# QUARTERLY OPERATIONS REPORT

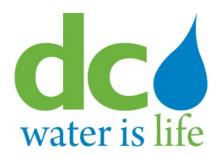
# DISTRICT OF COLUMBIA

# COMBINED SEWER OVERFLOW FACILITIES

FIRST QUARTER, 2023

Prepared By:

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# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**Serving the Public • Protecting the Environment** 

# Monthly Operations Report For Combined Sewer System

Month: January 2023

#### Prepared By:

District of Columbia
Water and Sewer Authority
Department of
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Washington, D.C. 20003

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

# Monthly Operations Report for Combined Sewer System Month: January 2023 Table of Contents

#### 1. INTRODUCTION

#### 2. OPERATION AND MAINTENANCE

- 2.1 Regulators
- 2.2 Outfalls, Tide Gates and CSO Signs
- 2.3 Pumping Stations
- 2.4 Inflatable Dams and SCADA Systems

#### 3. DRY WEATHER OVERFLOWS

#### 4. SOLIDS AND FLOATABLES CONTROL

- 4.1 Catch Basin Cleaning
- 4.2 BMP Demonstration for Solid and Floatable Control
- 4.3 Anacostia River Floating Debris Removal Program
- 4.4 CSS Litter Control

#### 5. MONITORING

- 5.1 Bar Racks at Main & O Street
- 5.2 Rainfall Data
- 5.3 Wet Weather Overflows

#### 1. INTRODUCTION

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

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

#### 2. OPERATION AND MAINTENANCE

#### 2.1 Regulators

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

Table 2-1 Regulator Structures

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
21	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
41	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
51	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	01/25/23	*			
7	W Street and Railroad Ave, SE	005	01/25/23	*			
81	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13th Street and Ridge Place, SE (Diversion Structure)	007	01/25/23	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	01/25/23	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	01/13/23	*			
11	"O" Street Pumping Station	011(a)	01/25/23	*			
12	Storm Pump Discharge at Main Pumping Station	011	01/05/23	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	01/18/23	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	01/18/23	*			
15	South Capitol and E Streets	010	01/18/23	*			
15a	Half and L Streets, SE	010	01/18/23	*			
15b	South Capitol and I Streets	010	01/04/23	*			
15c	South Capitol and I Streets	010	01/04/23	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	01/18/23	*			
17	4th and N Streets, SE, Both Extended	013	01/25/23	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	01/25/23	*			
17b	4 <sup>th</sup> and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	01/25/23	*			
18	6 <sup>th</sup> and M Streets, SE (Diversion and Overflow Structure)	014	01/25/23	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	01/25/23	*			
19	9 <sup>th</sup> and M Streets, SE	015	01/19/23	*			
19a	9 <sup>th</sup> and M Streets, SE	015	01/19/23	*			
19b	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	01/19/23	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	01/19/23	*			
20	12 <sup>th</sup> and M Streets, SE	016	01/19/23	*			
20a	12 <sup>th</sup> and M Streets, SE	016	01/19/23	*			
20b	12 <sup>th</sup> and M Streets, SE (CSO-016 Diversion Chamber)	016	01/19/23	*			
21	14 <sup>th</sup> and M Streets, SE	017	10/19/23	*			
21a	14 <sup>th</sup> and M Streets, SE (CSO-017 Diversion Chamber)	017	01/19/23	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	01/26/23	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	01/26/23	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	01/26/23	*			
22d	Kentucky Ave and Potomac Street, SE	018	01/20/23	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	01/10/23	*			
23	Independence Ave, 21st Street, SE, Extended	019	01/10/23	*			
24a	East Capitol St, west of RFK stadium	019	01/10/23	*			
28	21st and Constitution Ave, NW	020	01/09/23	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	01/09/23	*			
30	17 <sup>th</sup> and D Streets, NW	020	01/09/23	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	01/09/23	*			
33	10 <sup>th</sup> and F Streets, NW	020	01/09/23	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	01/18/23	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	01/09/23	*			
35	Northeast of Roosevelt Bridge, NW	021	01/18/23	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	01/13/23	*			
36	27 <sup>th</sup> and I Streets, NW	022	01/09/23	*			
36a	New Hampshire Ave and Eye Street, NW	022	01/09/23	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
36b	19th and L Streets, NW	022, 034	01/09/23	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	01/09/23	*			
36g	18th and M Streets, NW	022, 034	01/09/23	*			
36h	18th and M Streets, NW	022, 034	01/09/23	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	01/09/23	*			
38	29th and K Streets, NW	024	01/04/23	*			
38a	30th Street, south of K Street, NW	024	01/17/23	*			
39a	30th and K Streets, NW	024	01/04/23	*			
39b	30th and K Streets, NW	024	01/04/23	*			
41b	31st and K Streets, NW	025	01/04/23	*			
41c	31st and K Streets, NW	025	01/04/23	*			
42	Wisconsin Ave and K Street, NW	026	01/04/23	*			
43	Potomac and Water Streets, NW	027	01/04/23	*			
43a	Potomac and Water Streets, NW	027	01/04/23	*			
44	Water Street, west of Potomac St, NW	027	01/04/23	*			
45	36 <sup>th</sup> and M Streets, NW	028	01/04/23	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	01/04/23	*			
47	38th Street and Reservoir Road, NW	029	01/09/23	*			
47a	37 <sup>th</sup> and T Streets, NW	029	01/04/23	*			
47b	37 <sup>th</sup> and T Streets, NW	029	01/04/23	*			
47c	38 <sup>th</sup> and W Streets, NW	029	01/04/23	*			
$49^{1}$	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	01/26/23	*			
51	N Street Extended, west of 25th Street, NW	033	01/26/23	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	01/18/23	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	01/13/23	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	01/13/23	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	01/13/23	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	01/09/23	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	01/09/23	*			
54	23 <sup>rd</sup> and O Streets, NW	034	01/10/23	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	01/10/23	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	01/10/23	*			

				Со	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	01/10/23	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	01/10/23	*			
58 <sup>1</sup>	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	01/03/23	*			
60	Connecticut Ave, east of Rock Creek, NW	039	01/03/23	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	01/03/23	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	01/17/23	*			
63	Harvard Street and Rock Creek Parkway, NW	042	01/17/23	*			
64	Adams Mill Road, south of Irving Street, NW	043	01/17/23	*			
65	Kenyon Street and Adams Mill Road, NW	044	01/17/23	*			
65a	Kenyon Street and Adams Mill Road, NW	044	01/17/23	*			
66	Adams Mill Road and Lamont Street, NW	045	01/17/23	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	01/17/23	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	01/17/23	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	01/17/23	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	01/17/23	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	01/03/23	*			
71	28th Street, west of Rock Creek Parkway, NW	050	01/03/23	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	01/10/23	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	01/10/23	*			
73	O Street Extended and Rock Creek Parkway, NW	052	01/10/23	*			
74 <sup>1</sup>	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	01/03/23	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	01/03/23	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	01/03/23	*			
78 <sup>1</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>1</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26th and P Streets, NW	060	01/10/23	*			
84a	26th and P Streets, NW	060	01/10/23	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	01/19/23	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	01/19/23	*			
89	First and V St, NW (First St Tunnel)	019	01/19/23	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
90	First and V St, NW (First St Tunnel)	019	01/19/23	*			
91	First and V St, NW (First St Tunnel)	019	01/19/23	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	01/19/23	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	01/19/23	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	01/19/23	*			
96	CSO 007 Shaft at 11 <sup>th</sup> St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	01/13/23	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	01/13/23	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	01/25/23	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	01/18/23	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	01/18/23	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	01/20/23	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	01/20/23	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	01/20/23	*			
104	Poplar Point PS Discharge Chamber	N/A	01/20/23	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	01/20/23	*			

