QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

SECOND QUARTER, 2020

Prepared By:

D.C. Water and Sewer Authority
Department of Sewer Operations
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 2020

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

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

Table 2-1
Regulator Structures

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5[1]	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	04/24/20	*			
7	W Street and Railroad Ave, SE	005	04/24/20	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	04/24/20	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	04/24/20	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	04/20/20	*			
11	"O" Street Pumping Station	011(a)	04/24/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	04/09/20	*			
13	2nd Street, 300 ft. north of N Place, SE	009	04/24/20	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	04/09/20	*			
15	South Capitol and E Streets	010	04/09/20	*			
15a	Half and L Streets, SE	010	04/09/20	*			
15b	South Capitol and I Streets	010	04/06/20	*			
15c	South Capitol and I Streets	010	04/10/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	04/09/20	*			
17	4th and N Streets, SE, Both Extended	013	04/07/20	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	04/20/20	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	04/07/20	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	04/20/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	04/07/20	*			
19	9th and M Streets, SE	015	04/10/20	*			
19a	9th and M Streets, SE	015	04/10/20	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	04/10/20	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	04/10/20	*			
20	12th and M Streets, SE	016	04/10/20	*			
20a	12th and M Streets, SE	016	04/10/20	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	04/10/20	*			
21	14th and M Streets, SE	017	04/10/20	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	04/10/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	04/08/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	04/08/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	04/08/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	04/08/20	*			
22e	14th Street and Kentucky Ave, SE	018	04/08/20	*			
23	Independence Ave, 21st Street, SE, Extended	019	04/21/20	*			
24a	East Capitol St, west of RFK stadium	019	04/21/20	*			
28	21st and Constitution Ave, NW	020	04/07/20	*			
29	22nd Street, between Constitution Ave and C St, NW	020	04/07/20	*			
30	17th and D Streets, NW	020	04/10/20	*			
31	15th Street and Pennsylvania Ave, NW	020	04/10/20	*			
33	10th and F Streets, NW	020	04/10/20	*			
34	23rd Street, north of Constitution Ave, NW	020	04/21/20	*			
34a	23rd Street near C Street, NW	020	04/07/20	*			
35	Northeast of Roosevelt Bridge, NW	021	04/21/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	04/10/20	*			
36	27th and I Streets, NW	022	04/07/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
36a	New Hampshire Ave and Eye Street, NW	022	04/07/20	*			
36b	19th and L Streets, NW	022, 034	04/10/20	*			
36d	17th and L Streets, NW	022, 034	04/10/20	*			
36g	18th and M Streets, NW	022, 034	04/10/20	*			
36h	18th and M Streets, NW	022, 034	04/10/20	*			
37	27th and Eye Streets, NW	022	04/07/20	*			
38	29th and K Streets, NW	024	04/07/20	*			
38a	30th Street, south of K Street, NW	024	04/07/20	*			
39a	30th and K Streets, NW	024	04/07/20	*			
39b	30th and K Streets, NW	024	04/07/20	*			
41b	31st and K Streets, NW	025	04/07/20	*			
41c	31st and K Streets, NW	025	04/07/20	*			
42	Wisconsin Ave and K Street, NW	026	04/07/20	*			
43	Potomac and Water Streets, NW	027	04/07/20	*			
43a	Potomac and Water Streets, NW	027	04/07/20	*			
44	Water Street, west of Potomac St, NW	027	04/07/20	*			
45	36th and M Streets, NW	028	04/06/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	04/06/20	*			
47	38th Street and Reservoir Road, NW	029	04/06/20	*			
47a	37th and T Streets, NW	029	04/06/20	*			
47b	37th and T Streets, NW	029	04/06/20	*			
47c	38th and W Streets, NW	029	04/06/20	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	04/22/20	*			
51	N Street Extended, west of 25th Street, NW	033	04/22/20	*			
52	22nd Street between M and N Streets, NW	034	04/21/20	*			
52a	N Street between 22nd and 23rd Streets, NW	034	04/21/20	*			
53	22nd and M Streets, NW	022, 034	04/10/20	*			
53a	22nd and M Streets, NW	022, 034	04/10/20	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	04/10/20	*			
53c	L and 22nd Streets, NW	022	04/10/20	*			
54	23rd and O Streets, NW	034	04/22/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
55	22nd Street, south of Q Street, NW	035	04/22/20	*			
55a	22nd Street, south of Q Street, NW	035	04/22/20	*			
56	23rd and Massachusetts Ave, NW	036	04/22/20	*			
57	23rd Street, south of Q Street, NW	036	04/22/20	*			
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	04/06/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	04/06/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	04/06/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	04/08/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	04/08/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	04/08/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	04/08/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	04/08/20	*			
66	Adams Mill Road and Lamont Street, NW	045	04/08/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	04/08/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	04/08/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	04/08/20	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	04/08/20	*			
70i	5th and Quackenbos Streets, NW	049	04/27/20	*			
71	28th Street, west of Rock Creek Parkway, NW	050	04/06/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	04/22/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	04/22/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	04/22/20	*			
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	04/22/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	04/22/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	04/22/20	*			
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	26th and P Streets, NW	060	04/22/20	*			
84a	26th and P Streets, NW	060	04/22/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	04/03/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
88	Flagler and Adams St. NW (First St Tunnel)	019	04/03/20	*			
89	First and V St, NW (First St Tunnel)	019	04/03/20	*			
90	First and V St, NW (First St Tunnel)	019	04/03/20	*			
91	First and V St, NW (First St Tunnel)	019	04/03/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	04/20/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	04/20/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	04/10/20	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	04/20/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	04/20/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	04/24/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	04/09/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	04/09/20		*	Replacement stop log is on-going at this location. DSS is working with contractor. No additional flow to the river due to missing stop log.	
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	04/24/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	04/24/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	04/24/20	*			
104	Poplar Point PS Discharge Chamber	N/A	04/24/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	04/24/20	*			

Notes:

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2-2
Outfalls and Tide Gates

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003[1]	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	04/24/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	04/24/20	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	04/24/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	04/09/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	04/09/20	*			*			*		
011	Main Sewage Pumping Station, SE	04/09/20	*			*			*		
011a	Main Sewage Pumping Station, SE	04/09/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	04/09/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	04/09/20	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	04/09/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	04/09/20	*			*			*		
016	12th and O Streets, SE	04/23/20	*		*		*		*		
017	M and Water Street, SE	04/23/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	04/23/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	04/20/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	04/20/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	04/23/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	04/23/20	*		*		*		*		
022	Rock Creek Parkway and G St., NW	04/23/20	*		*		*		*		
024	South of 30th and K Streets, NW[1]	04/23/20	*		*		*		*		
025	South of 31st and K Streets, NW	04/23/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	04/23/20	*		*		*		*		
027	33rd and Water Sts., NW	04/23/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	04/23/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	04/23/20	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	04/22/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	04/22/20	*		*		*		*		

