QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

FIRST QUARTER, 2021

Prepared By:

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

DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY

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Monthly Operations Report For
Combined Sewer System

Month: January 2021

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WATER AND SEWER AUTHORITY
Washington, D.C.

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

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

Table 2-1
Regulator Structures

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5[1]	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	01/07/21	*			
7	W Street and Railroad Ave, SE	005	01/07/21	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	01/07/21	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	01/07/21	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	01/07/21	*			
11	"O" Street Pumping Station	011(a)	01/27/21	*			
12	Storm Pump Discharge at Main Pumping Station	011	01/05/21	*			
13	2nd Street, 300 ft. north of N Place, SE	009	01/14/21	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	01/14/21	*			
15	South Capitol and E Streets	010	01/14/21	*			
15a	Half and L Streets, SE	010	01/14/21	*			
15b	South Capitol and I Streets	010	01/27/21	*			
15c	South Capitol and I Streets	010	01/27/21	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	01/14/21	*			
17	4th and N Streets, SE, Both Extended	013	01/07/21	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	01/15/21	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	01/28/21	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	01/07/21	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	01/07/21	*			
19	9th and M Streets, SE	015	01/06/21	*			
19a	9th and M Streets, SE	015	01/06/21	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	01/06/21	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	01/06/21	*			
20	12th and M Streets, SE	016	01/06/21	*			
20a	12th and M Streets, SE	016	01/06/21	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	01/06/21	*			
21	14th and M Streets, SE	017	01/06/21	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	01/06/21	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	01/05/21	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	01/05/21	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	01/05/21	*			
22d	Kentucky Ave and Potomac Street, SE	018	01/05/21	*			
22e	14th Street and Kentucky Ave, SE	018	01/05/21	*			
23	Independence Ave, 21st Street, SE, Extended	019	01/05/21	*			
24a	East Capitol St, west of RFK stadium	019	01/05/21	*			
28	21st and Constitution Ave, NW	020	01/11/21	*			
29	22nd Street, between Constitution Ave and C St, NW	020	01/11/21	*			
30	17th and D Streets, NW	020	01/11/21	*			
31	15th Street and Pennsylvania Ave, NW	020	01/11/21	*			
33	10th and F Streets, NW	020	01/11/21	*			
34	23rd Street, north of Constitution Ave, NW	020	01/14/21	*			
34a	23rd Street near C Street, NW	020	01/11/21	*			
35	Northeast of Roosevelt Bridge, NW	021	01/14/21	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	01/14/21	*			
36	27th and I Streets, NW	022	01/11/21	*			

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	01/11/21	*			
36b	19th and L Streets, NW	022, 034	01/25/21	*			
36d	17th and L Streets, NW	022, 034	01/25/21	*			
36g	18th and M Streets, NW	022, 034	01/25/21	*			
36h	18th and M Streets, NW	022, 034	01/25/21	*			
37	27th and Eye Streets, NW	022	01/11/21	*			
38	29th and K Streets, NW	024	01/04/21	*			
38a	30th Street, south of K Street, NW	024	01/04/21	*			
39a	30th and K Streets, NW	024	01/04/21	*			
39b	30th and K Streets, NW	024	01/04/21	*			
41b	31st and K Streets, NW	025	01/04/21	*			
41c	31st and K Streets, NW	025	01/04/21	*			
42	Wisconsin Ave and K Street, NW	026	01/04/21	*			
43	Potomac and Water Streets, NW	027	01/04/21	*			
43a	Potomac and Water Streets, NW	027	01/04/21	*			
44	Water Street, west of Potomac St, NW	027	01/04/21	*			
45	36th and M Streets, NW	028	01/25/21	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	01/25/21	*			
47	38th Street and Reservoir Road, NW	029	01/25/21	*			
47a	37th and T Streets, NW	029	01/25/21	*			
47b	37th and T Streets, NW	029	01/25/21	*			
47c	38th and W Streets, NW	029	01/25/21	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	01/28/21	*			
51	N Street Extended, west of 25th Street, NW	033	01/28/21	*			
52	22nd Street between M and N Streets, NW	034	01/28/21	*			
52a	N Street between 22nd and 23rd Streets, NW	034	01/28/21	*			
53	22nd and M Streets, NW	022, 034	01/28/21	*			
53a	22nd and M Streets, NW	022, 034	01/28/21	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	01/28/21	*			
53c	L and 22nd Streets, NW	022	01/28/21	*			
54	23rd and O Streets, NW	034	01/12/21	*			
55	22nd Street, south of Q Street, NW	035	01/12/21	*			

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	01/12/21	*			
56	23rd and Massachusetts Ave, NW	036	01/12/21	*			
57	23rd Street, south of Q Street, NW	036	01/12/21	*			
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	01/11/21	*			
60	Connecticut Ave, east of Rock Creek, NW	039	01/11/21	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	01/11/21	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	01/13/21	*			
63	Harvard Street and Rock Creek Parkway, NW	042	01/13/21	*			
64	Adams Mill Road, south of Irving Street, NW	043	01/13/21	*			
65	Kenyon Street and Adams Mill Road, NW	044	01/13/21	*			
65a	Kenyon Street and Adams Mill Road, NW	044	01/13/21	*			
66	Adams Mill Road and Lamont Street, NW	045	01/13/21	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	01/13/21	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	01/13/21	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	01/13/21	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	01/13/21	*			
70i	5th and Quackenbos Streets, NW	049	01/05/21	*			
71	28th Street, west of Rock Creek Parkway, NW	050	01/25/21	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	01/12/21	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	01/12/21	*			
73	O Street Extended and Rock Creek Parkway, NW	052	01/12/21	*			
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	01/25/21	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	01/25/21	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	01/25/21	*			
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	01/12/21	*			
84a	26th and P Streets, NW	060	01/12/21	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	01/14/21	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	01/14/21	*			

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	01/14/21	*			
90	First and V St, NW (First St Tunnel)	019	01/14/21	*			
91	First and V St, NW (First St Tunnel)	019	01/14/21	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	01/08/21	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	01/08/21	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	01/06/21	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	01/08/21	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	01/08/21	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	01/28/21	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	01/14/21	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	01/14/21	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	01/08/21	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	01/08/21	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	01/08/21	*			
104	Poplar Point PS Discharge Chamber	N/A	01/08/21	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	01/08/21	*			