<sup>1.</sup> 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

	O.	utians and	Tiuc	Gaics							
				2 6 11	Tie		<i>T</i>				
				Outfall	Ga			le Gate	aa	O G:	
		_	Co	ndition	Pres	ent!	Co	ndition	CS	O Sign	
NPDES	Location	Date	OK	Needs Work	Vac	Nia	ΟV	Needs Work	OV	Needs	Notes Work Nooded or Borformed
Outfall 0031	Bolling Air Force Base, at Giavanolli and Chanute, SW	Inspected	OK	WOIK	res	NO	UK	WOLK	UK	WOIK	Notes, Work Needed or Performed
		N/A	*		*		*		*		
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	01/20/23	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	01/19/23	~		~		~		٠		
0061	Good Hope Road and Welsh Memorial Bridge	N/A					<u>.</u>				
007	Between 11th St. and Anacostia Bridges, SE	01/19/23	*		*		*		*		
009	O St. Sewage Pumping Station, SE	01/05/23	*		*		*		*		
010	O St. Sewage Pumping Station, SE	01/05/23	*			*			*		
011	Main Sewage Pumping Station, SE	01/05/23	*			*			*		
011a	Main Sewage Pumping Station, SE	01/05/23	*		*		*		*		
012	Main Sewage Pumping Station, SE	01/05/23	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	01/05/23	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	01/05/23	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	01/05/23	*			*			*		
016	12th and O Streets, SE	01/05/23	*		*		*		*		
017	M and Water Street, SE	01/05/23	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	01/05/23	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	01/19/23	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	01/19/23	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	01/05/23	*		*		*		*		
021	Rock Creek Parkway and C St., NW	01/05/23	*		*		*		*		
022	Rock Creek Parkway and G St., NW	01/05/23	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	01/05/23	*		*		*		*		
025	South of 31st and K Streets, NW	01/05/23	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	01/05/23	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	01/05/23	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	01/05/23	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	01/05/23	*			*			*		
	, 5										

				outfall ndition	Tio Ga Press	te		le Gate ndition			
NPDES		Date		Needs				Needs		Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
0311	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	01/26/23	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	01/26/23	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	01/10/23	*			*			*		
035	P St. Bridge and Rock Creek Parkway	01/10/23	*			*			*		
036	22nd Street, South of Q Street NW.	01/12/23	*		*		*		*		
$037^{1}$	Waterside Dr. and Rock Creek Parkway	N/A									
	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	01/03/23	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	01/03/23	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	01/03/23	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	01/12/23	*		*		*		*		
042	Harvard St. and Beach Dr NW.	01/12/23	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	01/12/23	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	01/12/23	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	01/12/43	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	01/17/23	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	01/17/23	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	01/17/23	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	01/17/23	*		*		*		*		
050	Rock Creek Parkway and L St., NW	01/03/23	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	01/19/23	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	01/19/23	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	01/03/23	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	01/03/23	*		*		*		*		
0571	28th Street and Rock Creek Parkway, NW	N/A									
058 <sup>1</sup>	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	01/12/23	*		*		*		*		

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

				T umping state		and Equipment in Service		
Pumping	No. of	No.	No.	Screens or Pumps			Work Order	
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Number	Schedule to Restore to Service
Main	31	3	4	None				
					-	-	-	-
O Street	31	2	4	Pump 1				
					1/1/2023-1/31/2023	Rotating assembly broke by	23-91455	Anticipated by 05/31/23. The
						stormwater debris		pump has been disconnected for
								repair.
Eastside	1	2	4	None				
					-	<del>-</del>	-	-
Poplar Point	1	2	4	None				
					-	-	-	-
Potomac	31	4	5	Pump 4				
				-	1/3/2023-1/31/2023	Replacement of rotating	23-192689	Anticipated by 02/03/23. The
						assembly		pump has been disconnected for
								repair.

Table 2-4
Pumping Stations – Preventive Maintenance

		Tumping States 110, entry 5		
	Date		Work Order	
Pumping Station	Performed	Type of Preventive Maintenance Performed 1,2	Number	Comments
Main	1/11/23	Group A	23-175037	Add oil, grease bearings and replace packing if needed.
O St	1/17/23	Group A	23-189395	Add oil, grease bearings and replace packing if needed.
Eastside	1/5/23	Group A	23-133619	Add oil, grease bearings and replace packing if needed.
Poplar Point	1/9/23	Group A	23-178302	Add oil, grease bearings and replace packing if needed.
Potomac	1/19/23	Group A	23-136711	Add oil, grease bearings and replace packing if needed.
Rock Creek	1/3/23	Group A	23-109319	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	1/5/23	Group A	23-178709	Add oil, grease bearings and replace packing if needed.
Earl Place	1/5/23	Group A	23-154082	Add oil, grease bearings and replace packing if needed.
1 <sup>st</sup> Street Tunnel Dewatering	1/6/23	Group B	23-163107	

- 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

		nitary npage	Screenings Collected (tons) <sup>1</sup>	First St	of CSO from reet Tunnel Sewer System
_	Total	Daily Average		Date	Volume (mg)
Pumping Station	Wastewater (mg)	Wastewater (mg)			
Main <sup>1,2</sup>	1419.589	45.79	N/A	N/A	N/A
O St <sup>1,2</sup>	118.9979	3.839	N/A	N/A	N/A
Eastside	141.1315	4.553	N/A	N/A	N/A
Poplar Point	156.25	5.0403	N/A	N/A	N/A
Potomac	3366.6938	108.6030	N/A	N/A	N/A
Rock Creek	64.8245	2.09111	N/A	N/A	N/A
Upper Anacostia	37.8257	1.2202	N/A	N/A	N/A
Earl Place	0.1438	0.004639	N/A	N/A	N/A
1st Street Tunnel Dewatering	N/A	N/A	N/A	N/A <sup>3</sup>	N/A <sup>3</sup>

- 1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
- 2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
- 3. As stated in the letter to EPA dated October 28, 2022, there is an outage of First Street Tunnel for connectivity to the Northeast Boundary tunnel. First Street Tunnel Pump Station will be operated locally by the contractor during this outage. First Street Tunnel shut down began December 16, 2022. The flow will not be recorded in the CSO report during the outage as it is not stormwater flow.

#### 2.4 Inflatable Dams and SCADA System

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

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

Inflatable Dam		Was Dam Out of Service			
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Schedule to Restore to Service
14 - East	01/18/23	No	N/A	N/A	N/A
14 - West	01/18/23	No	N/A	N/A	N/A
1.5	01/11/23	Yes	01/11/23	Note 1	01/11/23
15	01/18/23	No	N/A	N/A	N/A
15A	01/18/23	No	N/A	N/A	N/A
16 – East	01/18/23	Yes	01/18/23	Note 2	01/18/23
	01/18/23	No	N/A	N/A	N/A
16 – West	01/18/23	Yes	01/18/23	Note 2	01/18/23
	01/18/23	No	N/A	N/A	N/A
34	01/18/23	No	N/A	N/A	N/A
35	01/18/23	No	N/A	N/A	N/A
52	01/18/23	No	N/A	N/A	N/A

- 1. On 1/11/23, Structure 15 deflated around 9.16am due to maintenance on the pressure sensor. The pressure sensor was recalibrated by the Instrumentation team and the structure was reinflated and returned to service within two hours. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
- 2. On 1/18/23, Structure 16 East and West deflated around 3.46pm due to maintenance on a level sensor. The level sensor was serviced by the Instrumentation team and the structure was reinflated and returned to service within four 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

Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow	Inflatable Dam Operational Status
14 (E & W)	None	N/A	Inflated
15	None	N/A	Inflated
15A	None	N/A	Inflated
16 (E & W)	None	N/A	Inflated
34	None	N/A	Inflated
35	None	N/A	Inflated
52	None	N/A	Inflated
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow	
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.	
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.	27/4
Outfall Structure 2	None	N/A	N/A
Outfall Sewer Control Gates	Operational Status	Position	
Outfall Sewer Control Gate No.1	Operational	Open	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	

#### 3. DRY WEATHER OVERFLOWS

There was one dry weather combined sewer overflow reported during January 2023.

On January 20, 2023, at approximately 1:00 PM, DC Water staff from the Department of Pumping and Sewer Operation (DPSO) maintenance crew observed three surcharged manholes which were not overflowing on K Street, between 29th and 30th Streets while they were cleaning the sewer main as part of the monthly preventive maintenance program. They used a Jet-Vac machine but could not clear the combined sewer (CSS) main and called another crew to assist them. Upon arrival, the crew checked Regulator Structure 38 on K Street. They discovered that the sewer level at the structure, which is upstream of Rock Creek Pumping Station (RCPS), was high and sewage was flowing over the weir wall. This caused an overflow at Outfall CSO 024 into the Potomac River.

The crew immediately called the control room of the RCPS to investigate further. During their investigation, the primary sensor level was at -2.0 feet, which was below the pump set point of 0.0 feet, and the station pumps were in automatic mode and operating as designed within the operating set points. At Structure 38, where the weir top is at +2.0 feet, it was flowing over the weir. This indicated that there was debris in the sewer between Structure 38 and in the pump station wet well, limiting the flow through the sewer and into RCPS. Upon discovery at approximately 2:00 PM, Pump #2 was turned on manually to draw down the wet well further below -2.0 feet and two pumps were on for a short period. The operation of the pumps and Jet-Vac cleaning of the system to remove sewage debris and grease through the wet well and pumps, stopped the overflow at approximately 3:00 PM.