NPDES Outfall	*Location*	*Date Inspected*	*Outfall Condition*		*Tide Gate Present?*		*Tide Gate Condition*		*CSO Sign*		*Notes, Work Needed or Performed*
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
034	Just west of St. Francis Jr. High and north of N St., NW	04/22/20	*			*			*		
035	P St. Bridge and Rock Creek Parkway	04/22/20	*			*			*		
036	22nd Street, South of Q Street NW.	04/23/20	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	04/06/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	04/06/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	04/06/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	04/23/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	04/23/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	04/23/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	04/23/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	04/23/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	04/08/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	04/08/20	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	04/08/20	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	04/08/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	04/06/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	04/23/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	04/23/20	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	04/22/20	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	04/22/20	*		*		*		*		
057[1]	28th Street and Rock Creek Parkway, NW	N/A									
058[1]	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	04/23/20	*		*		*		*		

Notes:

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

2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

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

Notes:

Table 2-4
Pumping Stations – Preventive Maintenance

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed [1,2]*	*Work Order Number*	*Comments*
Main	4/17/20	Group A	20-318216	Add oil, grease bearings and replace packing if needed.
O St	4/10/20	Group A	20-340234	Add oil, grease bearings and replace packing if needed.
Eastside	4/24/20	Group A	20-328156	Add oil, grease bearings and replace packing if needed.
Poplar Point	4/24/20	Group A	20-321559	Add oil, grease bearings and replace packing if needed.
Potomac	4/24/20	Group A	20-331656	Add oil, grease bearings and replace packing if needed.
Rock Creek	4/24/20	Group A	20-321573	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	4/24/20	Group A	20-321656	Add oil, grease bearings and replace packing if needed.
Earl Place	4/11/20	Group A	20-292561	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	4/29/20	Group B	20-415904	

Notes:

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

Table 2-5
Pumping Stations – Pumpage

Pumping Station	*Sanitary Pumpage*		*Screenings Collected (tons)*[1]	*Pumpage of CSO from First Street Tunnel back to Sewer System*	
	Total Wastewater (mg)	*Daily Average Wastewater (mg)*		*Date*	*Volume (mg)*
Main[1,2]	1247.26	41.58	N/A	N/A	N/A
O St[1,2]	125.19	4.17	N/A	N/A	N/A
Eastside	132.16	4.41	N/A	N/A	N/A
Poplar Point	359.95	12.00	N/A	N/A	N/A
Potomac	4259.10	141.97	N/A	N/A	N/A
Rock Creek	127.68	4.26	N/A	N/A	N/A
Upper Anacostia	42.63	1.42	N/A	N/A	N/A
Earl Place	2.548	0.085	N/A	N/A	N/A
1st Street Tunnel Dewatering[3]	N/A	N/A	N/A	4/13/20 4/21/20	0.39 0.11

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
3. The flow meter for the pumping station was found to be defective and did not record discharges. DC Water has ordered and received a replacement flow meter; however, the meter will not be installed until the current contractor at the 1st Street Tunnel pumping station demobilizes. The installation of the flow meter is not possible at this time due to space limitations. In the interim, the flow will be estimated based on pump run times and pump capacity. Pump data indicate activity on four occurrences in the month of April: 3 minutes on 4/1/2020, 181 minutes on 4/13/2020, 53 minutes on 4/21/20 and 4 minutes on 4/28/20. **The estimated volume is 0.50 MG for the month of April 2020.

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 Structure No	*Date Inspected*	*Was Dam Out of Service During the Month?*	*Dates out of Service*	*Reason*	*Schedule to Restore to Service*
14 - East	4/09/20	**No**	**N/A**	**N/A**	**N/A**
14 - West	4/09/20	**No**	**N/A**	**N/A**	**N/A**
15	4/09/20	**No**	**N/A**	**N/A**	**N/A**
15A	4/09/20	**No**	**N/A**	**N/A**	**N/A**
16 - East	4/09/20	**No**	**N/A**	**N/A**	**N/A**
16 - West	4/09/20	**No**	**N/A**	**N/A**	**N/A**
34	4/21/20	**No**	**N/A**	**N/A**	**N/A**
35	4/21/20	**No**	**N/A**	**N/A**	**N/A**
52	4/21/20	**No**	**N/A**	**N/A**	**N/A**

Notes:

1. Structure 34 was taken out of service on 4/1/2020 due to corrective maintenance of the compressor belt. The dam deflated due to a faulty compressor however, there was no discharge to the river as the upstream levels were significantly lower than the low-level threshold. The compressor belt was repaired the same day and the structure was returned to service in less than 24 hours.

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	*None*	*N/A*
15A	*None*	*N/A*
16 (E & W)[1]	*4/10/20* *4/13/20* *4/24/20* *4/26/20*	*0 hrs. 13 mins* *3 hrs. 13 mins* *0 hrs. 35 mins* *4 hrs. 53 mins*
34[2]	*4/1/20* *4/13/20*	*2 hrs. 50 min* *0 hrs. 3 mins*
35	*4/13/20*	*0 hrs. 54 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

Notes:

1. On 4/26/20, Structure 16(E & W) deflated and inflated several times due to a high upstream level signal that was incongruous with the weather. Further investigation of the dam operations revealed an obstruction to the level sensor that may or may not have resulted in an overflow into the river. The level sensor obstruction was removed, and procedures were put into place to mitigate future issues. A letter was sent to the EPA on 05/04/20 regarding this matter.
2. On 4/1/2020, Structure 34 deflated due to a faulty compressor which resulted in a pressure drop. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The compressor belt was repaired the same day and the structure was returned to service in less than 24 hours.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during April 2020.

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			*Cleaning*					
						CBs Cleaned Thru Last Month		*CB's Cleaned This Month*		*Total CBs Cleaned This Year to Date*	
Ward	*Total CBs*	*CBs in CSS*	*CBs in Anacostia CSS*	*Total Anacostia CBs Inspected Once this Year*	*Total Anacostia CBs Inspected Twice this Year*	Total	In CSS	Total	In CSS	Total	In CSS
1	1449	1426	652	601	0	605	605	0	0	605	605
2	2792	2642	476	2	0	180	176	385	70	565	246
3	3687	187	0	0	0	2208	0	0	0	2208	0
4	3495	1723	0	0	0	1010	7	450	0	1460	7
5	4007	1769	1692	2	0	8	4	0	0	8	4
6	3316	2666	2647	6	0	8	6	0	0	8	6
7	3785	43	41	0	0	1349	0	0	0	1349	0
8	2832	212	209	0	0	1777	0	0	0	1777	0
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**611[2]**	**0**	**7145[2]**	**798[2]**	**835[2]**	**70[2]**	**7980[2]**	**868[2]**
% Cleaned/Inspected to Date				**11%**	**0%**						

Notes:

1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.
2. These are estimated counts from sewer maps until the existing Sewer Mobile APP for field data is updated and reprogrammed for use.

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.

- 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)*
Bar Rack CSO 040	4/06/2020	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	4/23/2020	Good	None	Routine Cleaning	(1)

Notes:
(1) System was designed so that captured solids and floatables are conveyed to Blue Plains for treatment.
(2) As reported in the letter dated, February 10, 2020, the CSO Demonstration end of pipe netting at CSO Outfall 018 has been terminated, effective March 31, 2020.