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	01/08/21	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	01/27/21	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	01/27/21	*		*		*		*		
009	O St. Sewage Pumping Station, SE	01/15/21	*		*		*		*		
010	O St. Sewage Pumping Station, SE	01/15/21	*			*			*		
011	Main Sewage Pumping Station, SE	01/15/21	*			*			*		
011a	Main Sewage Pumping Station, SE	01/15/21	*		*		*		*		
012	Main Sewage Pumping Station, SE	01/15/21	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	01/15/21	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	01/15/21	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	01/15/21	*			*			*		
016	12th and O Streets, SE	01/07/21	*		*		*		*		
017	M and Water Street, SE	01/07/21	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	01/07/21	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	01/08/21	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	01/08/21	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	01/21/21	*		*		*		*		
021	Rock Creek Parkway and C St., NW	01/21/21	*			*			*		
022	Rock Creek Parkway and G St., NW	01/21/21	*		*		*		*		
024	South of 30th and K Streets, NW[1]	01/21/21	*		*		*		*		
025	South of 31st and K Streets, NW	01/21/21	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	01/21/21	*		*		*		*		
027	33rd and Water Sts., NW	01/21/21	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	01/21/21	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	01/21/21	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	01/28/21	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	01/28/21	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	01/12/21	*			*			*		

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	01/12/21	*			*			*		
036	22nd Street, South of Q Street NW.	01/27/21	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	01/11/21	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	01/11/21	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	01/11/21	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	01/27/21	*		*		*		*		
042	Harvard St. and Beach Dr NW.	01/27/21	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	01/27/21	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	01/27/21	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	01/27/21	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	01/13/21	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	01/13/21	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	01/31/21	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	01/13/21	*		*		*		*		
050	Rock Creek Parkway and L St., NW	01/25/21	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	01/28/21	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	01/28/21	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	01/25/21	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	01/25/21	*		*		*		*		
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	01/27/21	*		*		*		*		

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	1/01/21 – 1/31/21	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	1/01/21 – 1/31/21	Broken rake, screen is not running.	21-121831	Anticipated 2/12/2021. Parts have been received. Repair is ongoing.
				Pump #5	1/01/21 – 1/30/21	Bearing and vibration issue, pump not running.	20-404901	Returned to service on 1/30/2021. After further visual inspection, additional damage of the impeller welding was found. The impeller and rotating assembly have since been repaired.

Notes:

1. While two screens were periodically out of service during the month of January 2021, 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	1/15/21	Group A	21-142032	Add oil, grease bearings and replace packing if needed.
O St	1/16/21	Group A	21-154389	Add oil, grease bearings and replace packing if needed.
Eastside	1/13/21	Group A	21-150618	Add oil, grease bearings and replace packing if needed.
Poplar Point	1/15/21	Group A	21-146093	Add oil, grease bearings and replace packing if needed.
Potomac	1/15/21	Group A	21-146079	Add oil, grease bearings and replace packing if needed.
Rock Creek	1/15/21	Group A	21-126400	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	1/12/21	Group A	21-146452	Add oil, grease bearings and replace packing if needed.
Earl Place	1/23/21	Group A	21-109982	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	1/29/21	Group B	21-224122	

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]	1991.20	64.23	N/A	N/A	N/A
O St[1,2]	118.10	3.81	N/A	N/A	N/A
Eastside	125.91	4.06	N/A	N/A	N/A
Poplar Point	361.55	11.66	N/A	N/A	N/A
Potomac	3244.75	104.67	N/A	N/A	N/A
Rock Creek	96.29	3.11	N/A	N/A	N/A
Upper Anacostia	46.43	1.50	N/A	N/A	N/A
Earl Place	0.358	0.012	N/A	N/A	N/A
1st Street Tunnel Dewatering	N/A	N/A	N/A	1/10/21 1/24/21	0.22 0.22

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[1]
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	1/14/21	**No**	**N/A**	**N/A**	**N/A**
14 - West	1/14/21	**No**	**N/A**	**N/A**	**N/A**
15	1/14/21	**No**	**N/A**	**N/A**	**N/A**
15A	1/28/21	**Yes**	**1/30/21**	**See Note 2**	**1/30/21**
16 - East	1/14/21	**No**	**N/A**	**N/A**	**N/A**
16 - West	1/14/21	**No**	**N/A**	**N/A**	**N/A**
34	1/14/21	**No**	**N/A**	**N/A**	**N/A**
35	1/14/21	**No**	**N/A**	**N/A**	**N/A**
52	1/28/21	**No**	**N/A**	**N/A**	**N/A**

Notes:

1. In previous reports, only inflatable dam outages with durations longer than 24 hours were reported in Table 2-6. Short duration outages, which did not result in overflows, were still reported in table 2-7 along with a note to explain that no overflow occurred. Moving forward, all outages will be reported in Table 2-6, and only actual overflow events will be reported in Table 2-7.
2. On 1/30/21, Structure 15A deflated due to a compressor failure which resulted in deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The compressor belt was repaired the same day and the structure was returned to service in less than 24 hours.

Table 2-7[1]

Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*	*Inflatable Dam Operational Status*
14 (E & W)	*None*	*N/A*	*Inflated*
15	*None*	*N/A*	*Inflated*
15A	*None*	*N/A*	*Inflated*
16 (E & W)	*None*	*N/A*	*Inflated*
34	*None*	*N/A*	*Inflated*
35	*None*	*N/A*	*Inflated*
52	*None*	*N/A*	*Inflated*
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	*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. In previous reports, all inflatable dam outages were reported in Table 2-7, regardless if an overflow occurred or not. Moving forward, all outages will be reported in Table 2-6, and only actual overflow events will be reported in Table 2-7.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow reported during January 2021.

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	0	0	1377	1345	0	0	0	0
2	2792	2642	476	0	0	3003	2617	0	0	0	0
3	3687	187	0	0	0	3458	181	7	0	7	0
4	3495	1723	0	0	0	3346	1517	226	0	226	0
5	4007	1769	1692	0	0	4130	1913	4	0	4	0
6	3316	2666	2647	2	0	3579	3154	3	2	3	2
7	3785	43	41	0	0	2817	42	93	0	93	0
8	2832	212	209	1	0	2483	21	935	1	935	1
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**3**	**0**	**24193[2]**	**10790[2]**	**1268**	**3**	**1268**	**3**
% Cleaned/Inspected to Date				**0%**	**0%**					**5%**	**0%**

Notes:

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

4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

Facility	*Date Inspected*	*Condition*	*Work Needed*	*Work performed*	*Material Removed (LB)*
Bar Rack CSO 040	01/11/21	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	01/27/21	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:	18
Days not Operating	7
Reason not Operating	Maintenance, wind, low water levels, river closed by U.S. Coast Guard for Presidential Inauguration.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	2 Skimmers
Dates	B33: 1/5 - 1/14. B34: 1/1 - 1/31
Reason	B33: Ruptured hydraulic hose. B34: No. 1 screen off track.
Plan to Restore to Service	B33: Returned to operations 1/15. B34: Parts arrived, ETR March 2021.
Amount Material Collected	10 tons this month. Calendar year to date 10 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	1/28/21	X		21-188320		
Bar Racks at Main Storm Pumps (CSO 011)	KW	1/28/21	X		21-188313		

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
1/1/2021	0.82	0.80	0.79	0.83	0.81
1/2/2021	0.09	0.09	0	0.09	0
1/3/2021	0.16	0.17	0.24	0.20	0.28
1/4/2021	0.01	0.01	0	0.02	0
1/5/2021	0	0.01	0.02	0.01	0.03
1/6/2021	0	0	0	0	0
1/7/2021	0	0	0	0	0
1/8/2021	0	0	0	0	0
1/9/2021	0	0	0	0	0
1/10/2021	0	0	0	0	0
1/11/2021	0	0	0	0	0
1/12/2021	0	0	0	0	0
1/13/2021	0	0	0	0	0
1/14/2021	0	0	0	0	0
1/15/2021	0.15	0.16	0.18	0.15	0.17
1/16/2021	0.02	0.02	0	0.02	0
1/17/2021	0	0	0	0	0
1/18/2021	0	0	0	0	0
1/19/2021	0	0	0	0	0
1/20/2021	0	0	0	0	0
1/21/2021	0	0	0	0	0
1/22/2021	0	0	0	0	0
1/23/2021	0	0	0	0	0
1/24/2021	0	0	0	0	0
1/25/2021	0.06	0.09	0.12	0.11	0.18
1/26/2021	0.05	0.07	0.05	0.08	0.07
1/27/2021	0	0	0	0	0
1/28/2021	0	0	0	0	0
1/29/2021	0	0	0	0	0
1/30/2021	0	0	0	0	0
1/31/2021	0.07	0.22	0.30	0.19	0.39
TOTAL	1.36	1.42	1.40	1.51	1.54

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: Q1 2021 (January, February, March 2021)
SCENARIO: QuarterlyReport_2021Q1, created on 8 April 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	0	0.00	0.00	0.00	0.00	0.00
010	O Street SewagePumping Station, SE (pumped Overflow)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main SewagePumping Station, SE (gravity overflow)	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	0	0.00	0.00	0.00	0.00	0.00
014	6th and M Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle andPennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Modeled*	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			**0.00**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	5	9.36	15.50	3.10	4.50	1.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	8	59.48	18.75	2.34	4.50	0.50
022	27th and K Streets, NW	Modeled	8	0.72	33.50	4.19	11.75	0.25
024	30th and K Streets, NW	Modeled	20	3.00	127.25	6.36	27.25	0.25
025	31st & K St NW	Modeled	6	0.15	5.75	0.96	3.75	0.25
026	Wisconsin Avenue andK St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	Modeled	10	3.86	48.25	4.83	12.50	0.75
028	36th and M Streets, NW	Modeled	19	3.43	131.75	6.93	26.00	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	10	3.65	49.00	4.90	12.50	0.75
	SUBTOTAL			**83.64**				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	8	0.20	17.75	2.22	4.50	0.50
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	1	0.01	0.25	0.25	0.25	0.25
039	Connecticut Avenue east of Rock Creek, NW	Modeled	1	0.18	0.25	0.25	0.25	0.25
040	Biltmore Street extended east of RockCreek, NW	Modeled	1	0.18	0.25	0.25	0.25	0.25
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	1	0.29	0.25	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	1	0.53	0.25	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.27	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	1	0.22	0.25	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	1	0.11	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	1	0.07	0.25	0.25	0.25	0.25
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.36	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	2	4.29	1.25	0.63	0.75	0.50
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
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			**6.69**				
	TOTAL			**90.33**				

* 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: February 2021

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: February 2021
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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

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

Table 2-1
Regulator Structures

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4[1]	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5[1]	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	02/09/21	*			
7	W Street and Railroad Ave, SE	005	02/09/21	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	02/09/21	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	02/09/21	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	02/17/21	*			
11	"O" Street Pumping Station	011(a)	02/17/21	*			
12	Storm Pump Discharge at Main Pumping Station	011	02/11/21	*			
13	2nd Street, 300 ft. north of N Place, SE	009	02/17/21	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	02/24/21	*			
15	South Capitol and E Streets	010	02/24/21	*			
15a	Half and L Streets, SE	010	02/24/21	*			
15b	South Capitol and I Streets	010	02/09/21	*			
15c	South Capitol and I Streets	010	02/09/21	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	02/24/21	*			
17	4th and N Streets, SE, Both Extended	013	02/10/21	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	02/17/21	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	02/23/21	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	02/16/21	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	02/10/21	*			
19	9th and M Streets, SE	015	02/17/21	*			
19a	9th and M Streets, SE	015	02/17/21	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	02/17/21	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	02/17/21	*			
20	12th and M Streets, SE	016	02/16/21	*			
20a	12th and M Streets, SE	016	02/16/21	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	02/16/21	*			
21	14th and M Streets, SE	017	02/16/21	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	02/16/21	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	02/16/21	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	02/16/21	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	02/16/21	*			
22d	Kentucky Ave and Potomac Street, SE	018	02/12/21	*			
22e	14th Street and Kentucky Ave, SE	018	02/12/21	*			
23	Independence Ave, 21st Street, SE, Extended	019	02/12/21	*			
24a	East Capitol St, west of RFK stadium	019	02/12/21	*			
28	21st and Constitution Ave, NW	020	02/01/21	*			
29	22nd Street, between Constitution Ave and C St, NW	020	02/01/21	*			
30	17th and D Streets, NW	020	02/01/21	*			
31	15th Street and Pennsylvania Ave, NW	020	02/01/21	*			
33	10th and F Streets, NW	020	02/01/21	*			
34	23rd Street, north of Constitution Ave, NW	020	02/25/21	*			
34a	23rd Street near C Street, NW	020	02/01/21	*			
35	Northeast of Roosevelt Bridge, NW	021	02/25/21	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	02/23/21	*			
36	27th and I Streets, NW	022	02/01/21	*			

