

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

FOURTH 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**
Serving the Public • Protecting the Environment

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

Month: October 2021

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DISTRICT OF COLUMBIA
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Monthly Operations Report for Combined Sewer System
Month: October 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**

<i>Structure Number</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
2 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 ¹	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	10/01/21	*			
7	W Street and Railroad Ave, SE	005	10/01/21	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	10/01/21	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	10/01/21	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	10/27/21	*			
11	"O" Street Pumping Station	011(a)	10/25/21	*			
12	Storm Pump Discharge at Main Pumping Station	011	10/07/21	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	10/26/21	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	10/26/21	*			
15	South Capitol and E Streets	010	10/26/21	*			
15a	Half and L Streets, SE	010	10/26/21	*			
15b	South Capitol and I Streets	010	10/13/21	*			
15c	South Capitol and I Streets	010	10/13/21	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	10/26/21	*			
17	4 th and N Streets, SE, Both Extended	013	10/01/21	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	10/13/21	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	10/25/21	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	10/01/21	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	10/01/21	*			
19	9 th and M Streets, SE	015	10/13/21	*			
19a	9 th and M Streets, SE	015	10/13/21	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	10/13/21	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	10/13/21	*			
20	12 th and M Streets, SE	016	10/06/21	*			
20a	12 th and M Streets, SE	016	10/01/21	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	10/06/21	*			
21	14 th and M Streets, SE	017	10/06/21	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	10/06/21	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	10/01/21	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	10/01/21	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	10/01/21	*			
22d	Kentucky Ave and Potomac Street, SE	018	10/06/21	*			
22e	14 th Street and Kentucky Ave, SE	018	10/06/21	*			
23	Independence Ave, 21 st Street, SE, Extended	019	10/25/21	*			
24a	East Capitol St, west of RFK stadium	019	10/06/21	*			
28	21 st and Constitution Ave, NW	020	10/04/21	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	10/04/21	*			
30	17 th and D Streets, NW	020	10/04/21	*			
31	15 th Street and Pennsylvania Ave, NW	020	10/04/21	*			
33	10 th and F Streets, NW	020	10/04/21	*			
34	23 rd Street, north of Constitution Ave, NW	020	10/14/21	*			
34a	23 rd Street near C Street, NW	020	10/04/21	*			
35	Northeast of Roosevelt Bridge, NW	021	10/14/21	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	10/14/21	*			
36	27 th and I Streets, NW	022	10/13/21	*			

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	10/13/21	*			
36b	19 th and L Streets, NW	022, 034	10/04/21	*			
36d	17 th and L Streets, NW	022, 034	10/04/21	*			
36g	18 th and M Streets, NW	022, 034	10/04/21	*			
36h	18 th and M Streets, NW	022, 034	10/04/21	*			
37	27 th and Eye Streets, NW	022	10/13/21	*			
38	29 th and K Streets, NW	024	10/12/21	*			
38a	30 th Street, south of K Street, NW	024	10/12/21	*			
39a	30 th and K Streets, NW	024	10/12/21	*			
39b	30 th and K Streets, NW	024	10/12/21	*			
41b	31 st and K Streets, NW	025	10/12/21	*			
41c	31 st and K Streets, NW	025	10/12/21	*			
42	Wisconsin Ave and K Street, NW	026	10/12/21	*			
43	Potomac and Water Streets, NW	027	10/12/21	*			
43a	Potomac and Water Streets, NW	027	10/12/21	*			
44	Water Street, west of Potomac St, NW	027	10/12/21	*			
45	36 th and M Streets, NW	028	10/05/21	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	10/05/21	*			
47	38 th Street and Reservoir Road, NW	029	10/05/21	*			
47a	37 th and T Streets, NW	029	10/05/21	*			
47b	37 th and T Streets, NW	029	10/05/21	*			
47c	38 th and W Streets, NW	029	10/05/21	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	10/22/21	*			
51	N Street Extended, west of 25 th Street, NW	033	10/22/21	*			
52	22 nd Street between M and N Streets, NW	034	10/14/21	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	10/22/21	*			
53	22 nd and M Streets, NW	022, 034	10/22/21	*			
53a	22 nd and M Streets, NW	022, 034	10/22/21	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	10/18/21	*			
53c	L and 22 nd Streets, NW	022	10/18/21	*			
54	23 rd and O Streets, NW	034	10/18/21	*			
55	22 nd Street, south of Q Street, NW	035	10/18/21	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
55a	22 nd Street, south of Q Street, NW	035	10/18/21	*			
56	23 rd and Massachusetts Ave, NW	036	10/18/21	*			
57	23 rd Street, south of Q Street, NW	036	10/18/21	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	10/22/21	*			
60	Connecticut Ave, east of Rock Creek, NW	039	10/22/21	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	10/22/21	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	10/19/21	*			
63	Harvard Street and Rock Creek Parkway, NW	042	10/19/21	*			
64	Adams Mill Road, south of Irving Street, NW	043	10/19/21	*			
65	Kenyon Street and Adams Mill Road, NW	044	10/19/21	*			
65a	Kenyon Street and Adams Mill Road, NW	044	10/19/21	*			
66	Adams Mill Road and Lamont Street, NW	045	10/19/21	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	10/19/21	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	10/19/21	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	10/19/21	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	10/19/21	*			
70i	5 th and Quackenbos Streets, NW	049	10/13/21	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	10/22/21	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	10/18/21	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	10/18/21	*			
73	O Street Extended and Rock Creek Parkway, NW	052	10/18/21	*			
74 ^l	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	10/25/21	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	10/25/21	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	10/25/21	*			
78 ^l	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ^l	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	10/18/21	*			
84a	26 th and P Streets, NW	060	10/18/21	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	10/05/21	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	10/05/21	*			

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	10/05/21	*			
90	First and V St, NW (First St Tunnel)	019	10/05/21	*			
91	First and V St, NW (First St Tunnel)	019	10/05/21	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	10/29/21	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	10/28/21	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	10/06/21	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	10/27/21	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	10/27/21	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	10/25/21	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	10/26/21	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	10/26/21	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	10/28/21	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	10/28/21	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	10/28/21	*			
104	Poplar Point PS Discharge Chamber	N/A	10/31/21	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	10/28/21	*			