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 Operations. 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	12
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B32: 4/1 - 4/30.
Reason	B32: Number one screen not working.
Plan to Restore to Service	B32: waiting for parts ETR unknown.
Amount Material Collected	15 tons this month. Calendar year to date 60 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.

No Activity this month.

5. MONITORING

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

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

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

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	4/25/20	X		20-371076		
Bar Racks at Main Storm Pumps (CSO 011)	KW	4/25/20	X		20-371069		

5.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
4/1/2020	0	0	0	0	0
4/2/2020	0	0	0	0	0
4/3/2020	0	0	0	0	0
4/4/2020	0	0	0	0	0
4/5/2020	0	0	0	0	0
4/6/2020	0	0	0	0	0
4/7/2020	0.12	0.10	0.22	0.21	0.37
4/8/2020	0.05	0.06	0.04	0.08	0.03
4/9/2020	0.14	0.11	0.11	0.11	0.14
4/10/2020	0	0	0	0	0
4/11/2020	0	0	0	0	0
4/12/2020	0.04	0.09	0.09	0.09	0.21
4/13/2020	2.82	2.63	2.46	1.96	2.33
4/14/2020	0.09	0.09	0.08	0.16	0.14
4/15/2020	0.20	0.17	0.21	0.19	0.16
4/16/2020	0	0	0	0	0
4/17/2020	0	0	0	0	0
4/18/2020	0.06	0.06	0.05	0.06	0.06
4/19/2020	0	0	0	0	0
4/20/2020	0	0	0	0	0
4/21/2020	0	0	0	0	0.02
4/22/2020	0	0	0	0	0
4/23/2020	0.58	0.56	0.68	0.54	0.74
4/24/2020	0.68	0.48	0.68	0.50	0.61
4/25/2020	0.02	0.04	0.05	0.05	0.05
4/26/2020	0.22	0.22	0.23	0.27	0.23
4/27/2020	0.07	0.05	0.10	0.06	0.09
4/28/2020	0	0.01	0.01	0.01	0.02
4/29/2020	0	0	0	0	0
4/30/2020	0.90	1.00	1.07	1.07	1.10
TOTAL	5.09	4.67	5.01	4.29	5.20

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: April, May, June 2020
SCENARIO: QuarterlyReport_2020Q2, July 10, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave.,SE	separated						
007	13th Street and Ridge Place,SE	Modeled	1	1.46	1.25	1.25	1.25	1.25
009	2nd Street, 300 feet North of N Place, SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010	O Street SewagePumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main SewagePumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	Metered	3	6.90	2.08	0.42	1.67	0.17
013	4th and N Streets, SE	Modeled	2	0.02	0.50	0.25	0.25	0.25
014	6th and M Streets, SE	Modeled	1	0.02	0.25	0.25	0.25	0.25
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle andPennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	1	70.86	1.17	1.17	1.17	1.17
019A	Northeast Boundary - Tunnel OF	Metered	1	31.00	4.33	4.33	4.33	4.33
	SUBTOTAL			**110.26**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	1	17.03	3.50	3.50	3.50	3.50
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	7	24.44	20.25	2.89	6.75	0.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	8	135.41	23.00	2.88	6.50	0.25
022	27th and K Streets, NW	Modeled	12	5.48	30.75	2.56	9.00	0.25
024	30th and K Streets, NW	Modeled	7	7.32	14.75	2.11	4.50	0.50
025	31st & K St NW	Modeled	4	0.09	3.00	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	Water Street West ofStreet, NW	Modeled	8	6.86	27.00	3.38	6.50	1.25
028	36th and M Streets, NW	Modeled	17	3.58	85.25	5.01	12.25	0.50
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	11	10.18	29.75	2.70	6.25	0.25
	SUBTOTAL			**210.38**				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	8	0.393	22.00	2.75	5.50	0.75
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	Modeled	2	0.05	0.50	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	Modeled	2	0.00	0.50	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.00	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	3	12.59	4.75	1.58	2.50	1.00
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			**13.04**				
	TOTAL			**333.68**				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: April, May, June 2020
SCENARIO: QuarterlyReport_2020Q2, July 10, 2020

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

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

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For
Combined Sewer System

Month: May 2020

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

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

Monthly Operations Report for Combined Sewer System
Month: May 2020
Table of Contents