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	02/01/21	*			
36b	19th and L Streets, NW	022, 034	02/02/21	*			
36d	17th and L Streets, NW	022, 034	02/02/21	*			
36g	18th and M Streets, NW	022, 034	02/02/21	*			
36h	18th and M Streets, NW	022, 034	02/02/21	*			
37	27th and Eye Streets, NW	022	02/01/21	*			
38	29th and K Streets, NW	024	02/02/21	*			
38a	30th Street, south of K Street, NW	024	02/02/21	*			
39a	30th and K Streets, NW	024	02/02/21	*			
39b	30th and K Streets, NW	024	02/02/21	*			
41b	31st and K Streets, NW	025	02/02/21	*			
41c	31st and K Streets, NW	025	02/02/21	*			
42	Wisconsin Ave and K Street, NW	026	02/02/21	*			
43	Potomac and Water Streets, NW	027	02/02/21	*			
43a	Potomac and Water Streets, NW	027	02/02/21	*			
44	Water Street, west of Potomac St, NW	027	02/02/21	*			
45	36th and M Streets, NW	028	02/08/21	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	02/08/21	*			
47	38th Street and Reservoir Road, NW	029	02/08/21	*			
47a	37th and T Streets, NW	029	02/08/21	*			
47b	37th and T Streets, NW	029	02/08/21	*			
47c	38th and W Streets, NW	029	02/08/21	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	02/12/21	*			
51	N Street Extended, west of 25th Street, NW	033	02/12/21	*			
52	22nd Street between M and N Streets, NW	034	02/26/21	*			
52a	N Street between 22nd and 23rd Streets, NW	034	02/12/21	*			
53	22nd and M Streets, NW	022, 034	02/12/21	*			
53a	22nd and M Streets, NW	022, 034	02/12/21	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	02/02/21	*			
53c	L and 22nd Streets, NW	022	02/02/21	*			
54	23rd and O Streets, NW	034	02/03/21	*			
55	22nd Street, south of Q Street, NW	035	02/03/21	*			

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	02/03/21	*			
56	23rd and Massachusetts Ave, NW	036	02/03/21	*			
57	23rd Street, south of Q Street, NW	036	02/03/21	*			
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	02/08/21	*			
60	Connecticut Ave, east of Rock Creek, NW	039	02/08/21	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	02/08/21	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	02/10/21	*			
63	Harvard Street and Rock Creek Parkway, NW	042	02/10/21	*			
64	Adams Mill Road, south of Irving Street, NW	043	02/10/21	*			
65	Kenyon Street and Adams Mill Road, NW	044	02/10/21	*			
65a	Kenyon Street and Adams Mill Road, NW	044	02/10/21	*			
66	Adams Mill Road and Lamont Street, NW	045	02/10/21	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	02/10/21	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	02/10/21	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	02/10/21	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	02/10/21	*			
70i	5th and Quackenbos Streets, NW	049	02/09/21	*			
71	28th Street, west of Rock Creek Parkway, NW	050	02/08/21	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	02/03/21	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	02/03/21	*			
73	O Street Extended and Rock Creek Parkway, NW	052	02/03/21	*			
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	02/09/21	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	02/09/21	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	02/09/21	*			
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	02/03/21	*			
84a	26th and P Streets, NW	060	02/03/21	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	02/09/21	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	02/09/21	*			

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	02/09/21	*			
90	First and V St, NW (First St Tunnel)	019	02/09/21	*			
91	First and V St, NW (First St Tunnel)	019	02/09/21	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	02/19/21	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	02/19/21	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	02/16/21	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	02/17/21	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	02/17/21	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	02/23/21	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	02/24/21	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	02/24/21	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	02/19/21	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	02/19/21	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	02/19/21	*			
104	Poplar Point PS Discharge Chamber	N/A	02/19/21	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	02/26/21	*			

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	02/26/21	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	02/04/21	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	02/04/21	*		*		*		*		
009	O St. Sewage Pumping Station, SE	02/11/21	*		*		*		*		
010	O St. Sewage Pumping Station, SE	02/11/21	*			*			*		
011	Main Sewage Pumping Station, SE	02/11/21	*			*			*		
011a	Main Sewage Pumping Station, SE	02/11/21	*		*		*		*		
012	Main Sewage Pumping Station, SE	02/11/21	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	02/11/21	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	02/11/21	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	02/11/21	*			*			*		
016	12th and O Streets, SE	02/11/21	*		*		*		*		
017	M and Water Street, SE	02/11/21	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	02/11/21	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	02/19/21	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	02/19/21	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	02/04/21	*		*		*		*		
021	Rock Creek Parkway and C St., NW	02/04/21	*			*			*		
022	Rock Creek Parkway and G St., NW	02/04/21	*		*		*		*		
024	South of 30th and K Streets, NW[1]	02/04/21	*		*		*		*		
025	South of 31st and K Streets, NW	02/04/21	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	02/04/21	*		*		*		*		
027	33rd and Water Sts., NW	02/04/21	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	02/04/21	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	02/04/21	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	02/12/21	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	02/12/21	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	02/03/21	*			*			*		

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	02/03/21	*			*			*		
036	22nd Street, South of Q Street NW.	02/23/21	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	02/08/21	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	02/08/21	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	02/08/21	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	02/11/21	*		*		*		*		
042	Harvard St. and Beach Dr NW.	02/11/21	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	02/11/21	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	02/11/21	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	02/11/21	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	02/10/21	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	02/10/21	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	02/10/21	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	02/10/21	*		*		*		*		
050	Rock Creek Parkway and L St., NW	02/08/21	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	02/23/21	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	02/23/21	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	02/09/21	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	02/09/21	*		*		*		*		
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	02/23/21	*		*		*		*		

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	28	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac[1]	28	4	5	Screen #1	2/01/21 – 2/28/21	Bent rake and scraper bar, screen is off track.	20-675279	Anticipated 3/31/21. The screen has been disconnected for repair. Awaiting parts from manufacturer.
				Screen #2	2/01/21 – 2/12/21	Broken rake, screen is not running.	21-121831	Returned to service 2/12/2021.
					2/15/21 – 2/16/21	Large debris from wet weather event impacted screen operation, rakes broken and off track, screen is not running.	21-242683	Returned to service on 2/16/2021. Debris was removed and rakes were placed back on track.
					2/28/21 – 2/28/21	Large debris from wet weather event impacted screen operation, rakes broken and off track, screen is not running.	21-261243	Anticipated 3/20/21. The debris is being removed and rakes are being repaired.