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
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			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	10/28/21	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	10/21/21	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	10/21/21	*		*		*		*		
009	O St. Sewage Pumping Station, SE	10/07/21	*		*		*		*		
010	O St. Sewage Pumping Station, SE	10/07/21	*			*			*		
011	Main Sewage Pumping Station, SE	10/07/21	*			*			*		
011a	Main Sewage Pumping Station, SE	10/07/21	*		*		*		*		
012	Main Sewage Pumping Station, SE	10/07/21	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	10/07/21	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	10/07/21	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	10/07/21	*			*			*		
016	12th and O Streets, SE	10/07/21	*		*		*		*		
017	M and Water Street, SE	10/07/21	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	10/07/21	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	10/29/21	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	10/29/21	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	10/15/21	*		*		*		*		
021	Rock Creek Parkway and C St., NW	10/15/21	*			*			*		
022	Rock Creek Parkway and G St., NW	10/15/21	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	10/15/21	*		*		*		*		
025	South of 31st and K Streets, NW	10/15/21	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	10/15/21	*		*		*		*		
027	33 rd and Water Sts., NW	10/15/21	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	10/15/21	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	10/15/21	*			*			*		One side of the sign missing, needs to be replaced
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	10/22/21	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	10/22/21	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	10/18/21	*			*			*		
035	P St. Bridge and Rock Creek Parkway	10/18/21	*			*			*		
036	22nd Street, South of Q Street NW.	10/21/21	*		*		*		*		

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	
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	10/22/21	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	10/22/21	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	10/22/21	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	10/21/21	*		*		*		*		
042	Harvard St. and Beach Dr NW.	10/21/21	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	10/21/21	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	10/21/21	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	10/21/21	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	10/19/21	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	10/19/21	*		*			*	*		Tidegate unhinged. 21-560329 Repair Work is pending. Contractor has been notified.
048	South of Piney Branch Parkway and 17 th St.	10/19/21	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	10/19/21	*		*		*		*		
050	Rock Creek Parkway and L St., NW	10/22/21	*		*			*	*		Routine check of tide gate and outfall sign. The flap gate has come off the hinges and is lying in the creek (about 4' of water). 22-44999 Repair Work is pending
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	10/21/21	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	10/21/21	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	10/25/21	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	10/25/21	*		*		*		*		
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	10/21/21	*		*		*		*		

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**

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	31	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	None	-	-	-	-

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed^{1,2}</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	11/3/21	Group A	21-584701	Add oil, grease bearings and replace packing if needed.
O St	10/29/21	Group A	22-16659	Add oil, grease bearings and replace packing if needed.
Eastside	10/7/21	Group A	21-542226	Add oil, grease bearings and replace packing if needed.
Poplar Point	11/1/21	Group A	21-589534	Add oil, grease bearings and replace packing if needed.
Potomac	10/6/21	Group A	21-545254	Add oil, grease bearings and replace packing if needed.
Rock Creek	10/6/21	Group A	21-558558	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	11/2/21	Group A	21-589579	Add oil, grease bearings and replace packing if needed.
Earl Place	10/8/21	Group A	21-562483	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	10/26/21	Group B	22-23968	

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 Vector 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**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)¹</i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main ^{1,2}	1489.92	48.06	N/A	N/A	N/A
O St ^{1,2}	132.26	4.27	N/A	N/A	N/A
Eastside	145.19	4.68	N/A	N/A	N/A
Poplar Point	321.98	10.39	N/A	N/A	N/A
Potomac	3579.88	115.48	N/A	N/A	N/A
Rock Creek	134.97	4.35	N/A	N/A	N/A
Upper Anacostia	39.90	1.29	N/A	N/A	N/A
Earl Place	0.14	0.004	N/A	N/A	N/A
1 st Street Tunnel Dewatering	N/A	N/A	N/A	10/1/21 10/6/21 10/20/21	0.05 0.18 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
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	10/26/21	No	N/A	N/A	N/A
14 - West	10/26/21	No	N/A	N/A	N/A
15	10/26/21	No	N/A	N/A	N/A
15A	10/26/21	No	N/A	N/A	N/A
16 – East	10/26/21	No	N/A	N/A	N/A
16 – West	10/26/21	No	N/A	N/A	N/A
34	10/14/21	No	N/A	N/A	N/A
35	10/14/21	No	N/A	N/A	N/A
	10/20/21	Yes	10/20/21	Note 1	10/20/21
52	10/14/21	No	N/A	N/A	N/A

Notes:

- On 10/20/21, Structure 35 was manually deflated due to work being performed on the downstream level sensors by Instrumentation. The structures were returned to service in less than 24 hours. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.

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

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>	<i>Inflatable Dam Operational Status</i>
14 (E & W)	<i>None</i>	<i>N/A</i>	<i>Inflated</i>
15	<i>None</i>	<i>N/A</i>	<i>Inflated</i>
15A	<i>None</i>	<i>N/A</i>	<i>Inflated</i>
16 (E & W)	<i>None</i>	<i>N/A</i>	<i>Inflated</i>
34	<i>None</i>	<i>N/A</i>	<i>Inflated</i>
35	<i>10/25/21</i>	<i>1 hr., 19min</i>	<i>Deflated</i>
52	<i>None</i>	<i>N/A</i>	<i>Inflated</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>	<i>N/A</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.	
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.	
Outfall Structure 2	None	N/A	
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>	
Outfall Sewer Control Gate No.1	Operational	Open	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflows reported during October 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**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	652	652	581	1101	1092	220	220	1321	1312
2	2792	2642	476	476	417	2328	2247	137	137	2465	2384
3	3687	187	0	0	0	2689	178	4	0	2693	178
4	3495	1723	0	0	0	3085	1629	60	11	3145	1640
5	4007	1769	1692	1692	1414	1706	1007	525	515	2231	1522
6	3316	2666	2647	2647	1983	1479	1197	1136	1136	2615	2333
7	3785	43	41	41	34	2545	32	75	9	2620	41
8	2832	212	209	209	203	2043	218	48	0	2091	218
Grand Total	25363¹	10668¹	5717¹	5717	4632	16976	7600	2205	2028	19181	9628
% Cleaned/Inspected to Date				100%	81%					76%	90%

Notes:

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

4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Bar Rack CSO 040	10/22/21	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	10/21/21	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**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	20
<i>Days not Operating</i>	6
<i>Reason not Operating</i>	Maintenance, wind, low water levels.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	None
<i>Dates</i>	N/A
<i>Reason</i>	N/A
<i>Plan to Restore to Service</i>	N/A
<i>Amount Material Collected</i>	20 tons this month. Calendar year to date 235 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

No Activity this month.