DC Water estimates approximately 18,000 gallons of sanitary sewage discharged into the Potomac River at CSO 024 from the time the overflow was discovered until it stopped. DC Water will continue to perform monthly preventive maintenance cleaning, additional cleaning of the wet well at the pump station and the influent line and inspect the sewer by a closed-circuit television (CCTV) to determine what additional steps may be needed to prevent a recurrence.

#### 4. SOLIDS AND FLOATABLES CONTROL

### 4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Cleaning

				Inspections	1		Cleaning				
				Total	Total						
				Anacostia	Anacostia	CBs Cleaned Thru		CB's Cleaned		Total CBs Cleaned	
			CBs in	CBs	CBs	Last N	<i>Ionth</i>	This Month		This Year to Date	
		CBs in		Inspected Once this	Inspected Twice this						
ш 1	T . 1 CD		Anacostia			Tr. 4 1	I CCC	Tr 4 1	I CCC	Tr 4 1	I CCC
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1467	1442	655	398	2	1388	1369	9	9	9	9
2	2832	2647	486	30	0	2670	2466	18	11	18	11
3	3720	183	0	0	0	3691	176	9	0	9	0
4	3521	1729	0	0	0	3248	1645	57	21	57	21
5	4066	1758	1693	5	0	4050	1988	7	2	7	2
6	3333	2692	2676	227	0	3990	3323	6	3	6	3
7	3879	43	43	0	0	1824	51	2543	0	2543	0
8	2930	213	212	0	0	3488	235	121	0	121	0
Grand Total	25748 <sup>1</sup>	10707 <sup>1</sup>	5765 <sup>1</sup>	660	2	24349	11253	2770	46	2770	46
% Cleaned/Inspected to Date				11%	0%					11%	0%

#### 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

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (LB)
Bar Rack CSO 040	01/12/23	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	01/12/23	Good	None	Routine Cleaning	(1)

#### Notes:

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

#### 4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Operations. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

Table 4-3
Anacostia River Floating Debris Removal Program – Summary

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	20
Days not Operating	6
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	2 Skimmers
Dates	B33: 1/31. B34: 1/1 - 1/12.
Reason	B33: hydraulic fluid leak starboard prop tilt ram.
	B34: check engine light illuminated.
Plan to Restore to Service	B33: parts on order, ETR Feb 2023.
	B34: returned to operations on 1/13.
Amount Material Collected	10 tons this month. Calendar year to date 10 tons.
Nature of Material	Bottles, cans, natural debris and plastics.

#### 4.4 CSS Litter Control

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

No Activity this month.

#### 5. MONITORING

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

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

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

	Data	Condition		Work Order		Work Performed or
<b>Pumping Station</b>	Date Inspected	Good	Needs Work	Work Order Number	Work Needed	Schedule for Completion
Bar Racks at O Street Storm Pumps (CSO 010)	1/18/23	X		23-187566		_
Bar Racks at Main Storm Pumps (CSO 011)	1/18/23	X		23-187559		

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

5.2

Rain Data

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
1/1/2023	0.01	0	0	0	0
1/2/2023	0	0	0	0	0
1/3/2023	0	0	0	0	0
1/4/2023	1.09	0	0.01	0	0
1/5/2023	0.85	0	0	0	0
1/6/2023	0	0	0	0	0
1/7/2023	0	0	0	0	0
1/8/2023	0	0	0.01	0	0.01
1/9/2023	0	0	0	0	0
1/10/2023	0	0	0	0	0
1/11/2023	0	0.01	0.01	0	0.02
1/12/2023	0.08	0.09	0.14	0.12	0.15
1/13/2023	0.22	0.23	0.23	0.21	0.24
1/14/2023	0	0	0	0	0
1/15/2023	0	0	0	0	0
1/16/2023	0	0	0	0	0
1/17/2023	0	0	0.01	0.01	0.05
1/18/2023	0	0	0	0	0
1/19/2023	0.02	0.02	0.07	0.02	0.09
1/20/2023	0	0	0	0	0
1/21/2023	0	0	0	0	0
1/22/2023	0.17	0.17	0.21	0.20	0.24
1/23/2023	0.07	0.06	0.07	0.08	0.09
1/24/2023	0	0	0	0	0
1/25/2023	0.42	0.48	0.54	0.52	0.56
1/26/2023	0.01	0	0	0	0
1/27/2023	0	0	0	0	0
1/28/2023	0	0	0	0	0
1/29/2023	0	0.01	0.02	0.02	0.03
1/30/2023	0	0	0	0	0
1/31/2023	0.09	0.11	0.15	0.12	0.17
TOTAL	2.94	1.07	1.32	1.18	1.48

<i>-</i> -	<b>TT</b> 7 4	***	$\sim$
5.3	WAT	Waathar	Overflows
. / /	****	vvcaunci	

The wet weather overflow data for this quarter is reported below in the Combined Sewer System Modeled and Metered Quarterly Results table located in Section 5.3 of the March 2023 Report.



# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

# Monthly Operations Report For Combined Sewer System

**Month: February 2023** 

#### Prepared By:

District of Columbia
Water and Sewer Authority
Department of
Pumping and Sewer Operations
Washington, D.C. 20003

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

# Monthly Operations Report for Combined Sewer System Month: February 2023 Table of Contents

#### 1. INTRODUCTION

#### 2. OPERATION AND MAINTENANCE

- 2.1 Regulators
- 2.2 Outfalls, Tide Gates and CSO Signs
- 2.3 Pumping Stations
- 2.4 Inflatable Dams and SCADA Systems

#### 3. DRY WEATHER OVERFLOWS

#### 4. SOLIDS AND FLOATABLES CONTROL

- 4.1 Catch Basin Cleaning
- 4.2 BMP Demonstration for Solid and Floatable Control
- 4.3 Anacostia River Floating Debris Removal Program
- 4.4 CSS Litter Control

#### 5. MONITORING

- 5.1 Bar Racks at Main & O Street
- 5.2 Rainfall Data
- 5.3 Wet Weather Overflows

#### 1. INTRODUCTION

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

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

#### 2. OPERATION AND MAINTENANCE

#### 2.1 Regulators

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

Table 2-1 Regulator Structures

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
21	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
41	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
51	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	02/15/23	*			
7	W Street and Railroad Ave, SE	005	02/25/23	*			
81	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE (Diversion Structure)	007	02/15/23	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	02/15/23	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	02/23/23	*			
11	"O" Street Pumping Station	011(a)	02/14/23	*			
12	Storm Pump Discharge at Main Pumping Station	011	02/02/23	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	02/02/23	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	02/02/23	*			
15	South Capitol and E Streets	010	02/09/23	*			
15a	Half and L Streets, SE	010	02/09/23	*			
15b	South Capitol and I Streets	010	02/03/23	*			
15c	South Capitol and I Streets	010	02/03/23	*			