Notes:

1. While two screens were periodically out of service during the month of February 2021, 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	2/11/21	Group A	21-188565	Add oil, grease bearings and replace packing if needed.
O St	2/14/21	Group A	21-217096	Add oil, grease bearings and replace packing if needed.
Eastside	2/8/21	Group A	21-150751	Add oil, grease bearings and replace packing if needed.
Poplar Point	2/10/21	Group A	21-190320	Add oil, grease bearings and replace packing if needed.
Potomac	2/1/21	Group A	21-268893	Add oil, grease bearings and replace packing if needed.
Rock Creek	2/8/21	Group A	21-168147	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	2/10/21	Group A	21-190861	Add oil, grease bearings and replace packing if needed.
Earl Place	2/5/21	Group A	21-165373	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	2/28/21	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]	1776.16	63.43	N/A	N/A	N/A
O St[1,2]	120.93	4.32	N/A	N/A	N/A
Eastside	130.93	4.68	N/A	N/A	N/A
Poplar Point	358.66	12.81	N/A	N/A	N/A
Potomac	3532.22	126.15	N/A	N/A	N/A
Rock Creek	121.41	4.34	N/A	N/A	N/A
Upper Anacostia	43.35	1.55	N/A	N/A	N/A
Earl Place	0.308	0.011	N/A	N/A	N/A
1st Street Tunnel Dewatering	N/A	N/A	N/A	2/7/21 2/21/21 2/28/21	0.21 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.

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[1]
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	2/24/21	**No**	**N/A**	**N/A**	**N/A**
14 - West	2/24/21	**No**	**N/A**	**N/A**	**N/A**
15	2/24/21	**Yes**	**2/5/21**	**See Note 2**	**2/5/21**
15A	2/24/21	**Yes**	**2/2/21**	**See Note 3**	**2/2/21**
16 - East	2/24/21	**No**	**N/A**	**N/A**	**N/A**
16 - West	2/24/21	**No**	**N/A**	**N/A**	**N/A**
34	2/25/21	**No**	**N/A**	**N/A**	**N/A**
35	2/25/21	**No**	**N/A**	**N/A**	**N/A**
52	2/25/21	**No**	**N/A**	**N/A**	**N/A**

Notes:

1. In previous reports, only inflatable dam outages with durations longer than 24 hours were reported in Table 2-6. Short duration outages, which did not result in overflows, were still reported in table 2-7 along with a note to explain that no overflow occurred. Moving forward, all outages will be reported in Table 2-6, and only actual overflow events will be reported in Table 2-7.
2. On 2/5/21, Structure 15 experienced a loss of communication which resulted in a deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. Instrumentation personnel were dispatched to the site to investigate and communications was restored after 6 minutes.
3. On 2/2/21, Structure 15A experienced a level transmitter malfunction which resulted in a deflation. This was not an overflow to the river as any overflow from Structure 15A is diverted to O Street Pumping Station and is not discharged to the river unless the storm pumps are turned on. In this instance, the storm pumps at O Street Pumping Station were not turned on. The structure was inspected by instrumentation personnel and was returned to service in less than 24 hours.

Table 2-7[1]

Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*	*Inflatable Dam Operational Status*
14 (E & W)	*None*	*N/A*	*Inflated*
15	*None*	*N/A*	*Inflated*
15A	*None*	*N/A*	*Inflated*
16 (E & W)	*None*	*N/A*	*Inflated*
34	*None*	*N/A*	*Inflated*
35[2]	*2/15/21*	*0 hrs. 16 mins*	*Deflated*
52	*None*	*N/A*	*Inflated*
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	*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. In previous reports, all inflatable dam outages were reported in Table 2-7, regardless if an overflow occurred or not. Moving forward, all outages will be reported in Table 2-6, and only actual overflow events will be reported in Table 2-7.
2. On 2/15/21, Structure 35 deflated due to high upstream levels of wastewater. Please reference letter dated February 19, 2021 to the USEPA Region III.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow reported during February 2021.

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	552	3	0	0	1	1	1	1
2	2792	2642	476	1	0	0	0	0	0	0	0
3	3687	187	0	0	0	7	0	203	0	210	0
4	3495	1723	0	0	0	226	0	409	0	635	0
5	4007	1769	1692	5	0	4	0	0	0	4	0
6	3316	2666	2647	210	26	3	2	33	33	36	35
7	3785	43	41	2	2	93	0	3	2	96	2
8	2832	212	209	1	0	935	1	164	0	1099	1
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**771**	**31**	**1268[2]**	**3[2]**	**813**	**36**	**2081[2]**	**39[2]**
% Cleaned/Inspected to Date				**13%**	**1%**					**8%**	**0%**

Notes:

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

4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

Facility	*Date Inspected*	*Condition*	*Work Needed*	*Work performed*	*Material Removed (LB)*
Bar Rack CSO 040	02/08/21	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	02/11/21	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	10
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B34: 2/1 - 2/28
Reason	B34: No. 1 screen off track.
Plan to Restore to Service	B34: Parts arrived, ETR March 2021.
Amount Material Collected	5 tons this month. Calendar year to date 15 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	2/28/21	X		21-239262		
Bar Racks at Main Storm Pumps (CSO 011)	KW	2/28/21	X		21-239255		

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
2/1/2021	0.09	0.08	0.04	0.09	0.14
2/2/2021	0	0	0	0.02	0.04
2/3/2021	0	0	0	0	0
2/4/2021	0.60	0.60	0	0.60	0
2/5/2021	0.05	0.03	0.02	0.05	0.07
2/6/2021	0	0	0	0	0
2/7/2021	0.48	0.38	0.36	0.45	0.49
2/8/2021	0	0	0	0	0
2/9/2021	0	0	0	0	0
2/10/2021	0.20	0.18	0.14	0.16	0.23
2/11/2021	0.13	0.12	0.09	0.11	0.14
2/12/2021	0	0	0	0	0
2/13/2021	0.39	0.31	0.18	0.31	0.45
2/14/2021	0	0	0.03	0	0
2/15/2021	0.46	0.42	0.44	0.46	0.52
2/16/2021	0.40	0.38	0.36	0.40	0.45
2/17/2021	0	0	0	0	0
2/18/2021	0.37	0.30	0.25	0.33	0.46
2/19/2021	0.03	0.01	0.01	0	0.04
2/20/2021	0	0	0	0	0
2/21/2021	0	0	0	0	0
2/22/2021	0.40	0.36	0.30	0.34	0.41
2/23/2021	0	0	0	0	0
2/24/2021	0	0	0	0	0
2/25/2021	0	0	0	0	0
2/26/2021	0.14	0.11	0.08	0.09	0.19
2/27/2021	0.16	0.12	0.10	0.14	0.19
2/28/2021	0.81	0.78	0.75	0.73	0.84
TOTAL	4.71	4.18	3.15	4.28	4.66

