QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

FOURTH QUARTER, 2020

Prepared By:

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Washington, D.C. 20003

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY

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Monthly Operations Report For
Combined Sewer System

Month: October 2020

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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	10/28/20	*			
7	W Street and Railroad Ave, SE	005	10/28/20	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	10/28/20	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	10/28/20	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	10/20/20	*			
11	"O" Street Pumping Station	011(a)	10/28/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	10/27/20	*			
13	2nd Street, 300 ft. north of N Place, SE	009	10/08/20	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	10/28/20	*			
15	South Capitol and E Streets	010	10/08/20	*			
15a	Half and L Streets, SE	010	10/22/20	*			
15b	South Capitol and I Streets	010	10/28/20	*			
15c	South Capitol and I Streets	010	10/28/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	10/08/20	*			
17	4th and N Streets, SE, Both Extended	013	10/26/20	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	10/28/20	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	10/28/20	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	10/26/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	10/26/20	*			
19	9th and M Streets, SE	015	10/20/20	*			
19a	9th and M Streets, SE	015	10/20/20	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	10/20/20	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	10/20/20	*			
20	12th and M Streets, SE	016	10/20/20	*			
20a	12th and M Streets, SE	016	10/20/20	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	10/20/20	*			
21	14th and M Streets, SE	017	10/20/20	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	10/20/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	10/28/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	10/28/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	10/28/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	10/28/20	*			
22e	14th Street and Kentucky Ave, SE	018	10/28/20	*			
23	Independence Ave, 21st Street, SE, Extended	019	10/02/20	*			
24a	East Capitol St, west of RFK stadium	019	10/02/20	*			
28	21st and Constitution Ave, NW	020	10/08/20	*			
29	22nd Street, between Constitution Ave and C St, NW	020	10/05/20	*			
30	17th and D Streets, NW	020	10/05/20	*			
31	15th Street and Pennsylvania Ave, NW	020	10/05/20	*			
33	10th and F Streets, NW	020	10/05/20	*			
34	23rd Street, north of Constitution Ave, NW	020	10/22/20	*			
34a	23rd Street near C Street, NW	020	10/05/20	*			
35	Northeast of Roosevelt Bridge, NW	021	10/22/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	10/22/20	*			
36	27th and I Streets, NW	022	10/05/20	*			

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	10/05/20	*			
36b	19th and L Streets, NW	022, 034	10/09/20	*			
36d	17th and L Streets, NW	022, 034	10/09/20	*			
36g	18th and M Streets, NW	022, 034	10/09/20	*			
36h	18th and M Streets, NW	022, 034	10/09/20	*			
37	27th and Eye Streets, NW	022	10/05/20	*			
38	29th and K Streets, NW	024	10/02/20	*			
38a	30th Street, south of K Street, NW	024	10/02/20	*			
39a	30th and K Streets, NW	024	10/02/20	*			
39b	30th and K Streets, NW	024	10/02/20	*			
41b	31st and K Streets, NW	025	10/02/20	*			
41c	31st and K Streets, NW	025	10/02/20	*			
42	Wisconsin Ave and K Street, NW	026	10/02/20	*			
43	Potomac and Water Streets, NW	027	10/02/20	*			
43a	Potomac and Water Streets, NW	027	10/02/20	*			
44	Water Street, west of Potomac St, NW	027	10/02/20	*			
45	36th and M Streets, NW	028	10/01/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	10/01/20	*			
47	38th Street and Reservoir Road, NW	029	10/01/20	*			
47a	37th and T Streets, NW	029	10/01/20	*			
47b	37th and T Streets, NW	029	10/01/20	*			
47c	38th and W Streets, NW	029	10/01/20	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	10/26/20	*			
51	N Street Extended, west of 25th Street, NW	033	10/26/20	*			
52	22nd Street between M and N Streets, NW	034	10/22/20	*			
52a	N Street between 22nd and 23rd Streets, NW	034	10/22/20	*			
53	22nd and M Streets, NW	022, 034	10/26/20	*			
53a	22nd and M Streets, NW	022, 034	10/26/20	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	10/09/20	*			
53c	L and 22nd Streets, NW	022	10/09/20	*			
54	23rd and O Streets, NW	034	10/07/20	*			
55	22nd Street, south of Q Street, NW	035	10/07/20	*			

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	10/07/20	*			
56	23rd and Massachusetts Ave, NW	036	10/07/20	*			
57	23rd Street, south of Q Street, NW	036	10/07/20	*			
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	10/01/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	10/01/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	10/01/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	10/14/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	10/14/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	10/14/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	10/14/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	10/14/20	*			
66	Adams Mill Road and Lamont Street, NW	045	10/14/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	10/14/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	10/14/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	10/14/20	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	10/14/20	*			
70i	5th and Quackenbos Streets, NW	049	10/26/20	*			
71	28th Street, west of Rock Creek Parkway, NW	050	10/09/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	10/07/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	10/07/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	10/07/20	*			
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	10/09/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	10/09/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	10/09/20	*			
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	10/07/20	*			
84a	26th and P Streets, NW	060	10/07/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	10/21/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	10/21/20	*			

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	10/21/20	*			
90	First and V St, NW (First St Tunnel)	019	10/21/20	*			
91	First and V St, NW (First St Tunnel)	019	10/21/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	10/20/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	10/20/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	10/20/20	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	10/20/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	10/20/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	10/28/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	10/08/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	10/08/20	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	10/23/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	10/23/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	10/23/20	*			
104	Poplar Point PS Discharge Chamber	N/A	10/23/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	10/23/20	*			

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									

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	
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	10/23/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	10/29/20	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	10/29/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	10/27/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	10/27/20	*			*			*		
011	Main Sewage Pumping Station, SE	10/27/20	*			*			*		
011a	Main Sewage Pumping Station, SE	10/27/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	10/27/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	10/27/20	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	10/27/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	10/27/20	*			*			*		
016	12th and O Streets, SE	10/15/20	*		*		*		*		
017	M and Water Street, SE	10/15/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	10/15/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	10/20/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	10/20/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	10/15/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	10/15/20	*			*			*		
022	Rock Creek Parkway and G St., NW	10/15/20	*		*		*		*		
024	South of 30th and K Streets, NW[1]	10/15/20	*		*		*		*		
025	South of 31st and K Streets, NW	10/15/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	10/15/20	*		*		*		*		
027	33rd and Water Sts., NW	10/15/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	10/15/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	10/15/20	*			*			*		DWO observed, see page 14, section 3
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	10/26/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	10/26/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	10/07/20	*			*			*		
035	P St. Bridge and Rock Creek Parkway	10/07/20	*			*			*		