1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

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

Table 2-1
Regulator Structures

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5[1]	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	05/18/20	*			
7	W Street and Railroad Ave, SE	005	05/18/20	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	05/18/20	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	05/18/20	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	05/22/20	*			
11	"O" Street Pumping Station	011(a)	05/26/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	05/26/20	*			
13	2nd Street, 300 ft. north of N Place, SE	009	05/07/20	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	05/07/20	*			
15	South Capitol and E Streets	010	05/07/20	*			
15a	Half and L Streets, SE	010	05/07/20	*			
15b	South Capitol and I Streets	010	05/27/20	*			
15c	South Capitol and I Streets	010	05/27/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	05/07/20	*			
17	4th and N Streets, SE, Both Extended	013	05/07/20	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	05/22/20	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	05/07/20	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	05/04/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	05/07/20	*			
19	9th and M Streets, SE	015	05/20/20	*			
19a	9th and M Streets, SE	015	05/20/20	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	05/20/20	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	05/20/20	*			
20	12th and M Streets, SE	016	05/22/20	*			
20a	12th and M Streets, SE	016	05/22/20	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	05/22/20	*			
21	14th and M Streets, SE	017	05/22/20	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	05/22/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	05/05/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	05/05/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	05/05/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	05/05/20	*			
22e	14th Street and Kentucky Ave, SE	018	05/05/20	*			
23	Independence Ave, 21st Street, SE, Extended	019	05/05/20	*			
24a	East Capitol St, west of RFK stadium	019	05/26/20	*			
28	21st and Constitution Ave, NW	020	05/05/20	*			
29	22nd Street, between Constitution Ave and C St, NW	020	05/05/20	*			
30	17th and D Streets, NW	020	05/05/20	*			
31	15th Street and Pennsylvania Ave, NW	020	05/05/20	*			
33	10th and F Streets, NW	020	05/05/20	*			
34	23rd Street, north of Constitution Ave, NW	020	05/19/20	*			
34a	23rd Street near C Street, NW	020	05/05/20	*			
35	Northeast of Roosevelt Bridge, NW	021	05/19/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	05/19/20	*			
36	27th and I Streets, NW	022	05/05/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
36a	New Hampshire Ave and Eye Street, NW	022	05/05/20	*			
36b	19th and L Streets, NW	022, 034	05/04/20	*			
36d	17th and L Streets, NW	022, 034	05/04/20	*			
36g	18th and M Streets, NW	022, 034	05/04/20	*			
36h	18th and M Streets, NW	022, 034	05/04/20	*			
37	27th and Eye Streets, NW	022	05/05/20	*			
38	29th and K Streets, NW	024	05/08/20	*			
38a	30th Street, south of K Street, NW	024	05/08/20	*			
39a	30th and K Streets, NW	024	05/08/20	*			
39b	30th and K Streets, NW	024	05/08/20	*			
41b	31st and K Streets, NW	025	05/08/20	*			
41c	31st and K Streets, NW	025	05/08/20	*			
42	Wisconsin Ave and K Street, NW	026	05/08/20	*			
43	Potomac and Water Streets, NW	027	05/08/20	*			
43a	Potomac and Water Streets, NW	027	05/08/20	*			
44	Water Street, west of Potomac St, NW	027	05/08/20	*			
45	36th and M Streets, NW	028	05/04/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	05/04/20	*			
47	38th Street and Reservoir Road, NW	029	05/04/20	*			
47a	37th and T Streets, NW	029	05/04/20	*			
47b	37th and T Streets, NW	029	05/04/20	*			
47c	38th and W Streets, NW	029	05/04/20	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	05/18/20	*			
51	N Street Extended, west of 25th Street, NW	033	05/18/20	*			
52	22nd Street between M and N Streets, NW	034	05/19/20	*			
52a	N Street between 22nd and 23rd Streets, NW	034	05/19/20	*			
53	22nd and M Streets, NW	022, 034	05/19/20	*			
53a	22nd and M Streets, NW	022, 034	05/19/20	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	05/04/20	*			
53c	L and 22nd Streets, NW	022	05/04/20	*			
54	23rd and O Streets, NW	034	05/18/20	*			
55	22nd Street, south of Q Street, NW	035	05/18/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
55a	22nd Street, south of Q Street, NW	035	05/18/20	*			
56	23rd and Massachusetts Ave, NW	036	05/18/20	*			
57	23rd Street, south of Q Street, NW	036	05/18/20	*			
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	05/19/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	05/19/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	05/19/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	05/06/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	05/06/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	05/06/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	05/06/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	05/06/20	*			
66	Adams Mill Road and Lamont Street, NW	045	05/06/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	05/06/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	05/06/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	05/06/20	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	05/06/20	*			
70i	5th and Quackenbos Streets, NW	049	05/04/20	*			
71	28th Street, west of Rock Creek Parkway, NW	050	05/04/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	05/18/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	05/18/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	05/18/20	*			
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	05/21/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	05/21/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	05/21/20	*			
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	26th and P Streets, NW	060	05/18/20	*			
84a	26th and P Streets, NW	060	05/18/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	05/14/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	05/14/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
89	First and V St, NW (First St Tunnel)	019	05/14/20	*			
90	First and V St, NW (First St Tunnel)	019	05/14/20	*			
91	First and V St, NW (First St Tunnel)	019	05/14/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	05/22/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	05/22/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	05/22/20	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	05/22/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	05/22/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	05/26/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	05/07/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	05/07/20		*	Replacement stop log is on-going at this location. DSS is working with contractor. No additional flow to the river due to missing stop log.	
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	05/22/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	05/22/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	05/22/20	*			
104	Poplar Point PS Discharge Chamber	N/A	05/22/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	05/26/20	*			

Notes:

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2-2
Outfalls and Tide Gates

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

			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003[1]	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	05/26/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	05/27/20	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	05/27/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	05/26/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	05/26/20	*			*			*		
011	Main Sewage Pumping Station, SE	05/26/20	*			*			*		
011a	Main Sewage Pumping Station, SE	05/26/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	05/26/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	05/26/20	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	05/26/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	05/26/20	*			*			*		
016	12th and O Streets, SE	05/26/20	*		*		*		*		
017	M and Water Street, SE	05/26/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	05/26/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	05/22/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	05/22/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	05/21/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	05/21/20	*		*		*		*		
022	Rock Creek Parkway and G St., NW	05/21/20	*		*		*		*		
024	South of 30th and K Streets, NW[1]	05/21/20	*		*		*		*		
025	South of 31st and K Streets, NW	05/21/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	05/21/20	*		*		*		*		
027	33rd and Water Sts., NW	05/21/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	05/21/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	05/21/20	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	05/18/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	05/18/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	05/18/20	*			*			*		
035	P St. Bridge and Rock Creek Parkway	05/18/20	*			*			*		
036	22nd Street, South of Q Street NW.	05/21/20	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									

NPDES Outfall	*Location*	*Date Inspected*	*Outfall Condition*		*Tide Gate Present?*		*Tide Gate Condition*		*CSO Sign*		*Notes, Work Needed or Performed*
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	05/19/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	05/19/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	05/19/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	05/21/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	05/21/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	05/21/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	05/21/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	05/21/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	05/06/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	05/06/20	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	05/06/20	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	05/06/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	05/04/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	05/21/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	05/21/20		*	*			*	*		Routine check of tide gate and outfall sign. Upon inspecting this outfall we noticed that the outfall gate was missing and after further inspection located the gate in the creek. DSS has contacted NPS to coordinate repair operations, we are awaiting NPS permit.
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	05/21/20		*	*			*	*		Routine check of tide gate and outfall sign. Upon inspection at this location the outfall gate was off the hinges and sitting in place. DSS has contacted NPS to coordinate repair operations, we are awaiting NPS permit.
056	Normanstone Dr. and Rock Creek Parkway, NW.	05/21/20		*	*			*	*		Routine check at this location. Upon inspection the outfall gate was completely off the hinges and lying down inside the channel. DSS has contacted NPS to coordinate repair operations, we are awaiting NPS permit.
057[1]	28th Street and Rock Creek Parkway, NW	N/A									
058[1]	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	05/21/20		*	*			*	*		Routine check of tide gate and outfall sign. Upon inspection the outfall gate at this location was off the hinges and in the creek. DSS has contacted NPS to coordinate repair operations, we are awaiting NPS permit.

Notes:

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

2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

Pumping Station	*No. of Inspections*	*No. Screens*	*No. Pumps*	*Screens or Pumps Out of Service*	*Dates*	*Reason*	*Work Order Number*	*Schedule to Restore to Service*
Main	31	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	Pump #5	05/05/20 – 05/31/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 7/31/20. The pump and motor have been disconnected for repair.