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: Q1 2021 (January, February, March 2021)
SCENARIO: QuarterlyReport_2021Q1, created on 8 April 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	0	0.00	0.00	0.00	0.00	0.00
010	O Street SewagePumping Station, SE (pumped Overflow)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main SewagePumping Station, SE (gravity overflow)	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	0	0.00	0.00	0.00	0.00	0.00
014	6th and M Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle andPennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Modeled*	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			**0.00**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	5	9.36	15.50	3.10	4.50	1.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	8	59.48	18.75	2.34	4.50	0.50
022	27th and K Streets, NW	Modeled	8	0.72	33.50	4.19	11.75	0.25
024	30th and K Streets, NW	Modeled	20	3.00	127.25	6.36	27.25	0.25
025	31st & K St NW	Modeled	6	0.15	5.75	0.96	3.75	0.25
026	Wisconsin Avenue andK St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	Modeled	10	3.86	48.25	4.83	12.50	0.75
028	36th and M Streets, NW	Modeled	19	3.43	131.75	6.93	26.00	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	10	3.65	49.00	4.90	12.50	0.75
	SUBTOTAL			**83.64**				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	8	0.20	17.75	2.22	4.50	0.50
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	1	0.01	0.25	0.25	0.25	0.25
039	Connecticut Avenue east of Rock Creek, NW	Modeled	1	0.18	0.25	0.25	0.25	0.25
040	Biltmore Street extended east of RockCreek, NW	Modeled	1	0.18	0.25	0.25	0.25	0.25
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	1	0.29	0.25	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	1	0.53	0.25	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.27	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	1	0.22	0.25	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	1	0.11	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	1	0.07	0.25	0.25	0.25	0.25
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.36	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	2	4.29	1.25	0.63	0.75	0.50
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
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			**6.69**				
	TOTAL			**90.33**				

* 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: March 2021

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: March 2021
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	03/15/21	*			
7	W Street and Railroad Ave, SE	005	03/15/21	*			
8[1]	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	03/15/21	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	03/15/21	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	03/09/21	*			
11	"O" Street Pumping Station	011(a)	03/16/21	*			
12	Storm Pump Discharge at Main Pumping Station	011	03/11/21	*			
13	2nd Street, 300 ft. north of N Place, SE	009	03/16/21	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	03/23/21	*			
15	South Capitol and E Streets	010	03/23/21	*			
15a	Half and L Streets, SE	010	03/23/21	*			
15b	South Capitol and I Streets	010	03/15/21	*			
15c	South Capitol and I Streets	010	03/15/21	*			

Structure Number	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	03/23/21	*			
17	4th and N Streets, SE, Both Extended	013	03/01/21	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	03/16/21	*			
17b	4th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	03/01/21	*			
18	6th and M Streets, SE (Diversion and Overflow Structure)	014	03/01/21	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	03/01/21	*			
19	9th and M Streets, SE	015	03/02/21	*			
19a	9th and M Streets, SE	015	03/02/21	*			
19b	9th and M Streets, SE (Diversion Chamber)	015	03/02/21	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	03/02/21	*			
20	12th and M Streets, SE	016	03/02/21	*			
20a	12th and M Streets, SE	016	03/02/21	*			
20b	12th and M Streets, SE (CSO-016 Diversion Chamber)	016	03/02/21	*			
21	14th and M Streets, SE	017	03/02/21	*			
21a	14th and M Streets, SE (CSO-017 Diversion Chamber)	017	03/02/21	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	03/15/21	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	03/15/21	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	03/15/21	*			
22d	Kentucky Ave and Potomac Street, SE	018	03/15/21	*			
22e	14th Street and Kentucky Ave, SE	018	03/15/21	*			
23	Independence Ave, 21st Street, SE, Extended	019	03/16/21	*			
24a	East Capitol St, west of RFK stadium	019	03/16/21	*			
28	21st and Constitution Ave, NW	020	03/02/21	*			
29	22nd Street, between Constitution Ave and C St, NW	020	03/02/21	*			
30	17th and D Streets, NW	020	03/08/21	*			
31	15th Street and Pennsylvania Ave, NW	020	03/08/21	*			
33	10th and F Streets, NW	020	03/08/21	*			
34	23rd Street, north of Constitution Ave, NW	020	03/23/21	*			
34a	23rd Street near C Street, NW	020	03/02/21	*			
35	Northeast of Roosevelt Bridge, NW	021	03/23/21	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	03/15/21	*			
36	27th and I Streets, NW	022	03/02/21	*			

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	03/02/21	*			
36b	19th and L Streets, NW	022, 034	03/15/21	*			
36d	17th and L Streets, NW	022, 034	03/15/21	*			
36g	18th and M Streets, NW	022, 034	03/15/21	*			
36h	18th and M Streets, NW	022, 034	03/15/21	*			
37	27th and Eye Streets, NW	022	03/02/21	*			
38	29th and K Streets, NW	024	03/01/21	*			
38a	30th Street, south of K Street, NW	024	03/01/21	*			
39a	30th and K Streets, NW	024	03/01/21	*			
39b	30th and K Streets, NW	024	03/01/21	*			
41b	31st and K Streets, NW	025	03/01/21	*			
41c	31st and K Streets, NW	025	03/01/21	*			
42	Wisconsin Ave and K Street, NW	026	03/01/21	*			
43	Potomac and Water Streets, NW	027	03/01/21	*			
43a	Potomac and Water Streets, NW	027	03/01/21	*			
44	Water Street, west of Potomac St, NW	027	03/01/21	*			
45	36th and M Streets, NW	028	03/08/21	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	03/08/21	*			
47	38th Street and Reservoir Road, NW	029	03/08/21	*			
47a	37th and T Streets, NW	029	03/08/21	*			
47b	37th and T Streets, NW	029	03/08/21	*			
47c	38th and W Streets, NW	029	03/08/21	*			
49[1]	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	03/12/21	*			
51	N Street Extended, west of 25th Street, NW	033	03/12/21	*			
52	22nd Street between M and N Streets, NW	034	03/23/21	*			
52a	N Street between 22nd and 23rd Streets, NW	034	03/12/21	*			
53	22nd and M Streets, NW	022, 034	03/12/21	*			
53a	22nd and M Streets, NW	022, 034	03/12/21	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	03/03/21	*			
53c	L and 22nd Streets, NW	022	03/03/21	*			
54	23rd and O Streets, NW	034	03/03/21	*			
55	22nd Street, south of Q Street, NW	035	03/03/21	*			