5. MONITORING

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

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

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

Pumping Station	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)	11/2/21	X		22-31550		
Bar Racks at Main Storm Pumps (CSO 011)	11/2/21	X		22-31557		

5.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
10/1/2021	0	0	0	0	0
10/2/2021	0	0	0	0	0
10/3/2021	0	0	0	0	0
10/4/2021	0	0	0	0	0
10/5/2021	0	0	0	0	0
10/6/2021	0	0	0.12	0	0.02
10/7/2021	0	0	0	0	0
10/8/2021	0	0	0	0	0
10/9/2021	0	0	0	0	0
10/10/2021	0	0	0.02	0.01	0.04
10/11/2021	0	0	0	0	0
10/12/2021	0.01	0.01	0.06	0	0.06
10/13/2021	0	0.01	0	0	0
10/14/2021	0	0	0	0	0
10/15/2021	0	0	0	0	0
10/16/2021	0.35	0.32	0.30	0.42	0.30
10/17/2021	0	0	0	0	0
10/18/2021	0	0	0	0	0
10/19/2021	0	0	0	0	0
10/20/2021	0	0	0	0	0
10/21/2021	0	0	0	0	0
10/22/2021	0	0	0	0	0
10/23/2021	0	0	0	0	0
10/24/2021	0	0	0	0	0
10/25/2021	1.44	1.18	1.58	1.56	1.55
10/26/2021	0.23	0.22	0.23	0.21	0.11
10/27/2021	0	0	0	0	0
10/28/2021	0	0	0	0	0
10/29/2021	1.39	1.38	1.43	1.21	1.15
10/30/2021	0.08	0.09	0.01	0.14	0.04
10/31/2021	0	0	0	0	0
TOTAL	3.50	3.21	3.75	3.55	3.27

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
 Period: October, November, December 2021

SCENARIO: QuarterlyReport_2021Q4, created on 7 January 2022

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave. SE	separated						
007	13 th Street and Ridge Place SE	Metered	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 Sewage Pumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Metered	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 and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			0.00				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	4	13.28	13.00	3.25	5.50	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	5	83.80	13.50	2.70	5.75	0.25
022	27th and K Streets, NW	Modeled	6	1.35	33.00	5.50	17.25	0.50
024	30th and K Streets, NW	Modeled	9	3.75	53.75	5.97	14.75	0.50
025	31st & R St NW	Modeled	4	0.03	5.50	1.38	2.50	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of O Street, NW	Modeled	5	3.42	19.25	3.85	5.75	1.50
028	36th and M Streets, NW	Modeled	9	1.78	60.50	6.72	19.25	0.75
029	Canal Road 1000 feet east of Rock Creek NW	Modeled	7	2.91	22.25	3.18	8.25	0.25
	SUBTOTAL			110.32				
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 extended west of 25th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of O Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of O Street, NW	Modeled	5	0.20	14.50	2.90	5.75	0.50
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
044	Kenyon Street and Adams Mill Road, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
047	Ingliside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and Lamont Street, NW	Modeled	1	1.58	2.25	2.25	2.25	2.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			1.78				
	TOTAL			112.10				

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



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

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

Month: November 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: November 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**

<i>Structure Number</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
2 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 ¹	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	11/16/21	*			
7	W Street and Railroad Ave, SE	005	11/16/21	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	11/16/21	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	11/16/21	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	11/29/21	*			
11	"O" Street Pumping Station	011(a)	11/29/21	*			
12	Storm Pump Discharge at Main Pumping Station	011	11/26/21	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	11/29/21	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	11/29/21	*			
15	South Capitol and E Streets	010	11/23/21	*			
15a	Half and L Streets, SE	010	11/29/21	*			
15b	South Capitol and I Streets	010	11/05/21	*			
15c	South Capitol and I Streets	010	11/05/21	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	11/29/21	*			
17	4 th and N Streets, SE, Both Extended	013	11/24/21	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	11/24/21	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	11/24/21	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	11/10/21	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	11/10/21	*			
19	9 th and M Streets, SE	015	11/15/21	*			
19a	9 th and M Streets, SE	015	11/15/21	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	11/15/21	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	11/15/21	*			
20	12 th and M Streets, SE	016	11/15/21	*			
20a	12 th and M Streets, SE	016	11/15/21	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	11/15/21	*			
21	14 th and M Streets, SE	017	11/15/21	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	11/15/21	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	11/02/21	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	11/02/21	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	11/02/21	*			
22d	Kentucky Ave and Potomac Street, SE	018	11/02/21	*			
22e	14 th Street and Kentucky Ave, SE	018	11/02/21	*			
23	Independence Ave, 21 st Street, SE, Extended	019	11/02/21	*			
24a	East Capitol St, west of RFK stadium	019	11/03/21	*			
28	21 st and Constitution Ave, NW	020	11/05/21	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	11/05/21	*			
30	17 th and D Streets, NW	020	11/05/21	*			
31	15 th Street and Pennsylvania Ave, NW	020	11/05/21	*			
33	10 th and F Streets, NW	020	11/05/21	*			
34	23 rd Street, north of Constitution Ave, NW	020	11/23/21	*			
34a	23 rd Street near C Street, NW	020	11/23/21	*			
35	Northeast of Roosevelt Bridge, NW	021	11/23/21	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	11/23/21	*			
36	27 th and I Streets, NW	022	11/05/21	*			