Notes:

Table 2-4
Pumping Stations – Preventive Maintenance

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed* [1,2]	*Work Order Number*	*Comments*
Main	5/18/20	Group A	20-357951	Add oil, grease bearings and replace packing if needed.
O St	5/6/20	Group A	20-374549	Add oil, grease bearings and replace packing if needed.
Eastside	5/8/20	Group A	20-363611	Add oil, grease bearings and replace packing if needed.
Poplar Point	5/22/20	Group A	20-360243	Add oil, grease bearings and replace packing if needed.
Potomac	5/25/20	Group A	20-366401	Add oil, grease bearings and replace packing if needed.
Rock Creek	5/22/20	Group A	20-366674	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	5/23/20	Group A	20-360275	Add oil, grease bearings and replace packing if needed.
Earl Place	5/8/20	Group A	20-336216	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	5/27/20	Group B	20-435339	

Notes:

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

Table 2-5
Pumping Stations – Pumpage

Pumping Station	*Sanitary Pumpage*		*Screenings Collected (tons)*[1]	*Pumpage of CSO from First Street Tunnel back to Sewer System*	
	Total Wastewater (mg)	*Daily Average Wastewater (mg)*		*Date*	*Volume (mg)*
Main[1,2]	1181.85	38.12	N/A	N/A	N/A
O St[1,2]	108.85	3.51	N/A	N/A	N/A
Eastside	127.17	4.10	N/A	N/A	N/A
Poplar Point	374.99	12.10	N/A	N/A	N/A
Potomac	4192.46	135.24	N/A	N/A	N/A
Rock Creek	119.30	3.85	N/A	N/A	N/A
Upper Anacostia	44.49	1.44	N/A	N/A	N/A
Earl Place	0.367	0.012	N/A	N/A	N/A
1st Street Tunnel Dewatering[3]	N/A	N/A	N/A	5/1/20 5/13/20 5/22/20 5/27/20 5/28/20	0.12 0.09 0.12 0.005 0.004

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
3. The flow meter for the pumping station was found to be defective and did not record discharges. DC Water has ordered and received a replacement flow meter; however, the meter will not be installed until the current contractor at the 1st Street Tunnel pumping station demobilizes. The installation of the flow meter is not possible at this time due to space limitations. In the interim, the flow will be estimated based on pump run times and pump capacity. Pump data indicate activity on five occurrences in the month of May: 54 minutes on 5/1/2020, 43 minutes on 5/13/2020, 57 minutes on 5/22/20, 1 minutes on 5/27/20 and 12 minutes on 5/28/20. **The estimated volume is 0.34 MG for the month of May 2020.

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 Structure No	*Date Inspected*	*Was Dam Out of Service During the Month?*	*Dates out of Service*	*Reason*	*Schedule to Restore to Service*
14 - East	5/07/20	**No**	**N/A**	**N/A**	**N/A**
14 - West	5/07/20	**No**	**N/A**	**N/A**	**N/A**
15	5/07/20	**No**	**N/A**	**N/A**	**N/A**
15A	5/07/20	**No**	**N/A**	**N/A**	**N/A**
16 - East	5/07/20	**Yes**	**5/20/20**	**See Note 1**	**5/20/20**
16 - West	5/07/20	**Yes**	**5/20/20**	**See Note 1**	**5/20/20**
34	5/19/20	**No**	**N/A**	**N/A**	**N/A**
35	5/19/20	**No**	**N/A**	**N/A**	**N/A**
52	5/19/20	**No**	**N/A**	**N/A**	**N/A**

Notes:

1. Structure 16 was taken out of service on 5/20/2020 due to corrective maintenance of the compressor. The dam deflated due to a compressor failure however, there was no discharge to the river as the upstream levels were significantly lower than the low-level threshold. The compressor was repaired the same day and the structure was returned to service in less than 24 hours.

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	*None*	*N/A*
15A	*None*	*N/A*
16 (E & W)[1]	*5/07/20* *5/20/20* *5/22/20*	*1 hr. 37 mins* *2 hrs. 37 mins* *3 hrs. 39 mins*
34[2]	*5/19/20*	*0 hrs. 49 mins*
35	*5/03/20*	*0 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

Notes:

1. On 5/20/20, Structure 16(E & W) deflated due to a compressor failure that caused a valve malfunction. The compressor was repaired the same day and the structure was returned to service in less than 24 hours.
2. On 5/19/2020, Structure 34 deflated due to a faulty reading from the secondary level sensor which resulted in a pressure drop. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. After further investigation, it was found that the secondary level sensor had been installed too close to the manhole cover, giving a false high reading. Contractors are scheduled to lower the sensor in June 2020. In the interim, the primary level sensor is in operation.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during May 2020.

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			*Cleaning*					
						CBs Cleaned Thru Last Month		*CB's Cleaned This Month*		*Total CBs Cleaned This Year to Date*	
Ward	*Total CBs*	*CBs in CSS*	*CBs in Anacostia CSS*	*Total Anacostia CBs Inspected Once this Year*	*Total Anacostia CBs Inspected Twice this Year*	Total	In CSS	Total	In CSS	Total	In CSS
1	1449	1426	652	601	0	605	605	40	25	645	630
2	2792	2642	476	2	0	565	246	30	20	595	266
3	3687	187	0	0	0	2208	0	25	5	2233	5
4	3495	1723	0	0	0	1460	7	15	5	1475	12
5	4007	1769	1692	2	0	8	6	50	15	58	21
6	3316	2666	2647	6	0	8	6	50	35	58	41
7	3785	43	41	0	0	1349	0	25	0	1374	0
8	2832	212	209	0	0	1777	0	25	5	1802	5
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**611[2]**	**0**	**7980[2]**	**868[2]**	**260[2]**	**105[2]**	**8240[2]**	**980[2]**
% Cleaned/Inspected to Date				**11%**	**0%**					**32%**	**9%**

Notes:

1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.
2. These are estimated counts from sewer maps until the existing Sewer Mobile APP for field data is updated and reprogrammed for use.

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.

- 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)*
Bar Rack CSO 040	05/19/2020	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	05/21/2020	Good	None	Routine Cleaning	(1)

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Operations. 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:	20
Days not Operating	12
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B32: 5/1 - 5/31.
Reason	B32: Number one screen not working.
Plan to Restore to Service	B32: waiting for parts ETR unknown.
Amount Material Collected	10 tons this month. Calendar year to date 70 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.

No Activity this month.

5. MONITORING

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

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

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

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	5/27/20	X		20-417901		
Bar Racks at Main Storm Pumps (CSO 011)	KW	5/27/20	X		20-417894		

5.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
5/1/2020	0.06	0.07	0.10	0.08	0.09
5/2/2020	0	0	0	0	0
5/3/2020	1.16	0.88	0.96	1.16	0.93
5/4/2020	0.16	0.16	0.23	0.17	0.09
5/5/2020	0.22	0.21	0.24	0.25	0.19
5/6/2020	0.32	0.34	0.12	0.15	0.07
5/7/2020	0	0	0	0	0
5/8/2020	0.09	0.09	0.09	0.09	0.12
5/9/2020	0	0	0	0	0
5/10/2020	0	0	0	0	0
5/11/2020	0.01	0.01	0.01	0.01	0.02
5/12/2020	0	0	0	0	0
5/13/2020	0	0	0	0	0
5/14/2020	0.01	0.01	0	0.02	0.02
5/15/2020	0	0	0	0	0
5/16/2020	0	0	0	0	0
5/17/2020	0	0	0	0	0
5/18/2020	0	0	0	0	0
5/19/2020	0	0	0	0	0
5/20/2020	0	0	0	0	0
5/21/2020	0	0	0	0	0
5/22/2020	0.62	0.71	0.63	0.49	0.58
5/23/2020	n/a	0.11	0.25	0.06	0.29
5/24/2020	0	0	0	0	0
5/25/2020	0	0	0	0	0
5/26/2020	0	0	0	0	0
5/27/2020	0	0	0	0	0
5/28/2020	n/a	0.02	0.06	0.03	0.08
5/29/2020	n/a	0	0	0	0.01
5/30/2020	0	0	0	0	0
5/31/2020	0	0	0	0	0
TOTAL	2.65	2.61	2.69	2.51	2.49