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	
036	22nd Street, South of Q Street NW.	10/29/20	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	10/01/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	10/01/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	10/01/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	10/29/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	10/29/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	10/29/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	10/29/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	10/29/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	10/14/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	10/14/20	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	10/14/20	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	10/14/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	10/09/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	10/29/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	10/29/20	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	10/09/20	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	10/09/20	*		*		*		*		
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	10/29/20	*		*		*		*		

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	31	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac[1]	31	4	5	Screen #1	10/01/20 – 10/31/20	Bent rake and scraper bar, screen is off track.	20-675279	Anticipated 12/31/20. The screen has been disconnected for repair. Awaiting parts from manufacturer.
				Screen #2	10/15/20 – 10/20/20	Bent rake, screen is off track.	21-38695	Returned to service on 10/21/20. The rake has been repaired and placed back on track.
				Pump #5	10/01/20 – 10/31/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 12/31/20. The pump and motor have been disconnected for repair and the parts have been received. After further visual inspection, additional damage of the impeller welding was found. The impeller and rotating assembly are currently being repaired.

Notes:

1. While two screens were periodically out of service during the month of October 2020, firm pumping capacity was maintained by keeping the screening channel open to allow flow through to the pumps. Debris was manually removed as needed.

Table 2-4
Pumping Stations – Preventive Maintenance

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed [1,2]*	*Work Order Number*	*Comments*
Main	10/21/20	Group A	20-649780	Add oil, grease bearings and replace packing if needed.
O St	10/12/20	Group A	20-680565	Add oil, grease bearings and replace packing if needed.
Eastside	10/31/20	Group A	20-664311	Add oil, grease bearings and replace packing if needed.
Poplar Point	10/31/20	Group A	20-652346	Add oil, grease bearings and replace packing if needed.
Potomac	10/28/20	Group A	20-671611	Add oil, grease bearings and replace packing if needed.
Rock Creek	10/31/20	Group A	20-642942	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	10/31/20	Group A	20-652638	Add oil, grease bearings and replace packing if needed.
Earl Place	10/31/20	Group A	20-627242	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	10/31/20	Group B	21-74105	

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]	1554.49	50.14	N/A	N/A	N/A
O St[1,2]	132.49	4.27	N/A	N/A	N/A
Eastside	131.07	4.23	N/A	N/A	N/A
Poplar Point	370.78	11.96	N/A	N/A	N/A
Potomac	3811.59	122.95	N/A	N/A	N/A
Rock Creek	154.42	4.98	N/A	N/A	N/A
Upper Anacostia	46.31	1.49	N/A	N/A	N/A
Earl Place	0.466	0.015	N/A	N/A	N/A
1st Street Tunnel Dewatering[3]	N/A	N/A	N/A	10/7/20 10/20/20 10/24/20 10/25/20	0.11 0.18 0.05 0.03

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 has not been installed due to space limitations around the current contractor. Work delays can also be attributed to permitting, public notifications, and moratoriums during the presidential election. The flow meter is scheduled for installation during the week of 11/9/2020. 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 October: 51 minutes on 10/7/2020, 85 minutes on 10/20/20, 26 minutes on 10/24/20, 16 minutes on 10/25/20. **The estimated volume is 0.37 MG for the month of October 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	10/8/20	**No**	**N/A**	**N/A**	**N/A**
14 - West	10/8/20	**No**	**N/A**	**N/A**	**N/A**
15	10/8/20	**No**	**N/A**	**N/A**	**N/A**
15A	10/22/20	**No**	**N/A**	**N/A**	**N/A**
16 - East	10/8/20	**No**	**N/A**	**N/A**	**N/A**
16 - West	10/8/20	**No**	**N/A**	**N/A**	**N/A**
34	10/22/20	**No**	**N/A**	**N/A**	**N/A**
35	10/22/20	**No**	**N/A**	**N/A**	**N/A**
52	10/22/20	**No**	**N/A**	**N/A**	**N/A**

Notes:

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

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*
14 (E & W)[1,2,3,4,5]	*10/8/20*	*11 hrs. 17 mins*
	10/9/20	*1 hr. 26 mins*
	10/13/20	*4 hrs. 38 mins*
	10/19/20	*1 hr. 32 mins*
	10/23/20	*0 hrs. 41 mins*
15	*None*	*N/A*
15A	*None*	*N/A*
16 (E & W)	*None*	*N/A*
34[6]	*10/3/20*	*18 hrs. 52 mins*
35[7]	*10/3/20*	*9 hr. 49 mins*
	10/29/20	*0 hrs. 24 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 10/08/20, Structure 14 (E & W) deflated due to a faulty blower motor and belt which resulted in deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. As this was a dry day, temporary repair of the blower motor and belt was completed to return the structure to service the same day. A continuation and completion of the repair work occurred on the following day.
2. On 10/09/20, Structure 14 (E & W) was manually deflated to continue the repair work of the faulty blower motor and belt. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The blower motor and belt was repaired and returned to service the same day.
3. On 10/13/20, Structure 14 (E & W) was manually deflated due to corrective maintenance performed on the PLC instrumentation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
4. On 10/19/20, Structure 14 (E & W) had scheduled corrective maintenance performed to replace broken blower belts. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The blower belts were repaired the same day and the structure was returned to service in less than 24 hours.
5. On 10/23/20, Structure 14 (E & W) had scheduled predictive maintenance performed to inspect the blower and motor alignment. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
6. On 10/3/20, Structure 34 experienced a drop in air pressure due to a PEPCO power outage, which resulted in a dam deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
7. On 10/3/20, Structure 35 experienced a drop in air pressure due to a PEPCO power outage, which resulted in a dam deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.