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	11/05/21	*			
36b	19 th and L Streets, NW	022, 034	11/17/21	*			
36d	17 th and L Streets, NW	022, 034	11/09/21	*			
36g	18 th and M Streets, NW	022, 034	11/09/21	*			
36h	18 th and M Streets, NW	022, 034	11/09/21	*			
37	27 th and Eye Streets, NW	022	11/05/21	*			
38	29 th and K Streets, NW	024	11/01/21	*			
38a	30 th Street, south of K Street, NW	024	11/01/21	*			
39a	30 th and K Streets, NW	024	11/01/21	*			
39b	30 th and K Streets, NW	024	11/01/21	*			
41b	31 st and K Streets, NW	025	11/01/21	*			
41c	31 st and K Streets, NW	025	11/01/21	*			
42	Wisconsin Ave and K Street, NW	026	11/01/21	*			
43	Potomac and Water Streets, NW	027	11/01/21	*			
43a	Potomac and Water Streets, NW	027	11/01/21	*			
44	Water Street, west of Potomac St, NW	027	11/01/21	*			
45	36 th and M Streets, NW	028	11/08/21	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	11/08/21	*			
47	38 th Street and Reservoir Road, NW	029	11/08/21	*			
47a	37 th and T Streets, NW	029	11/08/21	*			
47b	37 th and T Streets, NW	029	11/08/21	*			
47c	38 th and W Streets, NW	029	11/08/21	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	11/09/21	*			
51	N Street Extended, west of 25 th Street, NW	033	11/09/21	*			
52	22 nd Street between M and N Streets, NW	034	11/23/21	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	11/23/21	*			
53	22 nd and M Streets, NW	022, 034	11/23/21	*			
53a	22 nd and M Streets, NW	022, 034	11/23/21	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	11/17/21	*			
53c	L and 22 nd Streets, NW	022	11/17/21	*			
54	23 rd and O Streets, NW	034	11/17/21	*			
55	22 nd Street, south of Q Street, NW	035	11/17/21	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
55a	22 nd Street, south of Q Street, NW	035	11/17/21	*			
56	23 rd and Massachusetts Ave, NW	036	11/17/21	*			
57	23 rd Street, south of Q Street, NW	036	11/17/21	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	11/08/21	*			
60	Connecticut Ave, east of Rock Creek, NW	039	11/08/21	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	11/08/21	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	11/10/21	*			
63	Harvard Street and Rock Creek Parkway, NW	042	11/10/21	*			
64	Adams Mill Road, south of Irving Street, NW	043	11/10/21	*			
65	Kenyon Street and Adams Mill Road, NW	044	11/10/21	*			
65a	Kenyon Street and Adams Mill Road, NW	044	11/10/21	*			
66	Adams Mill Road and Lamont Street, NW	045	11/10/21	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	11/10/21	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	11/10/21	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	11/10/21	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	11/10/21	*			
70i	5 th and Quackenbos Streets, NW	049	11/24/21	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	11/08/21	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	11/17/21	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	11/17/21	*			
73	O Street Extended and Rock Creek Parkway, NW	052	11/17/21	*			
74 ^l	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	11/24/21	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	11/24/21	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	11/24/21	*			
78 ^l	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ^l	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	11/17/21	*			
84a	26 th and P Streets, NW	060	11/17/21	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	11/22/21	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	11/22/21	*			

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	11/22/21	*			
90	First and V St, NW (First St Tunnel)	019	11/22/21	*			
91	First and V St, NW (First St Tunnel)	019	11/22/21	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	11/24/21	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	11/24/21	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	11/15/21	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	11/15/21	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	11/15/21	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	11/29/21	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	11/29/21	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	11/29/21	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	11/16/21	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	11/16/21	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	11/16/21	*			
104	Poplar Point PS Discharge Chamber	N/A	11/16/21	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	11/16/21	*			

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	
003 ¹	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	11/16/21	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	11/04/21	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	11/04/21	*		*		*		*		
009	O St. Sewage Pumping Station, SE	11/26/21	*		*		*		*		
010	O St. Sewage Pumping Station, SE	11/26/21	*			*			*		
011	Main Sewage Pumping Station, SE	11/26/21	*			*			*		
011a	Main Sewage Pumping Station, SE	11/26/21	*		*		*		*		
012	Main Sewage Pumping Station, SE	11/26/21	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	11/26/21	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	11/26/21	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	11/26/21	*			*			*		
016	12th and O Streets, SE	11/29/21	*		*		*		*		
017	M and Water Street, SE	11/26/21	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	11/26/21	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	11/24/21	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	11/24/21	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	11/04/21	*		*		*		*		
021	Rock Creek Parkway and C St., NW	11/04/21	*			*			*		
022	Rock Creek Parkway and G St., NW	11/04/21	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	11/04/21	*		*		*		*		
025	South of 31st and K Streets, NW	11/04/21	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	11/04/21	*		*		*		*		
027	33 rd and Water Sts., NW	11/04/21	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	11/04/21	*			*			*		

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	
029	Adjacent to C&O Canal, aligned with 38 th St. NW	11/04/21	*			*			*		Sign replacement was completed on 11/19/2021
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	11/09/21	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	11/09/21	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	11/17/21	*			*			*		
035	P St. Bridge and Rock Creek Parkway	11/17/21	*			*			*		
036	22nd Street, South of Q Street NW.	11/18/21	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	11/08/21	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	11/08/21	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	11/08/21	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	11/18/21	*		*		*		*		
042	Harvard St. and Beach Dr NW.	11/18/21	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	11/18/21	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	11/18/21	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	11/18/21	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	11/10/21	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	11/10/21	*		*		*		*		Tidegate unhinged. 21-560329 Repair Work is pending, Contractor has been notified.
048	South of Piney Branch Parkway and 17 th St.	11/10/21	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	11/10/21	*		*		*		*		
050	Rock Creek Parkway and L St., NW	11/08/21	*		*		*		*		Routine check of tide gate and outfall sign. The flap gate has come off the hinges and is lying in the creek (about 4' of water). 22-44999 Repair Work is pending
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	11/29/21	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	11/29/21	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	11/24/21	*		*		*		*		

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	
056	Normanstone Dr. and Rock Creek Parkway, NW.	11/24/21	*		*		*		*		
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	11/18/21	*		*		*		*		

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**

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	31	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	None	-	-	-	-

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed</i> ^{1,2}	<i>Work Order Number</i>	<i>Comments</i>
Main	12/1/2021	Group A	22-40613	Add oil, grease bearings and replace packing if needed.
O St	11/16/21	Group A	22-73962	Add oil, grease bearings and replace packing if needed.
Eastside	11/2/21	Group A	22-13569	Add oil, grease bearings and replace packing if needed.
Poplar Point	12/1/21	Group A	22-44309	Add oil, grease bearings and replace packing if needed.
Potomac	11/3/21	Group A	22-18113	Add oil, grease bearings and replace packing if needed.
Rock Creek	11/2/21	Group A	22-18127	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	12/3/21	Group A	22-44372	Add oil, grease bearings and replace packing if needed.
Earl Place	11/17/21	Group A	22-24166	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	11/23/21	Group B	22-68701	