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	03/03/21	*			
56	23rd and Massachusetts Ave, NW	036	03/03/21	*			
57	23rd Street, south of Q Street, NW	036	03/03/21	*			
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	03/05/21	*			
60	Connecticut Ave, east of Rock Creek, NW	039	03/05/21	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	03/05/21	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	03/12/21	*			
63	Harvard Street and Rock Creek Parkway, NW	042	03/12/21	*			
64	Adams Mill Road, south of Irving Street, NW	043	03/12/21	*			
65	Kenyon Street and Adams Mill Road, NW	044	03/12/21	*			
65a	Kenyon Street and Adams Mill Road, NW	044	03/12/21	*			
66	Adams Mill Road and Lamont Street, NW	045	03/12/21	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	03/12/21	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	03/12/21	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	03/12/21	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	03/12/21	*			
70i	5th and Quackenbos Streets, NW	049	03/08/21	*			
71	28th Street, west of Rock Creek Parkway, NW	050	03/05/21	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	03/03/21	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	03/03/21	*			
73	O Street Extended and Rock Creek Parkway, NW	052	03/03/21	*			
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	03/05/21	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	03/05/21	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	03/05/21	*			
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	03/03/21	*			
84a	26th and P Streets, NW	060	03/03/21	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	03/05/21	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	03/05/21	*			

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	03/05/21	*			
90	First and V St, NW (First St Tunnel)	019	03/05/21	*			
91	First and V St, NW (First St Tunnel)	019	03/03/21	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	03/09/21	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	03/09/21	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	03/02/21	*			
96	CSO 007 Shaft at 11th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	03/09/21	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	03/09/21	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	03/16/21	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	03/23/21	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	03/23/21	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	03/09/21	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	03/09/21	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	03/09/21	*			
104	Poplar Point PS Discharge Chamber	N/A	03/09/21	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	03/10/21	*			

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	03/10/21	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	03/11/21	*		*		*		*		
006[1]	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11th St. and Anacostia Bridges, SE	03/11/21	*		*		*		*		
009	O St. Sewage Pumping Station, SE	03/11/21	*		*		*		*		
010	O St. Sewage Pumping Station, SE	03/11/21	*			*			*		
011	Main Sewage Pumping Station, SE	03/11/21	*			*			*		
011a	Main Sewage Pumping Station, SE	03/11/21	*		*		*		*		
012	Main Sewage Pumping Station, SE	03/11/21	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	03/11/21	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	03/11/21	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	03/11/21	*			*			*		
016	12th and O Streets, SE	03/04/21	*		*		*		*		
017	M and Water Street, SE	03/04/21	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	03/04/21	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	03/09/21	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	03/09/21	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	03/04/21	*		*		*		*		
021	Rock Creek Parkway and C St., NW	03/04/21	*			*			*		
022	Rock Creek Parkway and G St., NW	03/04/21	*		*		*		*		
024	South of 30th and K Streets, NW[1]	03/04/21	*		*		*		*		
025	South of 31st and K Streets, NW	03/04/21	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	03/04/21	*		*		*		*		
027	33rd and Water Sts., NW	03/04/21	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	03/04/21	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	03/04/21	*			*			*		
031[1]	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	03/12/21	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	03/12/21	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	03/03/21	*			*			*		

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	03/03/21	*			*			*		
036	22nd Street, South of Q Street NW.	03/11/21	*		*		*		*		
037[1]	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	03/05/21	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	03/05/21	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	03/05/21	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	03/11/21	*		*		*		*		
042	Harvard St. and Beach Dr NW.	03/11/21	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	03/11/21	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	03/11/21	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	03/11/21	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	03/12/21	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	03/12/21	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	03/12/21	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	03/12/21	*		*		*		*		
050	Rock Creek Parkway and L St., NW	03/05/21	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	03/11/21	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	03/11/21	*		*		*		*		
053[1]	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	03/05/21	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	03/05/21	*		*		*		*		
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	03/11/21	*		*		*		*		

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	3/01/21 – 3/31/21	Bent rake and scraper bar, screen is off track.	20-675279	Anticipated 6/30/21. The screen has been disconnected for repair. Awaiting material from manufacturer.
				Screen #2	3/01/21 – 3/22/21	Large debris from wet weather event impacted screen operation, rakes broken and off track, screen is not running.	21-261243	Returned to service 3/22/21. The debris was removed, and rakes were being repaired.

Notes:

1. While two screens were periodically out of service during the month of March 2021, 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	3/19/21	Group A	21-239648	Add oil, grease bearings and replace packing if needed.
O St	3/16/21	Group A	21-264770	Add oil, grease bearings and replace packing if needed.
Eastside	3/3/21	Group A	21-194830	Add oil, grease bearings and replace packing if needed.
Poplar Point	3/23/21	Group A	21-241898	Add oil, grease bearings and replace packing if needed.
Potomac	3/9/21	Group A	21-201097	Add oil, grease bearings and replace packing if needed.
Rock Creek	3/17/21	Group A	21-220588	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	3/3/21	Group A	21-242453	Add oil, grease bearings and replace packing if needed.
Earl Place	3/3/21	Group A	21-213307	Add oil, grease bearings and replace packing if needed.
1st Street Tunnel Dewatering	3/25/21	Group B	21-314902	

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]	2141.51	69.08	N/A	N/A	N/A
O St[1,2]	119.12	3.84	N/A	N/A	N/A
Eastside	146.89	4.74	N/A	N/A	N/A
Poplar Point	388.41	12.53	N/A	N/A	N/A
Potomac	3336.75	107.64	N/A	N/A	N/A
Rock Creek	162.54	5.24	N/A	N/A	N/A
Upper Anacostia	47.62	1.54	N/A	N/A	N/A
Earl Place	0.354	0.011	N/A	N/A	N/A
1st Street Tunnel Dewatering	N/A	N/A	N/A	3/3/21 3/13/21 3/26/21	0.05 0.20 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[1]
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	3/23/21	**No**	**N/A**	**N/A**	**N/A**
14 - West	3/23/21	**No**	**N/A**	**N/A**	**N/A**
15	3/23/21	**No**	**N/A**	**N/A**	**N/A**
15A	3/23/21	**No**	**N/A**	**N/A**	**N/A**
16 – East	3/23/21	**Yes**	**3/23/21**	**See Note 3**	**3/23/21**
16 – West	3/23/21	**Yes**	**3/23/21**	**See Note 3**	**3/23/21**
34	3/23/21	**No**	**N/A**	**N/A**	**N/A**
35	3/23/21	**No**	**N/A**	**N/A**	**N/A**
52	3/23/21	**Yes**	**3/8/21**	**See Note 2**	**3/8/21**

Notes:

1. In previous reports, only inflatable dam outages with durations longer than 24 hours were reported in Table 2-6. Short duration outages, which did not result in overflows, were still reported in table 2-7 along with a note to explain that no overflow occurred. Moving forward, all outages will be reported in Table 2-6, and only actual overflow events will be reported in Table 2-7.
2. On 3/8/21, Structure 52 deflated due to a compressor belt failure which resulted in deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The compressor belt was repaired the same day and the structure was returned to service in less than 24 hours.
3. On 3/23/21, Structure 16 (E & W) deflated due to an instrumentation malfunction which resulted in deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. Instrumentation technicians were dispatched to investigate the issue. The compressor belt was repaired the same day and the structure was returned to service in less than 24 hours.