3. DRY WEATHER OVERFLOWS

There was one dry weather combined sewer overflow reported during October 2020.

On October 19, 2020, DC Water responded to a Dry Weather Overflow (DWO) that was discharging to CSO 029 from September 16, 2020 to October 19, 2020. Details regarding this DWO and DC Water's response were reported to EPA and DOEE in the letter dated October 23, 2020. DC Water determined approximately 9.5 million gallons discharged in the month of September, 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	652	1370	1338	7	7	1377	1345
2	2792	2642	476	476	292	2486	2116	269	269	2755	2385
3	3687	187	0	0	0	3454	181	0	0	3454	181
4	3495	1723	0	0	0	3333	1505	13	12	3346	1517
5	4007	1769	1692	1692	1034	2717	502	632	632	3349	1134
6	3316	2666	2647	2647	1288	263	161	1382	1382	1645	1543
7	3785	43	41	41	27	2144	0	29	28	2173	28
8	2832	212	209	209	197	2050	5	0	0	2050	5
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**5717[2]**	**3490[2]**	**17817[2]**	**5808[2]**	**2332[2]**	**2330[2]**	**20149[2]**	**8138[2]**
% Cleaned/Inspected to Date				**100%**	**61%**					**79%**	**76%**

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	10/01/20	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	10/29/20	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	5
Reason not Operating	Maintenance, wind, low water levels, lightening.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	3 Skimmers
Dates	B32: 10/19 - 10/22 and 10/29 - 10/31. B33: 10/1 - 10/31. B34: 10/3 - 10/5.
Reason	B32: no start and hyd ram leaking. B33: hyd ram leaking. B43: control stick failure.
Plan to Restore to Service	B32 and B33: waiting for parts. ETR unknown. B34: returned to operations on 10/6.
Amount Material Collected	10 tons this month. Calendar year to date 165 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	10/31/20	X		21-32657		
Bar Racks at Main Storm Pumps (CSO 011)	KW	10/31/20	X		21-32650		

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
10/1/2020	0.02	0.01	0	0.01	0.04
10/2/2020	0.09	0.07	0.09	0.08	0.07
10/3/2020	0	0	0	0	0
10/4/2020	0	0	0	0	0
10/5/2020	0.01	0	0.01	0	0.02
10/6/2020	0	0	0	0	0
10/7/2020	0	0	0	0	0
10/8/2020	0	0	0	0	0
10/9/2020	0	0	0	0	0
10/10/2020	0	0	0	0	0
10/11/2020	0.60	0.60	0.68	0.58	0.68
10/12/2020	0.86	0.75	0.57	0.97	0.86
10/13/2020	0.01	0	0.01	0.01	0
10/14/2020	0	0	0	0	0
10/15/2020	0	0	0	0	0
10/16/2020	0.16	0.14	0.13	0.18	0.16
10/17/2020	0	0	0	0	0
10/18/2020	0	0	0	0	0
10/19/2020	0	0	0	0	0
10/20/2020	0	0	0	0	0
10/21/2020	0	0	0	0	0.01
10/22/2020	0	0	0	0	0
10/23/2020	0	0	0	0	0
10/24/2020	0	0.01	0	0	0
10/25/2020	0.49	0.48	0.44	0.53	0.45
10/26/2020	0	0.01	0.01	0	0
10/27/2020	0	0	0	0	0
10/28/2020	0	0	0	0	0
10/29/2020	2.26	1.98	1.89	2.26	2.26
10/30/2020	0.30	0.22	0.25	0.29	0.31
10/31/2020	0	0	0	0	0
TOTAL	4.50	4.05	3.83	4.62	4.55

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: October - December 2020
SCENARIO: QuarterlyReport_2020Q4 , revised Jan 19, 2021

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*	0	0.00	0.00	0.00	0.00	0.00
009	2nd Street, 300 feet North of N Place, SE	Metered	1	0.004	0.50	0.50	0.50	0.50
010	O Street SewagePumping Station, SE (pumped Overflow)	Modeled*	3	14.58	3.50	1.17	1.50	0.75
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)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	Modeled	1	0.22	1.50	1.50	1.50	1.50
014	6th and M Streets, SE	Modeled	1	0.47	1.50	1.50	1.50	1.50
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	Modeled*	1	16.19	0.50	0.50	0.50	0.50
019A	Northeast Boundary - Tunnel OF	Metered	1	0.32	0.25	0.25	0.25	0.25
	SUBTOTAL			**31.79**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	1	0.93	0.92	0.92	0.92	0.92
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	9	41.65	37.75	4.19	8.50	1.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	10	220.99	43.50	4.35	8.50	0.50
022	27th and K Streets, NW	Modeled	10	14.26	48.50	4.85	10.00	0.25
024	30th and K Streets, NW	Modeled	9	17.33	40.00	4.44	12.50	0.75
025	31st & K St NW	Modeled	3	0.11	2.25	0.75	1.00	0.50
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	10	10.31	57.00	5.70	11.00	1.75
028	36th and M Streets, NW	Modeled	12	5.76	134.75	11.23	27.25	1.75
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	10	14.35	61.50	6.15	10.50	1.75
	SUBTOTAL			**325.68**				
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	9	0.621	37.00	4.11	8.25	1.25
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	0	0.0000	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	0.37	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.02	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	3	0.05	0.75	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	1	0.02	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	1	0.07	0.50	0.50	0.50	0.50
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.10	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	4	20.40	4.25	1.06	2.00	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock 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			**21.65**				
	TOTAL			**379.12**				

* Overflow flow meter out of service; model output has been used for report

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: November 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: November 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	11/16/20	*			
7	W Street and Railroad Ave, SE	005	11/16/20	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	11/16/20	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	11/16/20	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	11/16/20	*			
11	"O" Street Pumping Station	011(a)	11/23/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	11/25/20	*			
13	2nd Street, 300 ft. north of N Place, SE	009	11/17/20	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	11/17/20	*			
15	South Capitol and E Streets	010	11/17/20	*			
15a	Half and L Streets, SE	010	11/19/20	*			
15b	South Capitol and I Streets	010	11/04/20	*			
15c	South Capitol and I Streets	010	11/04/20	*			