				Condition			
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	02/14/23	*			
17	4th and N Streets, SE, Both Extended	013	02/23/23	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	02/23/23	*			
17b	4 <sup>th</sup> and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	02/23/23	*			
18	6 <sup>th</sup> and M Streets, SE (Diversion and Overflow Structure)	014	02/24/23	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	02/24/23	*			
19	9 <sup>th</sup> and M Streets, SE	015	02/24/23	*			
19a	9 <sup>th</sup> and M Streets, SE	015	02/24/23	*			
19b	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	02/24/23	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	02/24/23	*			
20	12 <sup>th</sup> and M Streets, SE	016	02/24/23	*			
20a	12 <sup>th</sup> and M Streets, SE	016	02/24/23	*			
20b	12 <sup>th</sup> and M Streets, SE (CSO-016 Diversion Chamber)	016	02/24/23	*			
21	14 <sup>th</sup> and M Streets, SE	017	02/24/23	*			
21a	14 <sup>th</sup> and M Streets, SE (CSO-017 Diversion Chamber)	017	02/24/23	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	02/24/23	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	02/24/23	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	02/24/23	*			
22d	Kentucky Ave and Potomac Street, SE	018	02/08/23	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	02/08/23	*			
23	Independence Ave, 21st Street, SE, Extended	019	02/08/23	*			
24a	East Capitol St, west of RFK stadium	019	02/08/23	*			
28	21st and Constitution Ave, NW	020	02/21/23	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	02/21/23	*			
30	17 <sup>th</sup> and D Streets, NW	020	02/21/23	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	02/21/23	*			
33	10 <sup>th</sup> and F Streets, NW	020	02/21/23	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	02/09/23	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	02/21/23	*			
35	Northeast of Roosevelt Bridge, NW	021	02/09/23	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	02/06/23	*			
36	27 <sup>th</sup> and I Streets, NW	022	02/21/23	*			
36a	New Hampshire Ave and Eye Street, NW	022	02/21/23	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
36b	19th and L Streets, NW	022, 034	02/06/23	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	02/06/23	*			
36g	18th and M Streets, NW	022, 034	02/06/23	*			
36h	18th and M Streets, NW	022, 034	02/06/23	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	02/21/23	*			
38	29th and K Streets, NW	024	02/06/23	*			
38a	30th Street, south of K Street, NW	024	02/06/23	*			
39a	30th and K Streets, NW	024	02/06/23	*			
39b	30th and K Streets, NW	024	02/06/23	*			
41b	31st and K Streets, NW	025	02/06/23	*			
41c	31st and K Streets, NW	025	02/06/23	*			
42	Wisconsin Ave and K Street, NW	026	02/06/23	*			
43	Potomac and Water Streets, NW	027	02/06/23	*			
43a	Potomac and Water Streets, NW	027	02/06/23	*			
44	Water Street, west of Potomac St, NW	027	02/06/23	*			
45	36 <sup>th</sup> and M Streets, NW	028	02/03/23	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	02/03/23	*			
47	38th Street and Reservoir Road, NW	029	02/03/23	*			
47a	37 <sup>th</sup> and T Streets, NW	029	02/03/23	*			
47b	37 <sup>th</sup> and T Streets, NW	029	02/03/23	*			
47c	38th and W Streets, NW	029	02/23/23	*			
49 <sup>1</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	02/15/23	*			
51	N Street Extended, west of 25th Street, NW	033	02/15/23	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	02/09/23	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	02/06/23	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	02/06/23	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	02/06/23	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	02/06/23	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	02/06/23	*			_
54	23 <sup>rd</sup> and O Streets, NW	034	02/15/23	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	02/15/23	*			_
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	02/15/23	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	02/15/23	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	02/15/23	*			
58 <sup>1</sup>	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	02/03/23	*			
60	Connecticut Ave, east of Rock Creek, NW	039	02/03/23	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	02/03/23	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	02/08/23	*			
63	Harvard Street and Rock Creek Parkway, NW	042	02/08/23	*			
64	Adams Mill Road, south of Irving Street, NW	043	02/08/23	*			
65	Kenyon Street and Adams Mill Road, NW	044	02/08/23	*			
65a	Kenyon Street and Adams Mill Road, NW	044	02/08/23	*			
66	Adams Mill Road and Lamont Street, NW	045	02/08/23	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	02/08/23	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	02/08/23	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	02/08/23	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	02/08/23	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	02/03/23	*			
71	28th Street, west of Rock Creek Parkway, NW	050	02/03/23	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	02/15/23	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	02/15/23	*			
73	O Street Extended and Rock Creek Parkway, NW	052	02/15/23	*			
74 <sup>1</sup>	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	02/23/23	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	02/23/23	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	02/23/23	*			
78 <sup>1</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	02/15/23	*			
84a	26 <sup>th</sup> and P Streets, NW	060	02/15/23	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	02/08/23	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	02/08/23	*			
89	First and V St, NW (First St Tunnel)	019	02/08/23	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
90	First and V St, NW (First St Tunnel)	019	02/08/23	*			
91	First and V St, NW (First St Tunnel)	019	02/08/23	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	02/27/23	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	02/27/23	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	02/24/23	*			
96	CSO 007 Shaft at 11 <sup>th</sup> St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	02/23/23	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	02/23/23	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	02/14/23	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	02/14/23	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	02/14/23	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	02/10/23	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	02/10/23	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	02/10/23	*			
104	Poplar Point PS Discharge Chamber	N/A	02/10/23	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	02/10/23	*			

<sup>1.</sup> 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

	O.	utians and	Tiuc	Gaics							
				Tide		<i>T</i> :	1.0.				
			Outfall Condition P				Tide Gate Condition		CSO Sign		
NDDEC		Dor	Co			eni:	Needs				
NPDES Outfall	Location	Date Inspected	OK	Needs Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed
0031	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	02/10/23	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	02/16/23	*		*		*		*		
0061	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	02/16/23	*		*		*		*		
009	O St. Sewage Pumping Station, SE	02/02/23	*		*		*		*		
010	O St. Sewage Pumping Station, SE	02/02/23	*			*			*		
011	Main Sewage Pumping Station, SE	02/02/23	*			*			*		
011a	Main Sewage Pumping Station, SE	02/02/23	*		*		*		*		
012	Main Sewage Pumping Station, SE	02/02/23	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	02/02/23	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	02/02/23	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	02/02/23	*			*			*		
016	12th and O Streets, SE	02/02/23	*		*		*		*		
017	M and Water Street, SE	02/16/23	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	02/02/23	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	02/27/23	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	02/27/23	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	02/02/23	*		*		*		*		
020	Rock Creek Parkway and C St., NW	02/02/23	*		*		*		*		
021	Rock Creek Parkway and G St., NW	02/02/23	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	02/02/23	*		*		*		*		
025	South of 31st and K Streets, NW	02/02/23	*		*		*		*		
025	Wisconsin Avenue and Water Street, NW	02/02/23	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	02/02/23	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	02/02/23	*			*			*		
029	Adjacent to C&O Canal, aligned with 38th St. NW	02/02/23	*			*			*		
02)	rajacent to coo canai, angioa with 50 St. 1111	02102123						L			

				Tide Outfall Gate ondition Present?			Tide Gate Condition		O Sign		
NPDES		Date		Needs				Needs		Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
0311	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	02/15/23	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	02/15/23	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	02/15/23	*			*			*		
035	P St. Bridge and Rock Creek Parkway	02/15/23	*			*			*		
036	22nd Street, South of Q Street NW.	02/16/23	*		*		*		*		
0371	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	02/03/23	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	02/03/23	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	02/03/23	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	02/16/23	*		*		*		*		
042	Harvard St. and Beach Dr NW.	02/16/23	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	02/16/23	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	02/16/23	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	02/16/23	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	02/08/23	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	02/08/23	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	02/08/23	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	02/08/23	*		*		*		*		
050	Rock Creek Parkway and L St., NW	02/03/23	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	02/16/23	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	02/16/23	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	02/23/23	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	02/23/23	*		*		*		*		
0571	28th Street and Rock Creek Parkway, NW	N/A									
058 <sup>1</sup>	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	02/16/23	*		*		*		*		

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

# 2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

Pumping	No. of	No.	No.	Screens or Pumps			Work Order	
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Number	Schedule to Restore to Service
Main	28	3	4	None	-	-	-	-
O Street	28	2	4	Pump 1	2/1/2023-2/28/2023	Rotating assembly broke by stormwater debris	23-91455	Anticipated by 05/31/23. The pump has been disconnected for repair.
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	28	4	5	Pump 4	2/1/2023-2/3/2023	Replacement of rotating assembly	23-192689	Returned to service on 2/3/2023.