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: April, May, June 2020
SCENARIO: QuarterlyReport_2020Q2, July 10, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave.,SE	separated						
007	13th Street and Ridge Place,SE	Modeled	1	1.46	1.25	1.25	1.25	1.25
009	2nd Street, 300 feet North of N Place, SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010	O Street SewagePumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main SewagePumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	Metered	3	6.90	2.08	0.42	1.67	0.17
013	4th and N Streets, SE	Modeled	2	0.02	0.50	0.25	0.25	0.25
014	6th and M Streets, SE	Modeled	1	0.02	0.25	0.25	0.25	0.25
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle andPennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	1	70.86	1.17	1.17	1.17	1.17
019A	Northeast Boundary - Tunnel OF	Metered	1	31.00	4.33	4.33	4.33	4.33
	SUBTOTAL			**110.26**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	1	17.03	3.50	3.50	3.50	3.50
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	7	24.44	20.25	2.89	6.75	0.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	8	135.41	23.00	2.88	6.50	0.25
022	27th and K Streets, NW	Modeled	12	5.48	30.75	2.56	9.00	0.25
024	30th and K Streets, NW	Modeled	7	7.32	14.75	2.11	4.50	0.50
025	31st & K St NW	Modeled	4	0.09	3.00	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	Water Street West ofStreet, NW	Modeled	8	6.86	27.00	3.38	6.50	1.25
028	36th and M Streets, NW	Modeled	17	3.58	85.25	5.01	12.25	0.50
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	11	10.18	29.75	2.70	6.25	0.25
	SUBTOTAL			**210.38**				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	8	0.393	22.00	2.75	5.50	0.75
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	Modeled	2	0.05	0.50	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	Modeled	2	0.00	0.50	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.00	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	3	12.59	4.75	1.58	2.50	1.00
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			**13.04**				
	TOTAL			**333.68**				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: April, May, June 2020
SCENARIO: QuarterlyReport_2020Q2, July 10, 2020

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

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

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For
Combined Sewer System

Month: June 2020

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

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

Monthly Operations Report for Combined Sewer System
Month: June 2020
Table of Contents

1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

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

Table 2-1
Regulator Structures

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5[1]	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	06/19/20	*			
7	W Street and Railroad Ave, SE	005	06/19/20	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	06/19/20	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	06/19/20	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	06/17/20	*			
11	"O" Street Pumping Station	011(a)	06/19/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	06/19/20	*			
13	2nd Street, 300 ft. north of N Place, SE	009	06/04/20	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	06/04/20	*			
15	South Capitol and E Streets	010	06/04/20	*			
15a	Half and L Streets, SE	010	06/17/20	*			
15b	South Capitol and I Streets	010	06/03/20	*			
15c	South Capitol and I Streets	010	06/03/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	06/04/20	*			
17	4th and N Streets, SE, Both Extended	013	06/03/20	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	06/02/20	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	06/29/20	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	06/02/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	06/03/20	*			
19	9th and M Streets, SE	015	06/04/20	*			
19a	9th and M Streets, SE	015	06/04/20	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	06/04/20	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	06/04/20	*			
20	12th and M Streets, SE	016	06/04/20	*			
20a	12th and M Streets, SE	016	06/04/20	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	06/04/20	*			
21	14th and M Streets, SE	017	06/04/20	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	06/04/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	06/19/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	06/19/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	06/19/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	06/15/20	*			
22e	14th Street and Kentucky Ave, SE	018	06/15/20	*			
23	Independence Ave, 21st Street, SE, Extended	019	06/15/20	*			
24a	East Capitol St, west of RFK stadium	019	06/15/20	*			
28	21st and Constitution Ave, NW	020	06/02/20	*			
29	22nd Street, between Constitution Ave and C St, NW	020	06/02/20	*			
30	17th and D Streets, NW	020	06/15/20	*			
31	15th Street and Pennsylvania Ave, NW	020	06/15/20	*			
33	10th and F Streets, NW	020	06/15/20	*			
34	23rd Street, north of Constitution Ave, NW	020	06/17/20	*			
34a	23rd Street near C Street, NW	020	06/02/20	*			
35	Northeast of Roosevelt Bridge, NW	021	06/17/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	06/17/20	*			
36	27th and I Streets, NW	022	06/02/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
36a	New Hampshire Ave and Eye Street, NW	022	06/02/20	*			
36b	19th and L Streets, NW	022, 034	06/01/20	*			
36d	17th and L Streets, NW	022, 034	06/01/20	*			
36g	18th and M Streets, NW	022, 034	06/01/20	*			
36h	18th and M Streets, NW	022, 034	06/01/20	*			
37	27th and Eye Streets, NW	022	06/02/20	*			
38	29th and K Streets, NW	024	06/02/20	*			
38a	30th Street, south of K Street, NW	024	06/02/20	*			
39a	30th and K Streets, NW	024	06/02/20	*			
39b	30th and K Streets, NW	024	06/02/20	*			
41b	31st and K Streets, NW	025	06/02/20	*			
41c	31st and K Streets, NW	025	06/02/20	*			
42	Wisconsin Ave and K Street, NW	026	06/02/20	*			
43	Potomac and Water Streets, NW	027	06/02/20	*			
43a	Potomac and Water Streets, NW	027	06/02/20	*			
44	Water Street, west of Potomac St, NW	027	06/02/20	*			
45	36th and M Streets, NW	028	06/01/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	06/01/20	*			
47	38th Street and Reservoir Road, NW	029	06/01/20	*			
47a	37th and T Streets, NW	029	06/01/20	*			
47b	37th and T Streets, NW	029	06/01/20	*			
47c	38th and W Streets, NW	029	06/01/20	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	06/05/20	*			
51	N Street Extended, west of 25th Street, NW	033	06/05/20	*			
52	22nd Street between M and N Streets, NW	034	06/17/20	*			
52a	N Street between 22nd and 23rd Streets, NW	034	06/17/20	*			
53	22nd and M Streets, NW	022, 034	06/16/20	*			
53a	22nd and M Streets, NW	022, 034	06/16/20	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	06/05/20	*			
53c	L and 22nd Streets, NW	022	06/05/20	*			
54	23rd and O Streets, NW	034	06/05/20	*			
55	22nd Street, south of Q Street, NW	035	06/05/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
55a	22nd Street, south of Q Street, NW	035	06/05/20	*			
56	23rd and Massachusetts Ave, NW	036	06/05/20	*			
57	23rd Street, south of Q Street, NW	036	06/05/20	*			
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	06/01/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	06/01/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	06/01/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	06/03/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	06/03/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	06/03/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	06/03/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	06/03/20	*			
66	Adams Mill Road and Lamont Street, NW	045	06/03/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	06/03/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	06/03/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	06/03/20	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	06/03/20	*			
70i	5th and Quackenbos Streets, NW	049	06/15/20	*			
71	28th Street, west of Rock Creek Parkway, NW	050	06/01/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	06/05/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	06/05/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	06/05/20	*			
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	06/15/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	06/15/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	06/15/20	*			
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	26th and P Streets, NW	060	06/05/20	*			
84a	26th and P Streets, NW	060	06/05/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	06/10/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	06/10/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
89	First and V St, NW (First St Tunnel)	019	06/10/20	*			
90	First and V St, NW (First St Tunnel)	019	06/10/20	*			
91	First and V St, NW (First St Tunnel)	019	06/10/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	06/17/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	06/17/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	06/04/20	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	06/17/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	06/17/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	06/29/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	06/04/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	06/04/20		*	Replacement stop log is on-going at this location. Anticipated repair completion date, July 2020. DSS is working with contractor. No additional flow to the river due to missing stop log.	
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	06/17/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	06/17/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	06/17/20	*			
104	Poplar Point PS Discharge Chamber	N/A	06/17/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	06/19/20	*			