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

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	11/04/20	*			
36b	19th and L Streets, NW	022, 034	11/03/20	*			
36d	17th and L Streets, NW	022, 034	11/03/20	*			
36g	18th and M Streets, NW	022, 034	11/03/20	*			
36h	18th and M Streets, NW	022, 034	11/03/20	*			
37	27th and Eye Streets, NW	022	11/04/20	*			
38	29th and K Streets, NW	024	11/03/20	*			
38a	30th Street, south of K Street, NW	024	11/03/20	*			
39a	30th and K Streets, NW	024	11/03/20	*			
39b	30th and K Streets, NW	024	11/03/20	*			
41b	31st and K Streets, NW	025	11/03/20	*			
41c	31st and K Streets, NW	025	11/03/20	*			
42	Wisconsin Ave and K Street, NW	026	11/03/20	*			
43	Potomac and Water Streets, NW	027	11/03/20	*			
43a	Potomac and Water Streets, NW	027	11/03/20	*			
44	Water Street, west of Potomac St, NW	027	11/03/20	*			
45	36th and M Streets, NW	028	11/06/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	11/06/20	*			
47	38th Street and Reservoir Road, NW	029	11/06/20	*			
47a	37th and T Streets, NW	029	11/13/20	*			
47b	37th and T Streets, NW	029	11/13/20	*			
47c	38th and W Streets, NW	029	11/13/20	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	11/23/20	*			
51	N Street Extended, west of 25th Street, NW	033	11/23/20	*			
52	22nd Street between M and N Streets, NW	034	11/19/20	*			
52a	N Street between 22nd and 23rd Streets, NW	034	11/19/20	*			
53	22nd and M Streets, NW	022, 034	11/19/20	*			
53a	22nd and M Streets, NW	022, 034	11/19/20	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	11/12/20	*			
53c	L and 22nd Streets, NW	022	11/12/20	*			
54	23rd and O Streets, NW	034	11/12/20	*			
55	22nd Street, south of Q Street, NW	035	11/12/20	*			

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	11/12/20	*			
56	23rd and Massachusetts Ave, NW	036	11/12/20	*			
57	23rd Street, south of Q Street, NW	036	11/12/20	*			
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	11/13/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	11/13/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	11/13/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	11/10/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	11/10/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	11/10/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	11/10/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	11/10/20	*			
66	Adams Mill Road and Lamont Street, NW	045	11/10/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	11/10/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	11/10/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	11/10/20	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	11/10/20	*			
70i	5th and Quackenbos Streets, NW	049	11/04/20	*			
71	28th Street, west of Rock Creek Parkway, NW	050	11/23/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	11/12/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	11/12/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	11/12/20	*			
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	11/13/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	11/13/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	11/13/20	*			
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	11/12/20	*			
84a	26th and P Streets, NW	060	11/12/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	11/18/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	11/18/20	*			

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	11/18/20	*			
90	First and V St, NW (First St Tunnel)	019	11/18/20	*			
91	First and V St, NW (First St Tunnel)	019	11/18/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	11/18/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	11/18/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	11/16/20	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	11/18/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	11/18/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	11/23/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	11/17/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	11/17/20	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	11/20/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	11/20/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	11/20/20	*			
104	Poplar Point PS Discharge Chamber	N/A	11/20/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	11/20/20	*			

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									

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	
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	11/20/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	11/24/20	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	11/24/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	11/25/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	11/25/20	*			*			*		
011	Main Sewage Pumping Station, SE	11/25/20	*			*			*		
011a	Main Sewage Pumping Station, SE	11/25/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	11/25/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	11/25/20	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	11/25/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	11/25/20	*			*			*		
016	12th and O Streets, SE	11/25/20	*		*		*		*		
017	M and Water Street, SE	11/25/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	11/25/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	11/18/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	11/18/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	11/24/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	11/24/20	*			*			*		
022	Rock Creek Parkway and G St., NW	11/24/20	*		*		*		*		
024	South of 30th and K Streets, NW[1]	11/24/20	*		*		*		*		
025	South of 31st and K Streets, NW	11/24/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	11/24/20	*		*		*		*		
027	33rd and Water Sts., NW	11/24/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	11/05/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	11/05/20	*			*			*		DWO observed, see page 14, section 3
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	11/23/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	11/23/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	11/12/20	*			*			*		
035	P St. Bridge and Rock Creek Parkway	11/12/20	*			*			*		

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	
036	22nd Street, South of Q Street NW.	11/24/20	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	11/13/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	11/13/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	11/13/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	11/24/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	11/24/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	11/24/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	11/24/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	11/24/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	11/10/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	11/10/20	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	11/10/20	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	11/10/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	11/23/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	11/23/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	11/23/20	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	11/13/20	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	11/13/20	*		*		*		*		
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	11/24/20	*		*		*		*		

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[1]	30	4	5	Screen #1	11/01/20 – 11/30/20	Bent rake and scraper bar, screen is off track.	20-675279	Anticipated 12/31/20. The screen has been disconnected for repair. Awaiting parts from manufacturer.
				Screen #4	11/14/20 – 11/30/20	Grinding noise from gearbox, screen not running.	21-85425	Anticipated 12/15/2020. Awaiting the replacement of the gearbox.
				Pump #5	11/01/20 – 11/30/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 1/31/2021. The pump and motor have been disconnected for repair and the parts have been received. After further visual inspection, additional damage of the impeller welding was found. The impeller and rotating assembly are currently being repaired.

Notes:

1. While two screens were periodically out of service during the month of November 2020, firm pumping capacity was maintained by keeping the screening channel open to allow flow through to the pumps. Debris was manually removed as needed.