Table 2-4
Pumping Stations – Preventive Maintenance

	Date		Work Order	
Pumping Station	Performed	<i>Type of Preventive Maintenance Performed</i> <sup>1,2</sup>	Number	Comments
Main	2/6/23	Group A	23-224068	Add oil, grease bearings and replace packing if needed.
O St	2/6/23	Group A	23-239259	Add oil, grease bearings and replace packing if needed.
Eastside	2/10/23	Group A	23-187832	Add oil, grease bearings and replace packing if needed.
Poplar Point	2/10/23	Group A	23-228578	Add oil, grease bearings and replace packing if needed.
Potomac	2/6/23	Group A	23-190162	Add oil, grease bearings and replace packing if needed.
Rock Creek	2/6/23	Group A	23-159406	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	2/10/23	Group A	23-228641	Add oil, grease bearings and replace packing if needed.
Earl Place	2/10/23	Group A	23-195911	Add oil, grease bearings and replace packing if needed.
1 <sup>st</sup> Street Tunnel Dewatering	2/16/23	Group B	23-222610	

- 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

		nitary mpage	Screenings Collected (tons) <sup>1</sup>	Pumpage of CSO from First Street Tunnel back to Sewer System		
Pumping Station	Total Wastewater	Daily Average Wastewater		Date	Volume (mg)	
Main <sup>1,2</sup>	( <i>mg</i> ) 1329.6143	(mg) 47.4862	N/A	N/A	N/A	
O St <sup>1,2</sup>	104.2165	3.7220	N/A	N/A	N/A	
Eastside	125.1813	4.4708	N/A	N/A	N/A	
Poplar Point	105.95	3.7839	N/A	N/A	N/A	
Potomac	3209.3166	114.6185	N/A	N/A	N/A	
Rock Creek	68.0027	2.4287	N/A	N/A	N/A	
Upper Anacostia	34.8401	1.2443	N/A	N/A	N/A	
Earl Place	0.1408	0.005029	N/A	N/A	N/A	
1st Street Tunnel Dewatering	N/A	N/A	N/A	N/A <sup>3</sup>	N/A <sup>3</sup>	

- 1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
- 2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
- 3. As stated in the letter to EPA dated October 28, 2022, there was an outage of First Street Tunnel for connectivity to the Northeast Boundary tunnel. First Street Tunnel Pump Station was operated locally by the contractor during this outage. First Street Tunnel shut down began December 16, 2022 and ended February 24,2023. The flow was not recorded in the CSO report during the outage as it was not stormwater flow. Pump data indicates no activity in the month of February since February 24<sup>th</sup>, 2023. DC Water is in the process of inspecting the defective flow meter. In the interim, the flow will be estimated based on pump run times and pump capacity. \*\*The estimated volume of 0 MG for the month of February 2023.

#### 2.4 Inflatable Dams and SCADA System

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

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

Inflatable Dam		Was Dam Out of Service			
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Schedule to Restore to Service
14 - East	02/14/23	No	N/A	N/A	N/A
	02/22/23	Yes	02/22/23	Note 2	02/22/23
14 - West	02/14/23	No	N/A	N/A	N/A
	02/22/23	Yes	02/22/23	Note 2	02/22/23
15	02/09/23	No	N/A	N/A	N/A
15A	02/09/23	No	N/A	N/A	N/A
16 – East	02/14/23	Yes	02/14/23	Note 1	02/14/23
	02/14/23	No	N/A	N/A	N/A
16 – West	02/14/23	Yes	02/14/23	Note 1	02/14/23
	02/14/23	No	N/A	N/A	N/A
34	02/09/23	No	N/A	N/A	N/A
35	02/09/23	No	N/A	N/A	N/A
52	02/09/23	No	N/A	N/A	N/A
	02/23/23	Yes	02/23/23	Note 3	02/23/23

- 1. On 2/14/23, Structures 16 East and West were deflated around 11.49am due to a level sensor being knocked loose during routine inspection. Instrumentation was notified and the level sensor was readjusted. The structure was up and returned to service within 2 hours. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
- 2. On 2/22/23, Structures 14 East and West were deflated around 12pm due to a level sensor being knocked loose during routine inspection. Instrumentation was notified and the level sensor was readjusted. The structure was up and returned to service within 5 hours. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
- 3. On 2/23/23, Structure 52 deflated around 10.20am due to a broken belt on the blower motor. Instrumentation was notified and the belt was replaced. The structure was up and returned to service within 5 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

Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow	Inflatable Dam Operational Status
14 (E & W)	None	N/A	Inflated
15	None	N/A	Inflated
15A	None	N/A	Inflated
16 (E & W)	None	N/A	Inflated
34	None	N/A	Inflated
35	None	N/A	Inflated
52	None	N/A	Inflated
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow	
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.	
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.	77/4
Outfall Structure 2	None	N/A	N/A
Outfall Sewer Control Gates	Operational Status	Position	
Outfall Sewer Control Gate No.1	Operational	Open	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	

### 3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow reported during February 2023.

### 4. SOLIDS AND FLOATABLES CONTROL

## 4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Cleaning

				Inspections	1	Cleaning					
				Total	Total						
				Anacostia	Anacostia	CBs Clear	ned Thru	CB's C	leaned	Total CBs Cleaned	
			CBs in	CBs	CBs	Last N	10nth	This I	Month	This Year	r to Date
		CDa in		Inspected	Inspected						
117. 1	T . 1 CD	CBs in	Anacostia	Once this	Twice this	1	1 000	m . 1	I GGG	TD . 1	I 000
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1467	1442	655	401	2	9	9	10	10	19	19
2	2832	2647	486	62	0	18	11	5	5	23	16
3	3720	183	0	0	0	9	0	548	0	557	0
4	3521	1729	0	0	1	57	21	1183	10	1240	31
5	4066	1758	1693	10	1	7	2	272	6	279	8
6	3333	2692	2676	515	0	6	3	7	5	13	8
7	3879	43	43	0	0	2543	0	237	0	2780	0
8	2930	213	212	1	0	121	0	41	1	162	1
Grand Total	25748 <sup>1</sup>	$10707^{1}$	5765 <sup>1</sup>	989	4	2770	46	2303	37	5073	83
% Cleaned/Inspected to Date				17%	0%					20%	1%

#### 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

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (LB)
Bar Rack CSO 040	02/03/23	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	02/16/23	Good	None	Routine Cleaning	(1)

#### Notes:

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

#### 4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Operations. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

Table 4-3
Anacostia River Floating Debris Removal Program – Summary

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	19
Days not Operating	10
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B33: 2/1
Reason	B33: hydraulic fluid leak starboard prop tilt ram.
Plan to Restore to Service	B33: returned to operations on 2/2
Amount Material Collected	10 tons this month. Calendar year to date 20 tons.
Nature of Material	Bottles, cans, natural debris and plastics.

#### 4.4 CSS Litter Control

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

No Activity this month.

### 5. MONITORING

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

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

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

	Date	Cond	lition	Work Order		Work Performed or
Pumping Station	Inspected	Good	Needs Work	Number	Work Needed	Schedule for Completion
Bar Racks at O Street Storm Pumps (CSO 010)	2/16/23	X		23-244338		
Bar Racks at Main Storm Pumps (CSO 011)	2/16/23	X		23-244331		

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

5.2

Rain Data

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
2/1/2023	0.01	0.01	0.02	0.01	0.04
2/2/2023	0	0	0	0	0
2/3/2023	0	0	0	0	0
2/4/2023	0	0	0	0	0
2/5/2023	0	0	0	0	0
2/6/2023	0	0	0	0	0
2/7/2023	0	0	0	0	0
2/8/2023	0	0	0	0	0
2/9/2023	0	0	0	0	0
2/10/2023	0	0	0	0	0
2/11/2023	0	0	0	0	0
2/12/2023	0.54	0.57	0.77	0.70	0.81
2/13/2023	0.01	0.01	0.01	0.03	0.02
2/14/2023	0	0	0	0	0
2/15/2023	0	0	0.01	0	0.01
2/16/2023	0.23	0.24	0.27	0.24	0.30
2/17/2023	0.60	0.58	0.63	0.63	0.58
2/18/2023	0	0	0	0	0
2/19/2023	0	0	0	0	0
2/20/2023	0	0	0	0	0
2/21/2023	0	0	0	0	0.01
2/22/2023	0	0	0.01	0	0.02
2/23/2023	0	0	0	0	0
2/24/2023		0	0	0	0
2/25/2023	0	0	0	0	0.01
2/26/2023	0	0	0	0	0
2/27/2023	0.11	0.13	0.22	0.11	0.27
2/28/2023	0	0	0	0	0.01
TOTAL	1.50	1.54	1.94	1.72	2.08

5.3	XX7.4	11/a a 4 la a sa	Overflows
7 1	WE	wearner	. Jvernaws

The wet weather overflow data for this quarter is reported below in the Combined Sewer System Modeled and Metered Quarterly Results table located in Section 5.3 of the March 2023 Report.



## DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

## Monthly Operations Report For Combined Sewer System

Month: March 2023

### Prepared By:

District of Columbia
Water and Sewer Authority
Department of
Pumping and Sewer Operations
Washington, D.C. 20003

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

## Monthly Operations Report for Combined Sewer System Month: March 2023 Table of Contents

#### 1. INTRODUCTION

#### 2. OPERATION AND MAINTENANCE

- 2.1 Regulators
- 2.2 Outfalls, Tide Gates and CSO Signs
- 2.3 Pumping Stations
- 2.4 Inflatable Dams and SCADA Systems

#### 3. DRY WEATHER OVERFLOWS

#### 4. SOLIDS AND FLOATABLES CONTROL

- 4.1 Catch Basin Cleaning
- 4.2 BMP Demonstration for Solid and Floatable Control
- 4.3 Anacostia River Floating Debris Removal Program
- 4.4 CSS Litter Control

#### 5. MONITORING

- 5.1 Bar Racks at Main & O Street
- 5.2 Rainfall Data
- 5.3 Wet Weather Overflows

#### 1. INTRODUCTION

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

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

#### 2. OPERATION AND MAINTENANCE

#### 2.1 Regulators

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

Table 2-1 Regulator Structures

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
21	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
41	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
5 <sup>1</sup>	Poplar Point Pumping Station	004	N/A				
6	Chicago Street and Railroad Ave, SE	005	03/24/2023	*			
7	W Street and Railroad Ave, SE	005	03/23/2023	*			
81	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE (Diversion Structure)	007	03/23/2023	*			
9a	13th Street and Ridge Place, SE (Regulator Structure)	007	03/23/2023	*			
9b	11th Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	03/14/2023	*			
11	"O" Street Pumping Station	011(a)	03/16/2023	*			
12	Storm Pump Discharge at Main Pumping Station	011	03/16/2023	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	03/15/2023	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	03/15/2023	*			
15	South Capitol and E Streets	010	03/15/2023	*			
15a	Half and L Streets, SE	010	03/15/2023	*			
15b	South Capitol and I Streets	010	03/03/2023	*	•		
15c	South Capitol and I Streets	010	03/03/2023	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	03/16/2023	*			
17	4th and N Streets, SE, Both Extended	013	03/14/2023	*			
17a	K Street between 6th Street and 7th Street, SE (Side Overflow Weir)	013	03/20/2023	*			
17b	4 <sup>th</sup> and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	03/14/2023	*			
18	6 <sup>th</sup> and M Streets, SE (Diversion and Overflow Structure)	014	03/20/2023	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	03/14/2023	*			
19	9 <sup>th</sup> and M Streets, SE	015	03/14/2023	*			
19a	9 <sup>th</sup> and M Streets, SE	015	03/14/2023	*			
19b	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	03/14/2023	*			
19c	9th and M Streets, SE (Diversion Chamber)	015	03/14/2023	*			
20	12 <sup>th</sup> and M Streets, SE	016	03/14/2023	*			
20a	12 <sup>th</sup> and M Streets, SE	016	03/14/2023	*			
20b	12 <sup>th</sup> and M Streets, SE (CSO-016 Diversion Chamber)	016	03/14/2023	*			
21	14 <sup>th</sup> and M Streets, SE	017	03/14/2023	*			
21a	14 <sup>th</sup> and M Streets, SE (CSO-017 Diversion Chamber)	017	03/14/2023	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	03/20/2023	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	03/20/2023	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	03/20/2023	*			
22d	Kentucky Ave and Potomac Street, SE	018	03/06/2023	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	03/06/2023	*			
23	Independence Ave, 21st Street, SE, Extended	019	03/20/2023	*			
24a	East Capitol St, west of RFK stadium	019	03/20/2023	*			
28	21st and Constitution Ave, NW	020	03/07/2023	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	03/07/2023	*			
30	17 <sup>th</sup> and D Streets, NW	020	03/07/2023	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	03/07/2023	*			
33	10 <sup>th</sup> and F Streets, NW	020	03/07/2023	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	03/15/2023	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	03/07/2023	*			
35	Northeast of Roosevelt Bridge, NW	021	03/15/2023	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	03/06/2023	*			
36	27 <sup>th</sup> and I Streets, NW	022	03/07/2023	*			
36a	New Hampshire Ave and Eye Street, NW	022	03/07/2023	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
36b	19th and L Streets, NW	022, 034	03/03/2023	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	03/03/2023	*			
36g	18th and M Streets, NW	022, 034	03/03/2023	*			
36h	18th and M Streets, NW	022, 034	03/03/2023	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	03/07/2023	*			
38	29th and K Streets, NW	024	03/01/2023	*			
38a	30th Street, south of K Street, NW	024	03/01/2023	*			
39a	30th and K Streets, NW	024	03/01/2023	*			
39b	30th and K Streets, NW	024	03/01/2023	*			
41b	31st and K Streets, NW	025	03/01/2023	*			
41c	31st and K Streets, NW	025	03/01/2023	*			
42	Wisconsin Ave and K Street, NW	026	03/01/2023	*			
43	Potomac and Water Streets, NW	027	03/01/2023	*			
43a	Potomac and Water Streets, NW	027	03/01/2023	*			
44	Water Street, west of Potomac St, NW	027	03/01/2023	*			
45	36 <sup>th</sup> and M Streets, NW	028	03/06/2023	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	03/06/2023	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	03/06/2023	*			
47a	37 <sup>th</sup> and T Streets, NW	029	03/06/2023	*			
47b	37 <sup>th</sup> and T Streets, NW	029	03/06/2023	*			
47c	38 <sup>th</sup> and W Streets, NW	029	03/06/2023	*			
$49^{1}$	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	03/20/2023	*			
51	N Street Extended, west of 25th Street, NW	033	03/20/2023	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	03/15/2023	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	07/07/2023	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	03/07/2023	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	03/07/2023	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	03/20/2023	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	03/20/2023	*			
54	23 <sup>rd</sup> and O Streets, NW	034	03/03/2023	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	03/03/2023	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	03/03/2023	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	03/03/2023	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	03/03/2023	*			
58 <sup>1</sup>	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	03/06/2023	*			
60	Connecticut Ave, east of Rock Creek, NW	039	03/06/2023	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	03/06/2023	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	03/06/2023	*			
63	Harvard Street and Rock Creek Parkway, NW	042	03/08/2023	*			
64	Adams Mill Road, south of Irving Street, NW	043	03/08/2023	*			
65	Kenyon Street and Adams Mill Road, NW	044	03/08/2023	*			
65a	Kenyon Street and Adams Mill Road, NW	044	03/08/2023	*			
66	Adams Mill Road and Lamont Street, NW	045	03/08/2023	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	03/08/2023	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	03/08/2023	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	03/08/2023	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	03/08/2023	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	03/01/2023	*			
71	28th Street, west of Rock Creek Parkway, NW	050	03/01/2023	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	03/03/2023	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	03/03/2023	*			
73	O Street Extended and Rock Creek Parkway, NW	052	03/03/2023	*			
74 <sup>1</sup>	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	03/07/2023	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	03/07/2023	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	03/07/2023	*			
$78^{1}$	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>1</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	03/03/2023	*			
84a	26 <sup>th</sup> and P Streets, NW	060	03/03/2023	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	03/02/2023	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	03/02/2023	*			
89	First and V St, NW (First St Tunnel)	019	03/02/2023	*			

				Co	ndition		
Structure		Associated NPDES	Date		Needs		
Number	Location	Outfall	Inspected	Good	Work	Work Needed	Work performed
90	First and V St, NW (First St Tunnel)	019	03/02/2023	*			
91	First and V St, NW (First St Tunnel)	019	03/03/2023	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	03/23/2023	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	03/23/2023	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	03/14/2023	*			
96	CSO 007 Shaft at 11 <sup>th</sup> St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	03/14/2023	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	03/14/2023	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	03/15/2023	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	03/15/2023	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	03/16/2023	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	03/21/2023	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	03/21/2023	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	03/21/2023	*			
104	Poplar Point PS Discharge Chamber	N/A	03/21/2023	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	03/21/2023	*			