Notes:

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2-2
Outfalls and Tide Gates

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

			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003[1]	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	06/19/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	06/19/20	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	06/19/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	06/19/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	06/19/20	*			*			*		
011	Main Sewage Pumping Station, SE	06/19/20	*			*			*		
011a	Main Sewage Pumping Station, SE	06/19/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	06/19/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	06/19/20	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	06/19/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	06/19/20	*			*			*		
016	12th and O Streets, SE	06/29/20	*		*		*		*		
017	M and Water Street, SE	06/19/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	06/19/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	06/17/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	06/17/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	06/18/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	06/18/20	*		*		*		*		
022	Rock Creek Parkway and G St., NW	06/18/20	*		*		*		*		
024	South of 30th and K Streets, NW[1]	06/18/20	*		*		*		*		
025	South of 31st and K Streets, NW	06/18/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	06/18/20	*		*		*		*		
027	33rd and Water Sts., NW	06/18/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	06/18/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	06/18/20	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	06/05/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	06/05/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	06/05/20	*			*			*		
035	P St. Bridge and Rock Creek Parkway	06/05/20	*			*			*		
036	22nd Street, South of Q Street NW.	06/18/20	*		*		*		*		

NPDES Outfall	*Location*	*Date Inspected*	*Outfall Condition*		*Tide Gate Present?*		*Tide Gate Condition*		*CSO Sign*		*Notes, Work Needed or Performed*
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	06/01/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	06/01/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	06/01/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	06/18/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	06/18/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	06/18/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	06/18/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	06/18/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	06/03/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	06/03/20	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	06/03/20	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	06/03/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	06/01/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	06/18/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	06/18/20		*	*			*	*		Routine check of tide gate and outfall sign. The tide gate is still off and inside the creek but Anchor Construction has the work order to fix it. We are awaiting NPS permit.
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	06/15/20		*	*			*	*		Routine check of tide gate and outfall sign. The tide gate at this location is still off the hinges but has been turned over to the contractors to plan repair operations. We are awaiting NPS permit.
056	Normanstone Dr. and Rock Creek Parkway, NW.	06/15/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is still not on hinges but inside the gate channel, contractors have been notified and are in the repair planning process. We are awaiting NPS permit.
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	06/18/20		*	*			*	*		Routine check of tide gate and outfall sign. The tide gate at this location is still off and inside the creek. Anchor Construction has the work order for this location and we are awaiting NPS permit..

Notes:

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

2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

Pumping Station	*No. of Inspections*	*No. Screens*	*No. Pumps*	*Screens or Pumps Out of Service*	*Dates*	*Reason*	*Work Order Number*	*Schedule to Restore to Service*
Main	30	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	30	4	5	Pump #5	06/01/20 – 06/30/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 7/31/20. The pump and motor have been disconnected for repair.

Notes:

Table 2-4
Pumping Stations – Preventive Maintenance

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed* [1,2]	*Work Order Number*	*Comments*
Main	6/18/20	Group A	20-409268	Add oil, grease bearings and replace packing if needed.
O St	6/8/20	Group A	20-427788	Add oil, grease bearings and replace packing if needed.
Eastside	6/28/20	Group A	20-418008	Add oil, grease bearings and replace packing if needed.
Poplar Point	6/7/20	Group A	20-413873	Add oil, grease bearings and replace packing if needed.
Potomac	6/25/20	Group A	20-421356	Add oil, grease bearings and replace packing if needed.
Rock Creek	6/19/20	Group A	20-413887	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	6/5/20	Group A	20-413901	Add oil, grease bearings and replace packing if needed.
Earl Place	6/5/20	Group A	20-383379	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	6/30/20	Group B	20-512261	

Notes:

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

Table 2-5
Pumping Stations – Pumpage

Pumping Station	*Sanitary Pumpage*		*Screenings Collected (tons)*[1]	*Pumpage of CSO from First Street Tunnel back to Sewer System*	
	Total Wastewater (mg)	*Daily Average Wastewater (mg)*		*Date*	*Volume (mg)*
Main[1,2]	1234.33	41.14	N/A	N/A	N/A
O St[1,2]	118.57	3.95	N/A	N/A	N/A
Eastside	112.17	3.74	N/A	N/A	N/A
Poplar Point	320.94	10.70	N/A	N/A	N/A
Potomac	3767.75	125.59	N/A	N/A	N/A
Rock Creek	100.10	3.34	N/A	N/A	N/A
Upper Anacostia	41.29	1.38	N/A	N/A	N/A
Earl Place	0.290	0.010	N/A	N/A	N/A
1st Street Tunnel Dewatering[3]	N/A	N/A	N/A	6/2/20 6/7/20 6/19/20 6/25/20	0.12 0.12 0.14 0.24

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
3. The flow meter for the pumping station was found to be defective and did not record discharges. DC Water has ordered and received a replacement flow meter; however, the meter will not be installed until the current contractor at the 1st Street Tunnel pumping station demobilizes. The installation of the flow meter is not possible at this time due to space limitations. In the interim, the flow will be estimated based on pump run times and pump capacity. Pump data indicate activity on four occurrences in the month of May: 55 minutes on 6/2/2020, 63 minutes on 6/7/20, 56 minutes on 6/19/20 and 109 minutes on 6/25/20. **The estimated volume is 0.62 MG for the month of June 2020.