Table 2-4
Pumping Stations – Preventive Maintenance

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed* [1,2]	*Work Order Number*	*Comments*
Main	11/23/20	Group A	21-22871	Add oil, grease bearings and replace packing if needed.
O St	11/12/20	Group A	21-55470	Add oil, grease bearings and replace packing if needed.
Eastside	11/28/20	Group A	21-32674	Add oil, grease bearings and replace packing if needed.
Poplar Point	11/21/20	Group A	21-25774	Add oil, grease bearings and replace packing if needed.
Potomac	11/30/20	Group A	21-35145	Add oil, grease bearings and replace packing if needed.
Rock Creek	11/21/20	Group A	21-16581	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	11/28/20	Group A	21-25788	Add oil, grease bearings and replace packing if needed.
Earl Place	11/28/20	Group A	20-677495	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	11/30/20	Group B	21-118790	

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]	1364.67	45.49	N/A	N/A	N/A
O St[1,2]	145.64	4.85	N/A	N/A	N/A
Eastside	128.13	4.27	N/A	N/A	N/A
Poplar Point	404.78	13.49	N/A	N/A	N/A
Potomac	3526.94	117.56	N/A	N/A	N/A
Rock Creek	128.04	4.27	N/A	N/A	N/A
Upper Anacostia	52.94	1.76	N/A	N/A	N/A
Earl Place	0.5480	0.018	N/A	N/A	N/A
1st Street Tunnel Dewatering[3]	N/A	N/A	N/A	11/1/20 11/3/20 11/6/20 11/12/20 11/14/20 11/28/20 11/30/20	0.12 0.02 0.04 0.30 0.03 0.22 0.12

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 previously found to be defective and did not record discharges. As of 11/12/2020, the replacement flow meter has been installed. Prior to the installation, the flow was estimated based on pump run times and pump capacity. After the installation, flow readings are received from the flow meter.

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	11/17/20	**No**	**N/A**	**N/A**	**N/A**
14 - West	11/17/20	**No**	**N/A**	**N/A**	**N/A**
15	11/19/20	**No**	**N/A**	**N/A**	**N/A**
15A	11/17/20	**No**	**N/A**	**N/A**	**N/A**
16 - East	11/17/20	**No**	**N/A**	**N/A**	**N/A**
16 - West	11/17/20	**No**	**N/A**	**N/A**	**N/A**
34	11/27/20	**No**	**N/A**	**N/A**	**N/A**
35	11/27/20	**No**	**N/A**	**N/A**	**N/A**
52	11/27/20	**No**	**N/A**	**N/A**	**N/A**

Notes:

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

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*
14 (E & W)[1]	*11/3/20*	*0 hrs. 8 mins*
15	*11/12/20*	*0 hrs. 10 mins*
15A	*None*	*N/A*
16 (E & W) [2]	*11/3/20*	*0 hrs. 10 mins*
34	*None*	*N/A*
35	*11/11/20* *11/30/20*	*0 hrs. 49 mins* *1 hr. 36 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 11/03/20, Structure 14 (E & W) experienced a drop in air pressure due to a PEPCO power outage, which resulted in a dam deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
2. On 11/03/20, Structure 16 (E & W) experienced a drop in air pressure due to a PEPCO power outage, which resulted in a dam deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.

3. DRY WEATHER OVERFLOWS

There was one dry weather combined sewer overflow reported during November 2020.

On November 5, 2020 during the monthly inspection of CSO outfalls, our crew observed a cloudy discharge at CSO 029. They inspected the sewer from the outfall and proceeded upstream to find the source of the flow. The discharge was ground water flow from Georgetown University Hospital construction site; the flow was then re-routed. EPA was notified orally regarding this discharge, but a written report was not previously submitted because the discharge source was not sewage.

On November 6, 2020 at approximately 11:15 am, during a follow up inspection of the CSO #029, the crew found raw sewage flowing from CSO Outfall 029 into the Potomac River. They then inspected the Regulator Structure No. 47 at 3800 Reservoir Road, NW, which is located approximately a mile upstream of the outfall, to determine the cause of the discharge to the 96-inch outfall pipe. DC Water had reported that the crew did not observe any discharge to the CSO 029 discharge pipe. Upon further inquiry, the crew confirmed that they found sewage overflowing the dam in the structure that diverts sewer flow into the 21-inch sanitary sewer. As previously reported, the crew entered the sewer to conduct a more detailed assessment of the 18-inch divergent pipe that connects to the sanitary sewer and found no blockages or defects in the line that may cause an overflow. The crew next inspected the by-pass activity at the Georgetown Hospital construction site, and at approximately 11:45am, they returned to CSO 029 outfall and did not observe any further discharge flowing out of the pipe.

DC Water still estimates that 900 gallons of sanitary sewage escaped the collection system and flowed into the Potomac River. The crew also returned the following day to check the outfall and observed no discharge.

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	652	1377	1345	0	0	1377	1345
2	2792	2642	476	476	349	2755	2385	71	58	2826	2443
3	3687	187	0	0	0	3454	181	4	0	3458	181
4	3495	1723	0	0	0	3346	1517	0	0	3346	1517
5	4007	1769	1692	1692	1172	3349	1134	224	224	3573	1358
6	3316	2666	2647	2647	2004	1645	1543	1089	813	2734	2356
7	3785	43	41	41	27	2173	28	352	0	2525	28
8	2832	212	209	209	197	2050	5	26	0	2076	5
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**5717[2]**	**4490[2]**	**20149[2]**	**8138[2]**	**1766[2]**	**1095[2]**	**21915[2]**	**9233[2]**
% Cleaned/Inspected to Date				**100%**	**77%**					**86%**	**87%**

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	11/13/20	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	11/24/20	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:	19
Days not Operating	12
Reason not Operating	Maintenance, wind, low water levels, lightening.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	3 Skimmers
Dates	B32: 11/1 - 11/30. B33 11/1 - 11/12 and 11/23 - 11/29. B34: 11/23 - 11/30
Reason	B32: hydraulic ram leaking. B33: hydraulic ram leaking and wing screen guide worn through. B34: No. 1 screen off track.
Plan to Restore to Service	B32: waiting for parts, ETR early December. B33: returned to operations on 11/13 and 11/30. B34: waiting for parts, ETR unknown.
Amount Material Collected	25 tons this month. Calendar year to date 190 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	11/29/20	X		21-86388		
Bar Racks at Main Storm Pumps (CSO 011)	KW	11/29/20	X		21-86381		