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 Vector 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**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)¹</i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main ^{1,2}	1294.18	43.14	N/A	N/A	N/A
O St ^{1,2}	111.31	3.71	N/A	N/A	N/A
Eastside	130.14	4.34	N/A	N/A	N/A
Poplar Point	259.51	8.65	N/A	N/A	N/A
Potomac	3278.28	109.28	N/A	N/A	N/A
Rock Creek	110.14	3.67	N/A	N/A	N/A
Upper Anacostia	36.80	1.23	N/A	N/A	N/A
Earl Place	0.11	0.004	N/A	N/A	N/A
1 st Street Tunnel Dewatering	N/A	N/A	N/A	11/5/21 11/18/21 11/19/21	0.21 0.10 0.11

Notes:

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

2.4 Inflatable Dams and SCADA System

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

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

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	11/29/21	No	N/A	N/A	N/A
14 - West	11/29/21	No	N/A	N/A	N/A
15	11/23/21	No	N/A	N/A	N/A
15A	11/29/21	No	N/A	N/A	N/A
16 – East	11/29/21	No	N/A	N/A	N/A
16 – West	11/29/21	No	N/A	N/A	N/A
34	11/23/21	No	N/A	N/A	N/A
35	11/23/21	No	N/A	N/A	N/A
52	11/23/21	No	N/A	N/A	N/A

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

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

3. DRY WEATHER OVERFLOWS

There was one dry weather combined sewer overflows reported during November 2021.

On November 17, 2021 at approximately 4:12 PM, Clark Construction texted DC Water staff to report a leak from an 18” sewer that runs inside the 96-inch stormwater pipe that discharges to CSO 029. On November 18, 2021, at 11:30 AM, DPSO crew responded to the report. Upon arrival, the crew found raw sewage leaking from the broken concrete encased 18-inch sanitary sewer main that is inside the 96-inch stormwater sewer. The crew also inspected the Regulator Structure No. 47 (last regulator structure on the stormwater sewer that is upstream of the reported leak) and found it to be in good operating condition with no defects or discharges. DC Water staff confirmed the leak and activated their emergency repair contractor to effect repairs.

On November 19, 2021 at approximately 11:00 AM, the emergency contractor completed the repair and stopped the bypass pumps. At approximately 12:00 PM after the repair work was completed, DPSO crew conducted a follow-up walk-through inspection of the 96-inch stormwater sewer. They found that the 18- inch sanitary sewer had backed up in the bypass pumping pit and overflowed into the 96-inch stormwater sewer upstream of the area that was repaired. The bypass pumps were restarted to stop the leak. They stopped the leak at approximately 7:15 PM.

On November 20, 2021 at approximately 9:40 AM, as part of the follow investigation into the cause of the surcharge, DC Water contractor extracted a hose (approximately fifty feet in length), along with rags that were lodged inside the 18” sewer main at the manhole that surcharged. The rags may have gotten stuck on the hose and the combination caused the backup in the manhole and sewage leakage into the 96- inch stormwater sewer. The backup stopped when the hose was removed. DPSO crew conducted another walk-through inspection of the stormwater sewer and found the sewer in good operating condition with no leaks.

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

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

**Table 4-1
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	652	652	607	1321	1312	56	54	1377	1366
2	2792	2642	476	476	444	2465	2384	51	47	2516	2431
3	3687	187	0	0	0	2693	178	2	2	2695	180
4	3495	1723	0	0	0	3145	1640	7	5	3152	1645
5	4007	1769	1692	1692	1560	2231	1522	173	163	2404	1685
6	3316	2666	2647	2647	2229	2615	2333	292	282	2907	2615
7	3785	43	41	41	34	2620	41	1420	0	4040	41
8	2832	212	209	209	203	2091	218	516	0	2607	218
Grand Total	25363¹	10668¹	5717¹	5717	5075	19181	9628	2517	553	21698	10181
% Cleaned/Inspected to Date				100%	89%					86%	95%

Notes:

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

4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Bar Rack CSO 040	11/08/21	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	11/18/21	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**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	19
<i>Days not Operating</i>	10
<i>Reason not Operating</i>	Maintenance, wind, low water levels.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	2 Skimmers
<i>Dates</i>	B32: 11/5 - 11/15. B34: 11/8 - 11/9
<i>Reason</i>	B32: Engine starter replacement. B34: Hydraulic oil leak on main pump.
<i>Plan to Restore to Service</i>	B32: Returned to operations on 11/15. B34: Returned to operations on 11/9.
<i>Amount Material Collected</i>	15 tons this month. Calendar year to date 250 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

No Activity this month.

5. MONITORING

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

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

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

Pumping Station	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)	11/29/21	X		22-80547		
Bar Racks at Main Storm Pumps (CSO 011)	11/30/21	X		22-80540		

5.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
11/1/2021	0	0	0	0	0
11/2/2021	0.09	0.09	0.09	0.10	0.10
11/3/2021	0	0	0	0	0
11/4/2021	0	0	0	0	0
11/5/2021	0	0	0	0	0
11/6/2021	0	0	0	0	0
11/7/2021	0	0	0	0	0
11/8/2021	0	0	0	0	0
11/9/2021	0	0	0	0	0
11/10/2021	0	0	0	0	0
11/11/2021	0	0	0	0	0
11/12/2021	0.48	0.65	0.62	0.62	0.64
11/13/2021	0.01	0	0.01	0.01	0.01
11/14/2021	0	0	0	0	0
11/15/2021	0	0	0	0	0
11/16/2021	0	0	0	0	0
11/17/2021	0	0	0	0	0
11/18/2021	0.02	0.01	0.06	0.02	0.06
11/19/2021	0	0	0	0	0
11/20/2021	0	0	0	0	0
11/21/2021	0	0	0	0	0.01
11/22/2021	0.03	0.03	0.06	0.04	0.06
11/23/2021	0	0	0	0	0
11/24/2021	0	0	0	0	0
11/25/2021	0	0	0	0	0
11/26/2021	0.08	0.07	0.09	0.08	0.10
11/27/2021	0	0	0	0	0
11/28/2021	0	0	0	0	0
11/29/2021	0	0	0	0	0
11/30/2021	0	0	0	0	0
TOTAL	0.71	0.85	0.93	0.87	0.98