<sup>1.</sup> 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			utimis min		- Out 100							
Note   Note												
Name   Name					0					aa	0.6:	
Dutfall   Location   Inspected   OK   Work   Ves   No   OK   Work   OK   Work   Notes, Work Needed or Perform			-	Co	1		Present?			CS		
0031   Bolling Air Force Base, at Giavanolli and Chanute, SW   N/A		T		OIZ		3.7	N.T	017		OIZ		N. W. IN II D.C. I
003a   Joint Base Anacostia Bolling Macdill and Arnold Ave SW   03/21/2023 *			•	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
005												
D06    Good Hope Road and Welsh Memorial Bridge   N/A		Č										
007   Between 11th St. and Anacostia Bridges, SE   03/16/2023 *				*		*		*		*		
009   O St. Sewage Pumping Station, SE   03/16/2023 *	$006^{1}$											
OS L Sewage Pumping Station, SE	-	6 7				*		*				
011   Main Sewage Pumping Station, SE	009			*		*		*		*		
O11a   Main Sewage Pumping Station, SE	010	O St. Sewage Pumping Station, SE	03/16/2023	*			*			*		
012   Main Sewage Pumping Station, SE	011	Main Sewage Pumping Station, SE	03/16/2023	*			*			*		
013   Southeast Federal Center, aligned with 4th St.   03/16/2023 *	011a	Main Sewage Pumping Station, SE	03/16/2023	*		*		*		*		
014   Navy Yard, aligned with 6th St., SE	012	Main Sewage Pumping Station, SE	03/16/2023	*		*		*		*		
015         Navy Yard, aligned with 9th Street, SE         03/16/2023 *	013	Southeast Federal Center, aligned with 4th St.	03/16/2023	*		*		*		*		
016   12th and O Streets, SE   03/02/2023 *	014	Navy Yard, aligned with 6th St., SE	03/16/2023	*		*		*		*		
017   M and Water Street, SE   03/16/2023 *	015	Navy Yard, aligned with 9th Street, SE	03/16/2023	*			*			*		
018   East of Barney Circle & South of Pennsylvania Avenue Bridge, SE   03/02/2023	016	12th and O Streets, SE	03/02/2023	*		*		*		*		
Adjacent to Service Drive behind swirl facility & D.C. General Hospital	017	M and Water Street, SE	03/16/2023	*		*		*		*		
Hospital	018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	03/02/2023	*		*		*		*		
Hospital (Tunnel Overflow Structure)	019		03/23/2023	*		*		*		*		
021       Rock Creek Parkway and C St., NW       03/02/2023 *	019a	, J	03/23/2023	*		*		*		*		
022         Rock Creek Parkway and G St., NW         03/02/2023 *	020	Rock Creek Parkway and Independence, NW	03/02/2023	*		*		*		*		
024       South of 30th and K Streets, NW¹       03/02/2023 *	021	Rock Creek Parkway and C St., NW	03/02/2023	*		*		*		*		
024       South of 30th and K Streets, NW¹       03/02/2023 *	022	Rock Creek Parkway and G St., NW	03/02/2023	*		*		*		*		
025       South of 31st and K Streets, NW       03/02/2023 *				*		*		*		*		
027       33 <sup>rd</sup> and Water Sts., NW       03/02/2023 *       *       *       *         028       Key Bridge and Whitehurst Freeway, NW       03/02/2023 *       *       *       *	025	South of 31st and K Streets, NW		*		*		*		*		
028 Key Bridge and Whitehurst Freeway, NW 03/02/2023 * * * * *	026	Wisconsin Avenue and Water Street, NW	03/02/2023	*		*		*		*		
028 Key Bridge and Whitehurst Freeway, NW 03/02/2023 * * * * *	027		03/02/2023	*			*			*		
		,		*			*			*		
029   Adjacent to C&O Canat, anglied with 58" St. NW   03/02/2025   *       *       *	029	Adjacent to C&O Canal, aligned with 38th St. NW	03/02/2023	*			*			*		

				3			le Gate ndition	CS	O Sign		
NPDES		Date	Co	Needs	1763		CO	Needs	CB	Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK		Notes, Work Needed or Performed
0311	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	03/20/2023	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	03/20/2023	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	03/03/2023	*			*			*		
035	P St. Bridge and Rock Creek Parkway	03/03/2023	*			*			*		
036	22nd Street, South of Q Street NW.	03/13/2023	*		*		*		*		
0371	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	03/06/2023	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	03/06/2023	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	03/06/2023	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	03/13/2016	*		*		*		*		
042	Harvard St. and Beach Dr NW.	03/13/2023	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	03/13/2023	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	03/13/2023	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	03/13/2023	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	03/08/2023	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	03/08/2023	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	03/08/2023	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	03/08/2023	*		*		*		*		
050	Rock Creek Parkway and L St., NW	03/01/2023	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	03/21/2023	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	03/21/2023	*		*		*		*		
$053^{1}$	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	03/07/2023	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	03/07/2023	*		*		*		*		
$057^{1}$	28th Street and Rock Creek Parkway, NW	N/A									
$058^{1}$	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	03/13/2023	*		*		*		*		

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

## 2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

Pumping	No. of	No.	No.	Screens or Pumps			Work Order	
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Number	Schedule to Restore to Service
Main	31	3	4	Pump 2	3/1/23-3/3/23	Blow off pipe valve broke off pump	23-262507	Returned to service on 3/3/2023.
O Street	31	2	4	Pump 1	3/1/2023-3/31/2023	Rotating assembly broke by stormwater debris	23-91455	Anticipated by 05/31/23. The pump has been disconnected for repair.
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	None	-	-	-	-

Notes:

Table 2-4
Pumping Stations – Preventive Maintenance

	Date		Work Order	
Pumping Station	Performed	<i>Type of Preventive Maintenance Performed</i> <sup>1,2</sup>	Number	Comments
Main	3/7/23	Group A	23-265102	Add oil, grease bearings and replace packing if needed.
O St	3/7/23	Group A	23-280656	Add oil, grease bearings and replace packing if needed.
Eastside	3/1/23	Group A	23-237504	Add oil, grease bearings and replace packing if needed.
Poplar Point	3/21/23	Group A	23-269106	Add oil, grease bearings and replace packing if needed.
Potomac	3/3/23	Group A	23-239984	Add oil, grease bearings and replace packing if needed.
Rock Creek	3/3/23	Group A	23-201288	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	3/22/23	Group A	23-269169	Add oil, grease bearings and replace packing if needed.
Earl Place	3/1/23	Group A	23-244635	Add oil, grease bearings and replace packing if needed.
1 <sup>st</sup> Street Tunnel Dewatering	3/3/23	Group B	23-264485	

- 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

		nitary mpage	Screenings Collected (tons) <sup>1</sup>	Pumpage of CSO from First Street Tunnel			
	m 1	D 11 1			wer System		
_	Total	Daily Average		Date	Volume (mg)		
Pumping	Wastewater	Wastewater					
Station	(mg)	(mg)					
Main <sup>1,2</sup>	1433.95	46.26	N/A	N/A	N/A		
O St <sup>1,2</sup>	115.55	3.727	N/A	N/A	N/A		
Eastside	133.55	4.308	N/A	N/A	N/A		
Poplar Point	253.98	8.193	N/A	N/A	N/A		
Potomac	3441.07	111.002	N/A	N/A	N/A		
Rock Creek	91.43	2.949	N/A	N/A	N/A		
Upper Anacostia	36.39	1.174	N/A	N/A	N/A		
Earl Place	0.134	0.004323	N/A	N/A	N/A		
1st Street Tunnel	N/A	N/A	N/A	N/A <sup>3</sup>	N/A <sup>3</sup>		
Dewatering							

- 1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
- 2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
- 3. Pump data indicates activity on two occurrences in the month of March: 115 minutes on 03/15/23 and 246 minutes on 03/27/23. DC Water is in the process of inspecting the defective flow meter. In the interim, the flow will be estimated based on pump run times and pump capacity. \*\*The estimated volume is 0.7942 MG for the month of March 2023.

#### 2.4 Inflatable Dams and SCADA System

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

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

Inflatable Dam		Was Dam Out of Service			
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Schedule to Restore to Service
14 - East	03/15/23	No	N/A	N/A	N/A
14 - West	03/15/23	No	N/A	N/A	N/A
15	03/15/23	No	N/A	N/A	N/A
15A	03/15/23	No	N/A	N/A	N/A
16 – East	03/16/23	No	N/A	N/A	N/A
16 – West	03/16/23	No	N/A	N/A	N/A
34	03/03/23	Yes	03/03/23	Note 1	03/03/23
	03/15/23	No	N/A	N/A	N/A
35	03/15/23	No	N/A	N/A	N/A
52	03/15/32	No	N/A	N/A	N/A

<sup>1.</sup> On 3/3/23 Structure 34 deflated around 8.15pm due to compressor low air pressure alarm. Maintenance was notified and the compressor belt was repaired. The structure was up and returned to service within 2 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

Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow	Inflatable Dam Operational Status
14 (E & W)	None	N/A	Inflated
15	None	N/A	Inflated
15A	None	N/A	Inflated
16 (E & W)	None	N/A	Inflated
34	None	N/A	Inflated
35	None	N/A	Inflated
52	None	N/A	Inflated
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow	
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.	
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.	77/4
Outfall Structure 2	None	N/A	N/A
Outfall Sewer Control Gates	Operational Status	Position	
Outfall Sewer Control Gate No.1	Operational	Open	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible	