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
11/1/2020	0.40	0.42	0.57	0.47	0.52
11/2/2020	0	0	0	0	0
11/3/2020	0	0	0	0	0
11/4/2020	0	0	0	0	0
11/5/2020	0	0	0	0	0
11/6/2020	0	0	0	0	0
11/7/2020	0	0	0	0	0
11/8/2020	0	0	0	0	0
11/9/2020	0	0	0	0	0
11/10/2020	0	0	0	0	0
11/11/2020	0.95	1.13	1.16	1.11	2.02
11/12/2020	1.60	1.47	1.82	1.50	0.89
11/13/2020	0	0	0	0	0
11/14/2020	0	0	0	0	0
11/15/2020	0.60	0.06	0.39	0.12	0.26
11/16/2020	0	0	0	0	0
11/17/2020	0	0	0	0	0
11/18/2020	0	0	0	0	0
11/19/2020	0.60	0	0	0	0
11/20/2020	0	0	0	0	0
11/21/2020	0	0	0	0	0
11/22/2020	0	0	0	0	0
11/23/2020	0	0	0.01	0	0.02
11/24/2020	0	0	0	0	0
11/25/2020	0	0	0	0	0.01
11/26/2020	0.03	0.04	0.04	0.04	0.03
11/27/2020	0	0	0	0	0
11/28/2020	0	0	0	0	0
11/29/2020	0	0	0	0	0
11/30/2020	1.80	1.59	2.19	1.67	2.39
TOTAL	5.98	4.71	6.18	4.91	6.14

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: October - December 2020
SCENARIO: QuarterlyReport_2020Q4 , revised Jan 19, 2021

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*	0	0.00	0.00	0.00	0.00	0.00
009	2nd Street, 300 feet North of N Place, SE	Metered	1	0.004	0.50	0.50	0.50	0.50
010	O Street SewagePumping Station, SE (pumped Overflow)	Modeled*	3	14.58	3.50	1.17	1.50	0.75
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)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	Modeled	1	0.22	1.50	1.50	1.50	1.50
014	6th and M Streets, SE	Modeled	1	0.47	1.50	1.50	1.50	1.50
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	Modeled*	1	16.19	0.50	0.50	0.50	0.50
019A	Northeast Boundary - Tunnel OF	Metered	1	0.32	0.25	0.25	0.25	0.25
	SUBTOTAL			**31.79**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	1	0.93	0.92	0.92	0.92	0.92
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	9	41.65	37.75	4.19	8.50	1.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	10	220.99	43.50	4.35	8.50	0.50
022	27th and K Streets, NW	Modeled	10	14.26	48.50	4.85	10.00	0.25
024	30th and K Streets, NW	Modeled	9	17.33	40.00	4.44	12.50	0.75
025	31st & K St NW	Modeled	3	0.11	2.25	0.75	1.00	0.50
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	10	10.31	57.00	5.70	11.00	1.75
028	36th and M Streets, NW	Modeled	12	5.76	134.75	11.23	27.25	1.75
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	10	14.35	61.50	6.15	10.50	1.75
	SUBTOTAL			**325.68**				
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	9	0.621	37.00	4.11	8.25	1.25
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	0	0.0000	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	0.37	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.02	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	3	0.05	0.75	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	1	0.02	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	1	0.07	0.50	0.50	0.50	0.50
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.10	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	4	20.40	4.25	1.06	2.00	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock 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			**21.65**				
	TOTAL			**379.12**				

* Overflow flow meter out of service; model output has been used for report

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: December 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: December 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	12/21/20	*			
7	W Street and Railroad Ave, SE	005	12/21/20	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	12/21/20	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	12/21/20	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	12/18/20	*			
11	"O" Street Pumping Station	011(a)	12/23/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	12/22/20	*			
13	2nd Street, 300 ft. north of N Place, SE	009	12/15/20	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	12/15/20	*			
15	South Capitol and E Streets	010	12/15/20	*			
15a	Half and L Streets, SE	010	12/15/20	*			
15b	South Capitol and I Streets	010	12/02/20	*			
15c	South Capitol and I Streets	010	12/02/20	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	12/15/20	*			
17	4th and N Streets, SE, Both Extended	013	12/07/20	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	12/21/20	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	12/14/20	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	12/11/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	12/07/20	*			
19	9th and M Streets, SE	015	12/14/20	*			
19a	9th and M Streets, SE	015	12/14/20	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	12/14/20	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	12/14/20	*			
20	12th and M Streets, SE	016	12/14/20	*			
20a	12th and M Streets, SE	016	12/14/20	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	12/14/20	*			
21	14th and M Streets, SE	017	12/14/20	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	12/14/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	12/11/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	12/11/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	12/11/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	12/11/20	*			
22e	14th Street and Kentucky Ave, SE	018	12/11/20	*			
23	Independence Ave, 21st Street, SE, Extended	019	12/21/20	*			
24a	East Capitol St, west of RFK stadium	019	12/21/20	*			
28	21st and Constitution Ave, NW	020	12/07/20	*			
29	22nd Street, between Constitution Ave and C St, NW	020	12/07/20	*			
30	17th and D Streets, NW	020	12/07/20	*			
31	15th Street and Pennsylvania Ave, NW	020	12/07/20	*			
33	10th and F Streets, NW	020	12/07/20	*			
34	23rd Street, north of Constitution Ave, NW	020	12/15/20	*			
34a	23rd Street near C Street, NW	020	12/07/20	*			
35	Northeast of Roosevelt Bridge, NW	021	12/15/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	12/15/20	*			
36	27th and I Streets, NW	022	12/07/20	*			