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
 Period: October, November, December 2021

SCENARIO: QuarterlyReport_2021Q4, created on 7 January 2022

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave. SE	separated						
007	13 th Street and Ridge Place SE	Metered	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 Sewage Pumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Metered	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 and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Metered	0	0.00	0.00	0.00	0.00	0.00
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			0.00				
Potomac CSOs								
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	4	13.28	13.00	3.25	5.50	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	5	83.80	13.50	2.70	5.75	0.25
022	27th and K Streets, NW	Modeled	6	1.35	33.00	5.50	17.25	0.50
024	30th and K Streets, NW	Modeled	9	3.75	53.75	5.97	14.75	0.50
025	31st & R St NW	Modeled	4	0.03	5.50	1.38	2.50	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of O Street, NW	Modeled	5	3.42	19.25	3.85	5.75	1.50
028	36th and M Streets, NW	Modeled	9	1.78	60.50	6.72	19.25	0.75
029	Canal Road 1000 feet east of Rock Creek NW	Modeled	7	2.91	22.25	3.18	8.25	0.25
	SUBTOTAL			110.32				
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 extended west of 25th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of O Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of O Street, NW	Modeled	5	0.20	14.50	2.90	5.75	0.50
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
044	Kenyon Street and Adams Mill Road, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
047	Ingliside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and Lamont Street, NW	Modeled	1	1.58	2.25	2.25	2.25	2.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL			1.78				
	TOTAL			112.10				

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



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

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

Month: December 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: December 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**

<i>Structure Number</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
2 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 ¹	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 ¹	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	12/17/21	*			
7	W Street and Railroad Ave, SE	005	12/17/21	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE (Diversion Structure)	007	12/17/21	*			
9a	13 th Street and Ridge Place, SE (Regulator Structure)	007	12/17/21	*			
9b	11 th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	12/10/21	*			
11	"O" Street Pumping Station	011(a)	12/15/21	*			
12	Storm Pump Discharge at Main Pumping Station	011	12/14/21	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	12/15/21	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	12/15/21	*			
15	South Capitol and E Streets	010	12/15/21	*			
15a	Half and L Streets, SE	010	12/15/21	*			
15b	South Capitol and I Streets	010	12/03/21	*			
15c	South Capitol and I Streets	010	12/03/21	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	12/08/21	*			
17	4 th and N Streets, SE, Both Extended	013	12/10/21	*			
17a	K Street between 6 th Street and 7 th Street, SE (Side Overflow Weir)	013	12/10/21	*			
17b	4 th and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	12/10/21	*			
18	6 th and M Streets, SE (Diversion and Overflow Structure)	014	12/10/21	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	12/10/21	*			
19	9 th and M Streets, SE	015	12/10/21	*			
19a	9 th and M Streets, SE	015	12/10/21	*			
19b	9 th and M Streets, SE (Diversion Chamber)	015	12/10/21	*			
19c	9 th and M Streets, SE (Diversion Chamber)	015	12/10/21	*			
20	12 th and M Streets, SE	016	12/10/21	*			
20a	12 th and M Streets, SE	016	12/10/21	*			
20b	12 th and M Streets, SE (CSO-016 Diversion Chamber)	016	12/10/21	*			
21	14 th and M Streets, SE	017	12/10/21	*			
21a	14 th and M Streets, SE (CSO-017 Diversion Chamber)	017	12/10/21	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	12/17/21	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	12/17/21	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	12/17/21	*			
22d	Kentucky Ave and Potomac Street, SE	018	12/01/21	*			
22e	14 th Street and Kentucky Ave, SE	018	12/01/21	*			
23	Independence Ave, 21 st Street, SE, Extended	019	12/17/21	*			
24a	East Capitol St, west of RFK stadium	019	12/17/21	*			
28	21 st and Constitution Ave, NW	020	12/03/21	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	12/03/21	*			
30	17 th and D Streets, NW	020	12/03/21	*			
31	15 th Street and Pennsylvania Ave, NW	020	12/03/21	*			
33	10 th and F Streets, NW	020	12/03/21	*			
34	23 rd Street, north of Constitution Ave, NW	020	12/09/21	*			
34a	23 rd Street near C Street, NW	020	12/03/21	*			
35	Northeast of Roosevelt Bridge, NW	021	12/09/21	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	12/09/21	*			
36	27 th and I Streets, NW	022	12/03/21	*			

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	12/03/21	*			
36b	19 th and L Streets, NW	022, 034	12/01/21	*			
36d	17 th and L Streets, NW	022, 034	12/01/21	*			
36g	18 th and M Streets, NW	022, 034	12/01/21	*			
36h	18 th and M Streets, NW	022, 034	12/01/21	*			
37	27 th and Eye Streets, NW	022	12/03/21	*			
38	29 th and K Streets, NW	024	12/01/21	*			
38a	30 th Street, south of K Street, NW	024	12/01/21	*			
39a	30 th and K Streets, NW	024	12/01/21	*			
39b	30 th and K Streets, NW	024	12/01/21	*			
41b	31 st and K Streets, NW	025	12/01/21	*			
41c	31 st and K Streets, NW	025	12/01/21	*			
42	Wisconsin Ave and K Street, NW	026	12/01/21	*			
43	Potomac and Water Streets, NW	027	12/01/21	*			
43a	Potomac and Water Streets, NW	027	12/01/21	*			
44	Water Street, west of Potomac St, NW	027	12/01/21	*			
45	36 th and M Streets, NW	028	12/06/21	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	12/06/21	*			
47	38 th Street and Reservoir Road, NW	029	12/06/21	*			
47a	37 th and T Streets, NW	029	12/06/21	*			
47b	37 th and T Streets, NW	029	12/06/21	*			
47c	38 th and W Streets, NW	029	12/06/21	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	12/06/21	*			
51	N Street Extended, west of 25 th Street, NW	033	12/06/21	*			
52	22 nd Street between M and N Streets, NW	034	12/09/21	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	12/09/21	*			
53	22 nd and M Streets, NW	022, 034	12/09/21	*			
53a	22 nd and M Streets, NW	022, 034	12/09/21	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	12/01/21	*			
53c	L and 22 nd Streets, NW	022	12/01/21	*			
54	23 rd and O Streets, NW	034	12/07/21	*			
55	22 nd Street, south of Q Street, NW	035	12/07/21	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
55a	22 nd Street, south of Q Street, NW	035	12/07/21	*			
56	23 rd and Massachusetts Ave, NW	036	12/07/21	*			
57	23 rd Street, south of Q Street, NW	036	12/07/21	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	12/06/21	*			
60	Connecticut Ave, east of Rock Creek, NW	039	12/06/21	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	12/06/21	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	12/08/21	*			
63	Harvard Street and Rock Creek Parkway, NW	042	12/08/21	*			
64	Adams Mill Road, south of Irving Street, NW	043	12/08/21	*			
65	Kenyon Street and Adams Mill Road, NW	044	12/08/21	*			
65a	Kenyon Street and Adams Mill Road, NW	044	12/08/21	*			
66	Adams Mill Road and Lamont Street, NW	045	12/08/21	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	12/08/21	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	12/08/21	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	12/08/21	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	12/08/21	*			
70i	5 th and Quackenbos Streets, NW	049	12/03/21	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	12/03/21	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	12/07/21	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	12/07/21	*			
73	O Street Extended and Rock Creek Parkway, NW	052	12/03/21	*			
74 ^l	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	12/13/21	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	12/13/21	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	12/13/21	*			
78 ^l	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ^l	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	12/07/21	*			
84a	26 th and P Streets, NW	060	12/07/21	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	12/16/21	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	12/16/21	*			