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 Structure No	*Date Inspected*	*Was Dam Out of Service During the Month?*	*Dates out of Service*	*Reason*	*Schedule to Restore to Service*
14 - East	6/04/20	**Yes**	**6/27/20**	**See Note 1**	**6/27/20**
14 - West	6/04/20	**Yes**	**6/27/20**	**See Note 1**	**6/27/20**
15	6/04/20	**No**	**N/A**	**N/A**	**N/A**
15A	6/16/20	**No**	**N/A**	**N/A**	**N/A**
16 - East	6/04/20	**No**	**N/A**	**N/A**	**N/A**
16 - West	6/04/20	**No**	**N/A**	**N/A**	**N/A**
34	6/16/20	**No**	**N/A**	**N/A**	**N/A**
35	6/16/20	**No**	**N/A**	**N/A**	**N/A**
52	6/12/20	**No**	**N/A**	**N/A**	**N/A**

Notes:

1. Structure 14 was taken out of service on 6/27/2020 due to corrective maintenance of the compressor. The dam deflated due to a compressor failure however, there was no discharge to the river as the upstream levels were significantly lower than the low-level threshold. The compressor was repaired the same day and the structure was returned to service in less than 24 hours.

Table 2-7

Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*
14 (E & W) [1]	*06/27/20*	*1 hr. 26 mins*
15	*None*	*N/A*
15A	*06/22/20*	*0 hrs. 8 mins*
16 (E & W)	*None*	*N/A*
34	*None*	*N/A*
35	*06/04/20* *06/05/20*	*0 hrs. 20 mins* *0 hrs. 33 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

Notes:

1. On 6/27/20, Structure 14(E & W) deflated due to a compressor failure that caused a valve malfunction. The compressor was repaired the same day and the structure was returned to service in less than 24 hours.
2. On 6/16/20, contractors completed the lowering of the secondary level sensor after Structure 34 deflated on 5/19/2020 due to a false high reading from the secondary level sensor.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during June 2020.

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			*Cleaning*					
						CBs Cleaned Thru Last Month		*CB's Cleaned This Month*		*Total CBs Cleaned This Year to Date*	
Ward	*Total CBs*	*CBs in CSS*	*CBs in Anacostia CSS*	*Total Anacostia CBs Inspected Once this Year*	*Total Anacostia CBs Inspected Twice this Year*	Total	In CSS	Total	In CSS	Total	In CSS
1	1449	1426	652	652	0	645	630	573	570	1218	1200
2	2792	2642	476	476	44	595	266	109	104	704	370
3	3687	187	0	0	0	2233	5	23	0	2256	5
4	3495	1723	0	0	0	1475	12	1527	1483	3002	1495
5	4007	1769	1692	1692	4	58	21	68	34	126	55
6	3316	2666	2647	2647	6	58	41	70	1	128	42
7	3785	43	41	41	0	1374	0	176	0	1550	0
8	2832	212	209	209	197	1802	5	113	0	1915	5
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**5717[2]**	**251[2]**	**8240[2]**	**980[2]**	**2659[2]**	**2192[2]**	**10899[2]**	**3172[2]**
% Cleaned/Inspected to Date				**100%**	**4%**					**43%**	**30%**

Notes:

1. The number of catch basins in our service area changes with the ongoing connections and abandonments to the sewer infrastructure.
2. These are estimated counts from sewer maps until the existing Sewer Mobile APP for field data is updated and reprogrammed for use.

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.

- 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)*
Bar Rack CSO 040	06/01/2020	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	06/18/2020	Good	None	Routine Cleaning	(1)

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Operations. 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	12
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B32: 6/1 - 6/30.
Reason	B32: Number one screen not working.
Plan to Restore to Service	B32: waiting for parts ETR unknown.
Amount Material Collected	10 tons this month. Calendar year to date 80 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.

No Activity this month.

5. MONITORING

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

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

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

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	6/28/20	X		20-465920		
Bar Racks at Main Storm Pumps (CSO 011)	KW	6/28/20	X		20-465913		

5.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
6/1/2020	0	0	0	0	0
6/2/2020	0	0	0	0	0
6/3/2020	0	0	0	0	0
6/4/2020	0.30	0.49	0.31	0.66	0.52
6/5/2020	1.94	1.55	1.69	1.00	1.26
6/6/2020	0.02	0.05	0	0.01	0
6/7/2020	0	0	0	0	0
6/8/2020	0	0	0	0	0
6/9/2020	0	0	0	0	0
6/10/2020	0.01	0.02	0.02	0.04	0.15
6/11/2020	0.44	0.30	0.42	0.25	0.23
6/12/2020	0	0	0	0	0
6/13/2020	0	0	0	0	0
6/14/2020	0	0	0	0	0
6/15/2020	0	0	0	0	0
6/16/2020	0	0	0	0	0
6/17/2020	0.41	0.42	0.68	0.59	0.85
6/18/2020	0.02	0.02	0.01	0.02	0
6/19/2020	0.04	0.05	0.11	0.06	0.01
6/20/2020	0.29	0.09	0.21	0.02	0.47
6/21/2020	0	0	0	0	0
6/22/2020	0	0	0	0	0
6/23/2020	0	0	0	0	0
6/24/2020	0	0	0	0	0
6/25/2020	0.19	0.29	0	0	0
6/26/2020	0	0	0	0	0
6/27/2020	0.34	0.18	0.05	0.16	0.02
6/28/2020	0	0	0	0	0
6/29/2020	0	0	0	0	0
6/30/2020	0	0	0	0	0
TOTAL	4.00	3.46	3.50	2.81	3.51

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: April, May, June 2020
SCENARIO: QuarterlyReport_2020Q2, July 10, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave.,SE	separated						
007	13th Street and Ridge Place,SE	Modeled	1	1.46	1.25	1.25	1.25	1.25
009	2nd Street, 300 feet North of N Place, SE	Metered	0	0.00	0.00	0.00	0.00	0.00
010	O Street SewagePumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main SewagePumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	Metered	3	6.90	2.08	0.42	1.67	0.17
013	4th and N Streets, SE	Modeled	2	0.02	0.50	0.25	0.25	0.25
014	6th and M Streets, SE	Modeled	1	0.02	0.25	0.25	0.25	0.25
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle andPennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	1	70.86	1.17	1.17	1.17	1.17
019A	Northeast Boundary - Tunnel OF	Metered	1	31.00	4.33	4.33	4.33	4.33
	SUBTOTAL			**110.26**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	1	17.03	3.50	3.50	3.50	3.50
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	7	24.44	20.25	2.89	6.75	0.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	8	135.41	23.00	2.88	6.50	0.25
022	27th and K Streets, NW	Modeled	12	5.48	30.75	2.56	9.00	0.25
024	30th and K Streets, NW	Modeled	7	7.32	14.75	2.11	4.50	0.50
025	31st & K St NW	Modeled	4	0.09	3.00	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	Water Street West ofStreet, NW	Modeled	8	6.86	27.00	3.38	6.50	1.25
028	36th and M Streets, NW	Modeled	17	3.58	85.25	5.01	12.25	0.50
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	11	10.18	29.75	2.70	6.25	0.25
	SUBTOTAL			**210.38**				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	8	0.393	22.00	2.75	5.50	0.75
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	Modeled	2	0.05	0.50	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	Modeled	2	0.00	0.50	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.00	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	3	12.59	4.75	1.58	2.50	1.00
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			**13.04**				
	TOTAL			**333.68**				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: April, May, June 2020
SCENARIO: QuarterlyReport_2020Q2, July 10, 2020

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

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