Table 2-7[1]

Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*	*Inflatable Dam Operational Status*
14 (E & W)	*None*	*N/A*	*Inflated*
15	*None*	*N/A*	*Inflated*
15A	*None*	*N/A*	*Inflated*
16 (E & W)	*None*	*N/A*	*Inflated*
34	*None*	*N/A*	*Inflated*
35	*None*	*N/A*	*Inflated*
52	*None*	*N/A*	*Inflated*
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	*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. In previous reports, all inflatable dam outages were reported in Table 2-7, regardless if an overflow occurred or not. Moving forward, all outages will be reported in Table 2-6, and only actual overflow events will be reported in Table 2-7.

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow reported during March 2021.

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	560	3	1	1	1	1	2	2
2	2792	2642	476	284	0	0	0	45	45	45	45
3	3687	187	0	0	0	210	0	1445	0	1655	0
4	3495	1723	0	0	0	635	0	594	0	1229	0
5	4007	1769	1692	49	0	4	0	3	0	7	0
6	3316	2666	2647	1124	26	36	35	66	16	102	51
7	3785	43	41	25	2	96	2	10	0	106	2
8	2832	212	209	1	0	1099	1	276	0	1375	1
Grand Total	**25363[1]**	**10668[1]**	**5717[1]**	**2043**	**116**	**2081[2]**	**39[2]**	**2440**	**62**	**4521[2]**	**101[2]**
% Cleaned/Inspected to Date				**36%**	**1%**					**18%**	**1%**

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	03/05/21	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	03/11/21	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:	23
Days not Operating	9
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	3 Skimmers
Dates	B32: 3/12 - 3/31. B33: 3/1 - 3/2. B34: 3/1 - 3/15.
Reason	B32: Electric wiring failure. B33: Hydraulic oil leak. B34: No. 1 screen off track.
Plan to Restore to Service	B32: Waiting for parts ETR April 2021. B33: Returned to operations on 3/3. B34: Returned to operations on 3/16.
Amount Material Collected	80 tons this month. Calendar year to date 95 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	3/28/21	X		21-286417		
Bar Racks at Main Storm Pumps (CSO 011)	KW	3/28/21	X		21-286410		

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
3/1/2021	0.27	0.25	0.30	0.26	0.29
3/2/2021	0	0	0	0	0
3/3/2021	0	0	0	0	0
3/4/2021	0	0	0	0	0
3/5/2021	0	0	0	0	0
3/6/2021	0	0	0	0	0
3/7/2021	0	0	0	0	0
3/8/2021	0	0	0	0	0
3/9/2021	0	0	0	0	0
3/10/2021	0	0	0	0	0
3/11/2021	0	0	0	0	0
3/12/2021	0	0	0	0	0
3/13/2021	0	0	0	0	0
3/14/2021	0	0	0	0	0
3/15/2021	0	0	0	0	0
3/16/2021	0	0	0	0	0
3/17/2021	0	0	0	0	0
3/18/2021	0.42	0.46	0.38	0.43	0.37
3/19/2021	0	0	0	0	0
3/20/2021	0	0	0	0	0
3/21/2021	0	0	0	0	0
3/22/2021	0	0	0	0	0
3/23/2021	0	0	0	0	0
3/24/2021	1.29	0.99	1.58	0.92	1.69
3/25/2021	0.01	0	0	0	0
3/26/2021	0.01	0	0	0	0
3/27/2021	0	0	0	0	0
3/28/2021	0.58	0.58	0.60	0.68	0.53
3/29/2021	0	0	0	0	0
3/30/2021	0	0	0	0	0
3/31/2021	0.77	0.70	0.87	0.68	0.92
TOTAL	3.35	2.98	3.73	2.97	3.80

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: Q1 2021 (January, February, March 2021)
SCENARIO: QuarterlyReport_2021Q1, created on 8 April 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	0	0.00	0.00	0.00	0.00	0.00
010	O Street SewagePumping Station, SE (pumped Overflow)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main SewagePumping Station, SE (gravity overflow)	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	0	0.00	0.00	0.00	0.00	0.00
014	6th and M Streets, SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle andPennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Modeled*	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			**0.00**				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	Modeled	5	9.36	15.50	3.10	4.50	1.50
021	Northeast ofRoosevelt Bridge, NW	Modeled	8	59.48	18.75	2.34	4.50	0.50
022	27th and K Streets, NW	Modeled	8	0.72	33.50	4.19	11.75	0.25
024	30th and K Streets, NW	Modeled	20	3.00	127.25	6.36	27.25	0.25
025	31st & K St NW	Modeled	6	0.15	5.75	0.96	3.75	0.25
026	Wisconsin Avenue andK St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	Modeled	10	3.86	48.25	4.83	12.50	0.75
028	36th and M Streets, NW	Modeled	19	3.43	131.75	6.93	26.00	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	Modeled	10	3.65	49.00	4.90	12.50	0.75
	SUBTOTAL			**83.64**				
Rock Creek								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	Modeled	8	0.20	17.75	2.22	4.50	0.50
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road,east of Kalorama Circle, NW	Modeled	1	0.01	0.25	0.25	0.25	0.25
039	Connecticut Avenue east of Rock Creek, NW	Modeled	1	0.18	0.25	0.25	0.25	0.25
040	Biltmore Street extended east of RockCreek, NW	Modeled	1	0.18	0.25	0.25	0.25	0.25
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	1	0.29	0.25	0.25	0.25	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	1	0.53	0.25	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	1	0.27	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	1	0.22	0.25	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	1	0.11	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	1	0.07	0.25	0.25	0.25	0.25
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	1	0.36	0.25	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	Modeled	2	4.29	1.25	0.63	0.75	0.50
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
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			**6.69**				
	TOTAL			**90.33**				

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

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