Work	Number Work Needed		Schedule for Completion
Bar Racks at O Street Storm Pumps (CSO 010)	KW	06/28/18	X		18-468559		
Bar Racks at Main Storm Pumps (CSO 011)	KW	06/28/18	X		18-468552		

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

Rain Data

5.2

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
6/1/2018	0	0	0	0	0
6/2/2018	0.11	0.23	0.22	0.29	0.05
6/3/2018	2.15	2.19	1.73	1.87	1.65
6/4/2018	0	0	0	0	0
6/5/2018	0	0	0	0	0
6/6/2018	0	0	0	0	0
6/7/2018	0	0	0	0	0
6/8/2018	0	0	0.03	0	0.96
6/9/2018	0.24	0.23	0.21	0.18	0.10
6/10/2018	0	0.01	0	0	0
6/11/2018	0.26	0.31	0.45	0.33	0.42
6/12/2018	0	0	0	0	0
6/13/2018	0	0	0	0	0
6/14/2018	0	0	0	0	0
6/15/2018	0	0	0	0	0
6/16/2018	0	0	0	0	0
6/17/2018	0	0	0	0	0
6/18/2018	0	0	0	0	0
6/19/2018	0.51	0.52	0.48	0.53	1.12
6/20/2018	0.17	0.26	0.21	0.20	0.13
6/21/2018	0	0	0.01	0	0
6/22/2018	0.37	0.39	0.41	0.44	0.57
6/23/2018	0.11	0.15	0.13	0.18	0.06
6/24/2018	0.01	0.02	0.04	0.06	0.11
6/25/2018		0.01	0	0	0
6/26/2018		0	0	0	0
6/27/2018	0.12	0.13	0.12	0.05	0.04
6/28/2018		0	0	0	0
6/29/2018	0	0	0	0	0
6/30/2018	0	0	0	0	0
TOTAL	4.05	4.45	4.04	4.13	5.21

5.3	Wet Weather Overflows
Comb	oined Sewer System Model Results are summarized below

Combined Sewer System Model Results Period: April, May, June 2018 SCENARIO: PCM_QuarterlyReport_2018Q2, revised July 19, 2018

NDDEGN	5	D O	Number of Overflows	CSO Overflow	Total Duration of Overflow	Avg Duration of Overflow	Maximum Duration of Overflow	Minimum Duration of Overflow
NPDES No.	Description	Data Source	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
Anacostia CSO 005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
003	Good Hope Road, West of Nichols	Wodeled	0	0.00	•	0.00	0.00	0.00
006	Ave.,SE				separated		4.05	0.50
007*	13 th Street and Ridge Place,SE 2nd Street, 300 feet North of N Place,	Metered	4	0.62	3.59	0.90	1.25	0.50
009*	SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010*	O Street SewagePumping Station, SE (pumped Overflow)	Metered	5	16.17	4.82	0.96	1.83	0.33
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 SewagePumping Station, SE (gravity overflow)	Metered	3	3.20	1.33	0.44	0.83	0.33
012*	North of Main SewagePumping Station, SE (Tiber Creek)	Metered	6	11.55	4.50	0.75	1.33	0.25
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
015 016	9th and M Streets, SE 12th and M Streets, SE				ated to tunnel ated to tunnel			
017	14th and M Streets, SE				ated to tunnel			
	Barney Circle andPennsylvania Ave,				ated to tunnel			
019*	Northeast Boundary	Metered	7	38.46	33.29	4.76	10.92	0.11
019A*	Northeast Boundary - Tunnel OF	Metered	1	6.46	4.92	4.92	4.92	4.92
	SUBTOTAL			76.46				
otomac CSOs	,							
003A*	JBAB Tunnel OF	Metered	1	9.20	4.75	4.75	4.75	4.75
000	23rd Street, North of Constitution Ave,	Medel	40	F0.00	00.75	0.04	0.00	0.50
	NW (Easby Point) Northeast ofRoosevelt Bridge, NW	Modeled Modeled	12 13	58.92 218.61	33.75 34.75	2.81 2.67	6.00 6.75	0.50
021	27th and K Streets, NW	Modeled	17	41.19	90.75	5.34	41.00	0.50
024	30th and K Streets, NW	Modeled	14	13.62	20.75	1.48	4.00	0.25
025	31st & K St NW	Modeled	7	0.41	5.25	0.75	1.50	0.25
026	Wisconsin Avenue andK St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027 028	Water Street West of Street, NW 36th and M Streets, NW	Modeled Modeled	15 20	15.89 6.91	52.25 151.25	3.48 7.56	17.00 62.50	0.50
	Canal Road 1000 feet east of Rock							
029	Creek,NW SUBTOTAL	Modeled	16	24.16 388.91	56.00	3.50	18.75	0.75
Rock Creek								
	Pennsylvania Avenue, East Rock				separated			
031 032	Creek, NW 26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
032	N Street extendedwest of 25th	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	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
035 036	22nd Street south of Q Street, NW 22nd Street South of Q Street, NW	Modeled Modeled	0 15	0.00 0.872	0.00 32.75	0.00 2.18	7.00	0.00
	Northwest of Belmontand Rock Creek	Wodeled	10	0.072	separated	2.10	7.00	0.20
	and Potomac Parkway North of Belmont Road,east of		1					
038	Kalorama Circle, NW Connecticut Avenue east of Rock	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Creek, NW Biltmore Street extended east of	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	RockCreek, NW Ontario extended and Rock Creek	Modeled	1	0.02	0.25	0.25	0.25	0.25
041	Parkway Harvard Street and RockCreek	Modeled	0	0.00	0.00	0.00	0.00	0.00
	Parkway, NW	Modeled	3	0.07	0.75	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	5	1.42	2.50	0.50	0.50	0.50
	Kenyon Street and Adams Mill Road, NW	Modeled	3	0.006	0.75	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	7	0.14	2.75	0.39	0.50	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	5	0.06	2.00	0.40	0.50	0.25
047	Ingleside Terrace extended and Piney Branch Parkway Mt. Pleasant Street extended and Piney	Modeled	4	0.031	1.75	0.44	0.50	0.25
048	Branch Parkway	Modeled	5	0.26	2.00	0.40	0.50	0.25
049	Piney Branch and LamontStreet, NW	Modeled	15	46.99	39.00	2.60	8.75	0.50
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			
	West Side of Rock Creek300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
054	Normanstone Drive extended west of			0.00	0.00	0.00	0.00	
054					. 0.00	. 0.00	0.00	0.00
056	Rock Creek, NW 28th Street extended west of Rock	Modeled	0	0.00	separated	2.55		
056 057	Rock Creek, NW 28th Street extended west of Rock Creek, NW Connecticut Avenue and Rock Creek	Modeled	0	0.00	separated			
056	Rock Creek, NW 28th Street extended west of Rock Creek, NW	Modeled	0	0.00		0.00	0.00	0.00

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results Period: April, May, June 2018 SCENARIO: PCM_QuarterlyReport_2018Q2, revised July 19, 2018

					Total		Maximum	Minimum
			Number of	CSO	Duration of	Avg Duration	Duration of	Duration of
			Overflows	Overflow	Overflow	of Overflow	Overflow	Overflow
NPDES No.	Description	Data Source	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
	TOTAL			515.24				

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Prepared by: Greeley and Hansen LLC and Limno-Tech, Inc.