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	12/07/20	*			
36b	19th and L Streets, NW	022, 034	12/04/20	*			
36d	17th and L Streets, NW	022, 034	12/04/20	*			
36g	18th and M Streets, NW	022, 034	12/04/20	*			
36h	18th and M Streets, NW	022, 034	12/04/20	*			
37	27th and Eye Streets, NW	022	12/07/20	*			
38	29th and K Streets, NW	024	12/04/20	*			
38a	30th Street, south of K Street, NW	024	12/04/20	*			
39a	30th and K Streets, NW	024	12/04/20	*			
39b	30th and K Streets, NW	024	12/04/20	*			
41b	31st and K Streets, NW	025	12/04/20	*			
41c	31st and K Streets, NW	025	12/04/20	*			
42	Wisconsin Ave and K Street, NW	026	12/04/20	*			
43	Potomac and Water Streets, NW	027	12/04/20	*			
43a	Potomac and Water Streets, NW	027	12/04/20	*			
44	Water Street, west of Potomac St, NW	027	12/04/20	*			
45	36th and M Streets, NW	028	12/02/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	12/02/20	*			
47	38th Street and Reservoir Road, NW	029	12/02/20	*			
47a	37th and T Streets, NW	029	12/02/20	*			
47b	37th and T Streets, NW	029	12/02/20	*			
47c	38th and W Streets, NW	029	12/02/20	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	12/17/20	*			
51	N Street Extended, west of 25th Street, NW	033	12/21/20	*			
52	22nd Street between M and N Streets, NW	034	12/17/20	*			
52a	N Street between 22nd and 23rd Streets, NW	034	12/17/20	*			
53	22nd and M Streets, NW	022, 034	12/17/20	*			
53a	22nd and M Streets, NW	022, 034	12/17/20	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	12/08/20	*			
53c	L and 22nd Streets, NW	022	12/08/20	*			
54	23rd and O Streets, NW	034	12/08/20	*			
55	22nd Street, south of Q Street, NW	035	12/08/20	*			

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	12/08/20	*			
56	23rd and Massachusetts Ave, NW	036	12/08/20	*			
57	23rd Street, south of Q Street, NW	036	12/08/20	*			
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	12/02/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	12/02/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	12/02/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	12/09/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	12/09/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	12/09/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	12/09/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	12/09/20	*			
66	Adams Mill Road and Lamont Street, NW	045	12/09/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	12/09/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	12/09/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	12/09/20	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	12/09/20	*			
70i	5th and Quackenbos Streets, NW	049	12/11/20	*			
71	28th Street, west of Rock Creek Parkway, NW	050	12/09/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	12/08/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	12/08/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	12/08/20	*			
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	12/10/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	12/10/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	12/10/20	*			
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	12/08/20	*			
84a	26th and P Streets, NW	060	12/08/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	12/21/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	12/21/20	*			

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	12/21/20	*			
90	First and V St, NW (First St Tunnel)	019	12/21/20	*			
91	First and V St, NW (First St Tunnel)	019	12/21/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	12/23/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	12/23/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	12/14/20	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	12/18/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	12/18/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	12/23/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	12/15/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	12/15/20	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	12/18/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	12/18/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	12/18/20	*			
104	Poplar Point PS Discharge Chamber	N/A	12/18/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	12/18/20	*			

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	

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	12/18/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	12/22/20	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	12/22/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	12/22/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	12/22/20	*			*			*		
011	Main Sewage Pumping Station, SE	12/22/20	*			*			*		
011a	Main Sewage Pumping Station, SE	12/22/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	12/22/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	12/22/20	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	12/22/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	12/22/20	*			*			*		
016	12th and O Streets, SE	12/22/20	*		*		*		*		
017	M and Water Street, SE	12/22/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	12/22/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	12/23/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	12/23/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	12/03/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	12/03/20	*			*			*		
022	Rock Creek Parkway and G St., NW	12/03/20	*		*		*		*		
024	South of 30th and K Streets, NW[1]	12/03/20	*		*		*		*		
025	South of 31st and K Streets, NW	12/03/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	12/03/20	*		*		*		*		
027	33rd and Water Sts., NW	12/03/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	12/03/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	12/03/20	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	12/17/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	12/21/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	12/08/20	*			*			*		

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	
035	P St. Bridge and Rock Creek Parkway	12/08/20	*			*			*		
036	22nd Street, South of Q Street NW.	12/10/20	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	12/02/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	12/02/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	12/02/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	12/10/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	12/10/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	12/10/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	12/10/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	12/10/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	12/09/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	12/09/20	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	12/09/20	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	12/09/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	12/09/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	12/10/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	12/10/20	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	12/10/20	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	12/10/20	*		*		*		*		
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	12/10/20	*		*		*		*		

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	31	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	Screen #1	12/01/20 – 12/31/20	Bent rake and scraper bar, screen is off track.	20-675279	Anticipated 2/28/21. The screen has been disconnected for repair. Awaiting parts from manufacturer.
				Screen #2	12/01/20 – 12/31/20	Broken rake, screen is not running	21-121831	Anticipated 1/31/2021. Awaiting the parts for rake and gearbox.
				Screen #4	12/01/20 – 12/11/20	Grinding noise from gearbox, screen not running.	21-85425	Returned to service 12/11/2020. Gearbox was repaired.
				Pump #5	12/01/20 – 12/31/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 1/31/2021. The pump and motor have been disconnected for repair and the parts have been received. After further visual inspection, additional damage of the impeller welding was found. The impeller and rotating assembly are currently being repaired.

Notes:

1. While three screens were periodically out of service during the month of December 2020, firm pumping capacity was maintained by keeping the screening channel open to allow flow through to the pumps. Debris was manually removed as needed.

Table 2-4
Pumping Stations – Preventive Maintenance

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed* [1,2]	*Work Order Number*	*Comments*
Main	12/23/20	Group A	21-86610	Add oil, grease bearings and replace packing if needed.
O St	12/14/20	Group A	21-112842	Add oil, grease bearings and replace packing if needed.
Eastside	12/26/20	Group A	21-100558	Add oil, grease bearings and replace packing if needed.
Poplar Point	12/26/20	Group A	21-89548	Add oil, grease bearings and replace packing if needed.
Potomac	12/30/20	Group A	21-105481	Add oil, grease bearings and replace packing if needed.
Rock Creek	12/26/20	Group A	21-82506	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	12/26/20	Group A	21-89858	Add oil, grease bearings and replace packing if needed.
Earl Place	12/26/20	Group A	21-63231	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	12/27/20	Group B	21-170167	

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]	1780.49	57.44	N/A	N/A	N/A
O St[1,2]	131.90	4.25	N/A	N/A	N/A
Eastside	144.50	4.66	N/A	N/A	N/A
Poplar Point	445.06	14.36	N/A	N/A	N/A
Potomac	3496.67	112.80	N/A	N/A	N/A
Rock Creek	128.08	4.13	N/A	N/A	N/A
Upper Anacostia	54.62	1.76	N/A	N/A	N/A
Earl Place	0.628	0.020	N/A	N/A	N/A
1st Street Tunnel Dewatering	N/A	N/A	N/A	12/12/20 12/15/20 12/16/20 12/24/20 12/27/20	0.08 0.004 0.04 0.21 0.21