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	12/16/21	*			
90	First and V St, NW (First St Tunnel)	019	12/16/21	*			
91	First and V St, NW (First St Tunnel)	019	12/16/21	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	12/17/21	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	12/17/21	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	12/10/21	*			
96	CSO 007 Shaft at 11 th St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	12/10/21	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	12/10/21	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	12/15/21	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	12/15/21	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	12/15/21	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	12/13/21	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	12/13/21	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	12/13/21	*			
104	Poplar Point PS Discharge Chamber	N/A	12/13/21	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	12/13/21	*			

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	
003 ¹	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	12/13/21	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	12/16/21	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	12/16/21	*		*		*		*		
009	O St. Sewage Pumping Station, SE	12/14/21	*		*		*		*		
010	O St. Sewage Pumping Station, SE	12/14/21	*			*			*		
011	Main Sewage Pumping Station, SE	12/14/21	*			*			*		
011a	Main Sewage Pumping Station, SE	12/14/21	*		*		*		*		
012	Main Sewage Pumping Station, SE	12/14/21	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	12/14/21	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	12/14/21	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	12/14/21	*			*			*		
016	12th and O Streets, SE	12/14/21	*		*		*		*		
017	M and Water Street, SE	12/14/21	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	12/14/21	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	12/17/21	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	12/17/21	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	12/02/21	*		*		*		*		
021	Rock Creek Parkway and C St., NW	12/02/21	*			*			*		
022	Rock Creek Parkway and G St., NW	12/02/21	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	12/02/21	*		*		*		*		
025	South of 31st and K Streets, NW	12/02/21	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	12/02/21	*		*		*		*		
027	33 rd and Water Sts., NW	12/02/21	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	12/02/21	*			*			*		

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	
029	Adjacent to C&O Canal, aligned with 38 th St. NW	12/02/21	*			*			*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	12/06/21	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	12/06/21	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	12/07/21	*			*			*		
035	P St. Bridge and Rock Creek Parkway	12/07/21	*			*			*		
036	22nd Street, South of Q Street NW.	12/13/21	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	12/06/21	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	12/06/21	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	12/06/21	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	12/16/21	*		*		*		*		
042	Harvard St. and Beach Dr NW.	12/16/21	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	12/16/21	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	12/16/21	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	12/16/21	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	12/08/21	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	12/08/21	*		*			*	*		Tidegate unhinged. 21-560329 Repair Work order. Expected Start Date Feb. 2022.
048	South of Piney Branch Parkway and 17 th St.	12/08/21	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	12/08/21	*		*		*		*		
050	Rock Creek Parkway and L St., NW	12/03/21	*		*			*	*		Routine check of tide gate and outfall sign. The flap gate has come off the hinges and is lying in the creek (about 4' of water). 22-44999 Repair Work expected to begin Feb. 2022.
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	12/16/21	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	12/13/21	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	12/13/21	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	12/13/21	*		*		*		*		

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	
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	12/13/21	*		*		*		*		

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**

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	31	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	None	-	-	-	-

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed^{1,2}</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	1/7/22	Group A	22-99070	Add oil, grease bearings and replace packing if needed.
O St	12/15/21	Group A	22-115604	Add oil, grease bearings and replace packing if needed.
Eastside	12/1/21	Group A	22-55166	Add oil, grease bearings and replace packing if needed.
Poplar Point	1/4/22	Group A	22-106048	Add oil, grease bearings and replace packing if needed.
Potomac	12/1/21	Group A	22-61100	Add oil, grease bearings and replace packing if needed.
Rock Creek	12/15/21	Group A	22-61138	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	1/6/22	Group A	22-106139	Add oil, grease bearings and replace packing if needed.
Earl Place	12/15/21	Group A	22-80894	Add oil, grease bearings and replace packing if needed.
1 st Street Tunnel Dewatering	12/18/21	Group B	22-122095	

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**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)¹</i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main ^{1,2}	1246.04	40.19	N/A	N/A	N/A
O St ^{1,2}	102.29	3.30	N/A	N/A	N/A
Eastside	124.23	4.01	N/A	N/A	N/A
Poplar Point	289.15	9.33	N/A	N/A	N/A
Potomac	3202.31	103.30	N/A	N/A	N/A
Rock Creek	102.34	3.30	N/A	N/A	N/A
Upper Anacostia	36.33	1.17	N/A	N/A	N/A
Earl Place	0.51	0.017	N/A	N/A	N/A
1 st Street Tunnel Dewatering	N/A	N/A	N/A	12/2/21 12/15/21 12/30/21	0.24 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
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	12/15/21	No	N/A	N/A	N/A
14 - West	12/15/21	No	N/A	N/A	N/A
15	12/15/21	No	N/A	N/A	N/A
15A	12/15/21	No	N/A	N/A	N/A
16 – East	12/15/21	No	N/A	N/A	N/A
16 – West	12/15/21	No	N/A	N/A	N/A
34	12/09/21	No	N/A	N/A	N/A
35	12/02/21	Yes	12/02/21	Note 1	12/02/21
	12/09/21	No	N/A	N/A	N/A
52	12/09/21	No	N/A	N/A	N/A

Notes:

- On 12/02/21, Structures 35 deflated due to a work being conducted on a new meter recently installed. Instrumentation and a contractor verified functionality and accuracy of LIT/FIT transmitter which was working correctly and properly. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.