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

2.4 Inflatable Dams and SCADA System

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

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

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	12/15/20	**No**	**N/A**	**N/A**	**N/A**
14 - West	12/15/20	**No**	**N/A**	**N/A**	**N/A**
15	12/15/20	**No**	**N/A**	**N/A**	**N/A**
15A	12/15/20	**No**	**N/A**	**N/A**	**N/A**
16 - East	12/15/20	**No**	**N/A**	**N/A**	**N/A**
16 - West	12/15/20	**No**	**N/A**	**N/A**	**N/A**
34	12/15/20	**No**	**N/A**	**N/A**	**N/A**
35	12/15/20	**No**	**N/A**	**N/A**	**N/A**
52	12/17/20	**No**	**N/A**	**N/A**	**N/A**

Notes:

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]	*12/28/20*	*1 hr. 44 mins*
34	*None*	*N/A*
35	*12/24/20*	*0 hrs. 59 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 12/28/20, Structure 16 (E & W) experienced a high torque alarm on the blower which resulted in a deflation. Electrical technicians were dispatched to investigate equipment and the blower unit was reset. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow reported during December 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	652	1377	1345	0	0	1377	1345
2	2792	2642	476	476	476	2826	2443	177	174	3003	2617
3	3687	187	0	0	0	3458	181	0	0	3458	181
4	3495	1723	0	0	0	3346	1517	0	0	3346	1517
5	4007	1769	1692	1692	1692	3573	1358	557	555	4130	1913
6	3316	2666	2647	2647	2647	2734	2356	845	798	3579	3154
7	3785	43	41	41	41	2525	28	292	14	2817	42
8	2832	212	209	209	209	2076	5	407	16	2483	21
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**5717[2]**	**5717[2]**	**21915[2]**	**9233[2]**	**2278[2]**	**1557[2]**	**24193[2]**	**10790[2]**
% Cleaned/Inspected to Date				**100%**	**100%**					**95%**	**101%**

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	12/02/20	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	12/10/20	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	9
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B34: 12/1 - 12/31
Reason	B34: No. 1 screen off track.
Plan to Restore to Service	B34: waiting for parts, ETR unknown.
Amount Material Collected	45 tons this month. Calendar year to date 235 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	12/28/20	X		21-141787		
Bar Racks at Main Storm Pumps (CSO 011)	KW	12/28/20	X		21-141780		

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
12/1/2020	0.01	0	0.03	0.01	0.02
12/2/2020	0	0	0	0	0
12/3/2020	0	0	0	0	0
12/4/2020	0.27	0.26	0.39	0.30	0.42
12/5/2020	0.86	0.74	0.81	0.89	0.82
12/6/2020	0	0	0	0	0
12/7/2020	0	0	0	0	0
12/8/2020	0	0	0	0	0
12/9/2020	0	0	0	0	0
12/10/2020	0	0	0	0	0
12/11/2020	0	0	0	0	0
12/12/2020	0	0	0	0	0
12/13/2020	0	0	0	0	0
12/14/2020	0.99	0.94	1.05	1.01	1.06
12/15/2020	0	0	0	0	0
12/16/2020	0.81	0.96	1.16	1.15	1.11
12/17/2020	0	0	0.02	0.02	0.01
12/18/2020	0	0	0	0	0
12/19/2020	0	0	0	0	0
12/20/2020	0	0	0	0	0
12/21/2020	0	0.01	0.01	0.01	0.03
12/22/2020	0	0	0	0	0.01
12/23/2020	0	0	0	0	0
12/24/2020	0.99	1.25	1.37	1.37	1.30
12/25/2020	0.22	0.20	0.20	0.27	0.18
12/26/2020	0.02	0.02	0	0.03	0
12/27/2020	0	0	0	0	0
12/28/2020	0	0	0	0	0
12/29/2020	0	0	0	0	not available
12/30/2020	0	0	0	0	not available
12/31/2020	0	0	0	0	not available
TOTAL	4.17	4.38	5.04	5.06	4.96

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: October - December 2020
SCENARIO: QuarterlyReport_2020Q4 , revised Jan 19, 2021

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*	0	0.00	0.00	0.00	0.00	0.00
009	2nd Street, 300 feet North of N Place, SE	Metered	1	0.004	0.50	0.50	0.50	0.50
010	O Street SewagePumping Station, SE (pumped Overflow)	Modeled*	3	14.58	3.50	1.17	1.50	0.75
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)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	Modeled	1	0.22	1.50	1.50	1.50	1.50
014	6th and M Streets, SE	Modeled	1	0.47	1.50	1.50	1.50	1.50
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	Modeled*	1	16.19	0.50	0.50	0.50	0.50
019A	Northeast Boundary - Tunnel OF	Metered	1	0.32	0.25	0.25	0.25	0.25
	SUBTOTAL			**31.79**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	1	0.93	0.92	0.92	0.92	0.92
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	9	41.65	37.75	4.19	8.50	1.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	10	220.99	43.50	4.35	8.50	0.50
022	27th and K Streets, NW	Modeled	10	14.26	48.50	4.85	10.00	0.25
024	30th and K Streets, NW	Modeled	9	17.33	40.00	4.44	12.50	0.75
025	31st & K St NW	Modeled	3	0.11	2.25	0.75	1.00	0.50
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	10	10.31	57.00	5.70	11.00	1.75
028	36th and M Streets, NW	Modeled	12	5.76	134.75	11.23	27.25	1.75
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	10	14.35	61.50	6.15	10.50	1.75
	SUBTOTAL			**325.68**				
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	9	0.621	37.00	4.11	8.25	1.25
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	0	0.0000	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	0.37	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.02	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	3	0.05	0.75	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	1	0.02	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	1	0.07	0.50	0.50	0.50	0.50
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.10	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	4	20.40	4.25	1.06	2.00	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock 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			**21.65**				
	TOTAL			**379.12**				

* Overflow flow meter out of service; model output has been used for report

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