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

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

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflows reported during December 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**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	652	652	652	1377	1366	18	18	1395	1384
2	2792	2642	476	476	476	2516	2431	13	10	2529	2441
3	3687	187	0	0	0	2695	180	0	0	2695	180
4	3495	1723	0	0	0	3152	1645	152	8	3304	1653
5	4007	1769	1692	1692	1692	2404	1685	313	88	2717	1773
6	3316	2666	2647	2647	2647	2907	2615	92	89	2999	2704
7	3785	43	41	41	41	4040	41	888	0	4928	41
8	2832	212	209	209	208	2607	218	639	9	3246	227
Grand Total	25363¹	10668¹	5717¹	5717	5716	21698	10181	2115	222	23813	10403
% Cleaned/Inspected to Date				100%	100%					94%	98%

Notes:

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

4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Bar Rack CSO 040	12/06/21	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	12/16/21	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**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	21
<i>Days not Operating</i>	4
<i>Reason not Operating</i>	Maintenance, wind, low water levels.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer
<i>Dates</i>	B34: 12/9 – 12/20
<i>Reason</i>	B34: Hydraulic oil leak port propulsion assembly.
<i>Plan to Restore to Service</i>	B34: Returned to operations on 12/21.
<i>Amount Material Collected</i>	10 tons this month. Calendar year to date 260 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

No Activity this month.

5. MONITORING

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

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

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

Pumping Station	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)	12/16/21	X		22-130409		
Bar Racks at Main Storm Pumps (CSO 011)	12/21/21	X		22-130402		

5.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
12/1/2021	0	0	0	0	0
12/2/2021	0	0	0	0	0
12/3/2021	0	0	0	0	0
12/4/2021	0	0	0	0	0
12/5/2021	0	0	0	0	0
12/6/2021	0	0	0	0	0
12/7/2021	0	0	0	0	0
12/8/2021	0	0	0	0	0
12/9/2021	0	0	0	0	0
12/10/2021	0	0	0	0	0.01
12/11/2021	0.23	0.16	0.17	0.16	0.16
12/12/2021	0	0	0	0	0
12/13/2021	0	0	0	0	0
12/14/2021	0	0	0	0	0
12/15/2021	0	0	0	0	0
12/16/2021	0	0	0	0	0
12/17/2021	0	0	0	0	0
12/18/2021	0	0	0	0	0
12/19/2021	0	0	0	0	0
12/20/2021	0	0	0	0	0
12/21/2021	0.04	0.01	0.01	0	0.07
12/22/2021	0.01	0	0	0	0.02
12/23/2021	0	0	0	0	0
12/24/2021	0	0	0	0	0
12/25/2021	0.04	0.04	0.04	0.15	0.07
12/26/2021	0	0	0	0	0
12/27/2021	0	0	0	0	0
12/28/2021	0	0	0	0	0
12/29/2021	0.11	0.10	0.09	0.09	0.12
12/30/2021	0.15	0.16	0.15	0.17	0.15
12/31/2021	0.01	0	0	0	0.03
TOTAL	0.59	0.47	0.46	0.57	0.63

5.3 Wet Weather Overflows

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
 Period: October, November, December 2021

SCENARIO: QuarterlyReport_2021Q4, created on 7 January 2022

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)	
Anacostia CSOs									
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00	
006	Good Hope Road, West of Nichols Ave. SE	separated							
007	13 th Street and Ridge Place SE	Metered	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 Sewage Pumping Station, SE (pumped Overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00	
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00	
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00	
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Metered	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 and Pennsylvania Ave, SE	consolidated to tunnel system							
019	Northeast Boundary	Metered	0	0.00	0.00	0.00	0.00	0.00	
019A	Northeast Boundary - Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00	
	SUBTOTAL			0.00					
Potomac CSOs									
003A	JBAB Tunnel OF	Metered	0	0.00	0.00	0.00	0.00	0.00	
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	4	13.28	13.00	3.25	5.50	0.25	
021	Northeast of Roosevelt Bridge, NW	Modeled	5	83.80	13.50	2.70	5.75	0.25	
022	27th and K Streets, NW	Modeled	6	1.35	33.00	5.50	17.25	0.50	
024	30th and K Streets, NW	Modeled	9	3.75	53.75	5.97	14.75	0.50	
025	31st & R St NW	Modeled	4	0.03	5.50	1.38	2.50	0.25	
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
027	Water Street West of O Street, NW	Modeled	5	3.42	19.25	3.85	5.75	1.50	
028	36th and M Streets, NW	Modeled	9	1.78	60.50	6.72	19.25	0.75	
029	Canal Road 1000 feet east of Rock Creek NW	Modeled	7	2.91	22.25	3.18	8.25	0.25	
	SUBTOTAL			110.32					
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 extended west of 25th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
034	23rd and O Streets, SW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
035	22nd Street south of O Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
036	22nd Street South of O Street, NW	Modeled	5	0.20	14.50	2.90	5.75	0.50	
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated							
038	North of Belmont Road east of Kalorama Circle, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
039	Connecticut Avenue east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
040	Biltmore Street extended east of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
041	Ontario extended and Rock Creek Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00	
042	Harvard Street and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
043	Adams Mill Road South of Irving Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
044	Kenyon Street and Adams Mill Road, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
045	Adams Mill Road and Lamont Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
046	Park Road south of Piney Branch Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
047	Ingliside Terrace extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00	
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	0	0.00	0.00	0.00	0.00	0.00	
049	Piney Branch and Lamont Street, NW	Modeled	1	1.58	2.25	2.25	2.25	2.25	
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
052	O Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
053	O Street west of Rock Creek Parkway, NW	separated							
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
057	28th Street extended west of Rock Creek, NW	separated							
058	Connecticut Avenue and Rock Creek Parkway, NW	separated							
060	P St and 26 th St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
	SUBTOTAL			1.78					
	TOTAL			112.10					

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