### 3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow reported during March 2023.

### 4. SOLIDS AND FLOATABLES CONTROL

## 4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Cleaning

				Inspections	1		Cleaning					
				Total	Total							
				Anacostia	Anacostia	CBs Cleaned Thru		CB's C	leaned	Total CBs Cleaned		
			CBs in	CBs	CBs	Last N	10nth	This I	Month	This Year	r to Date	
		CBs in		Inspected Once this	Inspected Twice this							
Ш1	Total CD.		Anacostia			T-4-1	I. CCC	T-4-1	I., CCC	T-4-1	I. CCC	
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS	
1	1467	1442	655	414	6	19	19	5	5	24	24	
2	2832	2647	486	91	0	23	16	14	11	37	27	
3	3720	183	0	0	0	557	0	1538	0	2095	0	
4	3521	1729	0	0	1	1240	31	387	12	1627	43	
5	4066	1758	1693	15	1	279	8	129	5	408	13	
6	3333	2692	2676	630	0	13	8	4	4	17	12	
7	3879	43	43	4	0	2780	0	16	0	2796	0	
8	2930	213	212	1	0	162	1	2	0	164	1	
Grand Total	25748 <sup>1</sup>	10707 <sup>1</sup>	5765 <sup>1</sup>	1155	8	5073	83	2095	37	7168	120	
% Cleaned/Inspected to Date				20%	0%					28%	1%	

#### 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

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (LB)
Bar Rack CSO 040	03/06/2023	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	03/13/2023	Good	None	Routine Cleaning	(1)

#### Notes:

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

#### 4.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of DC WATER, Department of Sewer Operations. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

Table 4-3
Anacostia River Floating Debris Removal Program – Summary

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	23
Days not Operating	7
Reason not Operating	Maintenance, wind, low water levels.
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	1 Skimmer
Dates	B32: 3/1-3/31
Reason	B32: Starboard propulsion system failure.
Plan to Restore to Service	B32: Waiting for maintenance contract to start. ETR May 2023.
Amount Material Collected	5 tons this month. Calendar year to date 25 tons.
Nature of Material	Bottles, cans, natural debris and plastics.

#### 4.4 CSS Litter Control

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

No Activity this month.

### 5. MONITORING

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

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

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

	D-4-	Cond	lition	Work Order		Work Performed or	
<b>Pumping Station</b>	Date Inspected	Good	Needs Work	Work Order Number	Work Needed	Schedule for Completion	
Bar Racks at O Street Storm Pumps (CSO 010)	3/22/23	X		23-285203			
Bar Racks at Main Storm Pumps (CSO 011)	3/22/23	X		23-285196			

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

5.2

Rain Data

Date Brentwood Pumping Station		Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport	
3/1/2023	0	0	0	0	0	
3/2/2023	0.03	0.03	0.02	0.05	0.05	
3/3/2023	0.20	0.24	0.28	0.22	0.32	
3/4/2023	0	0	0	0	0	
3/5/2023	0	0	0	0	0	
3/6/2023	0	0	0	0	0	
3/7/2023	0	0	0	0	0	
3/8/2023	0	0	0	0	0	
3/9/2023	0	0	0	0	0	
3/10/2023	0.13	0.12	0.18	0.11	0.19	
3/11/2023	0	0	0	0	0	
3/12/2023	0	0	0	0	0.04	
3/13/2023	0	0.01	0.03	0	0.03	
3/14/2023	0	0	0	0	0	
3/15/2023	0	0	0	0	0	
3/16/2023	0	0	0	0	0	
3/17/2023	0	0	0	0	0.02	
3/18/2023	0	0	0.01	0	0	
3/19/2023	0	0	0	0	0	
3/20/2023	0	0	0	0	0	
3/21/2023	0	0	0	0	0	
3/22/2023	0	0	0	0	0	
3/23/2023	0	0	0	0	0	
3/24/2023	0.60	0.60	0.65	0.69	0.72	
3/25/2023	0.15	0.20	0.19	0.20	0.21	
3/26/2023	0.01	0	0	0	0	
3/27/2023	0	0	0.03	0	0	
3/28/2023	0	0	0	0	0	
3/29/2023	0	0	0	0	0	
3/30/2023	0	0	0	0	0	
3/31/2023	0	0	0	0	0	
TOTAL	1.12	1.20	1.39	1.27	1.58	

5.3	Wat	Woothor	Overflows
J.J	wet	weather	Overnows

The wet weather overflow data for this quarter is reported below in the Combined Sewer System Modeled and Metered Quarterly Results table located in Section 5.3 of the March 2023 Report.

# District of Columbia Water and Sewer Authority Combined Sewer System Model Results Period: Q1 Y2023 (January, February, March)

NPDES  Description  Negative Description  Number of Overflows  Number of Overflows  Overflows  Number of Overflows  Overflows  Number of Overflows		SCENARIO: QuarterlyReport_2023Q1, created on 31 March 2023								
Description   Description   Source		00210 11110	- Quartony				Ava	Maximum	Minimum	
No.   Description	NPDES		Data				•		Duration of	
	No.	Description	Source		Volume	Overflow			Overflow	
Decision   Company St and Featurious Station   Separated   Separ				(Occurrences)	l	(hrs)		(hrs)		
	Anacost	tia CSOs								
Own   Second   Seco	005		Modeled	0	0.00	0.00	0.00	0.00	0.00	
Dec   100	006	•				separated				
Description										
100   OSTORet Shwaip-Pumping Station, SE	007		Metered	0	0.00	0.00	0.00	0.00	0.00	
Orange   Description   Descr	009	· · · · · · · · · · · · · · · · · · ·	Metered	0	0.00	0.00	0.00	0.00	0.00	
Discription					0.00			0.00		
South of Main Sewage Pumping Station   Melered	010		Metered	0	0.00	0.00	0.00	0.00	0.00	
1911   Sis (pumped overflow)		1								
South of Main SewageFumping Station, Set (apply) overflow)   Set (apply) overflow)   Set (apply) overflow)   Metered   0	011		Metered	0	0.00	0.00	0.00	0.00	0.00	
10   10   10   10   10   10   10   10		X /		<u> </u>						
North of Main SewagePumping Station,   Series   Series Creak   S	011a		Metered	0	0.00	0.00	0.00	0.00	0.00	
1013   Aft and N Streets, SE   Modeled   0				_						
1013   Alth and N Streets, SE	012		Metered	0	0.00	0.00	0.00	0.00	0.00	
Other   Othe	013		Modeled	0	0.00	0.00	0.00	0.00	0.00	
171   14th and M Streets, SE	014	,		0	0.00	0.00	0.00			
18		,			consolida	ited to tunnel s	ystem			
Samey Circle and Pennsylvania Ave. SE		,	consolidated to tunnel system							
	017	14th and M Streets, SE			consolida	ited to tunnel s	ystem			
	018	Barney Circle andPennsylvania Ave. SE			consolida	ited to tunnel s	ystem			
D15A   Northeast Boundary - Tunnel OF   Metered   0		•	Motorod	n			,	0.00	0.00	
SUBTOTAL										
Potomac CSOB	0197		MOTOLOGE			0.00	0.00	0.00	0.00	
	Potoma				0.00					
23rd Street, North ofConstitution Ave, Nodeled			Metered	0	0.00	0.00	0.00	0.00	0.00	
Dec   Dec		23rd Street, North of Constitution Ave,								
D21   Northeast of Roosevelt Bridge, NW   Modeled   4   11.84   4.00   1.00   1.75   0.25		NW (Easby Point)								
0.24   30th and K Streets, NW   Modeled   11   0.31   79.00   7.18   25.75   0.50		Northeast ofRoosevelt Bridge, NW								
025   31st & K SI NW		·		<u>'</u>						
Company   Comp		,								
027   Water Street West of Street, NW   Modeled   11   1.28   80.25   7.30   25.75   0.25										
D28   36th and M Streets, NW		,								
Canal Road 1000 feet east of Rock   Modeled   6   0.91   30.50   5.08   13.50   0.50		,								
Creek,NW										
SUBTOTAL	029		Modeled	6	0.91	30.50	5.08	13.50	0.50	
					16.48					
Creek, NW	Rock Cr									
Creek, NW	021	Pennsylvania Avenue, East Rock				separated				
Notified Received Programs   Notified Received Programs		· · · · · · · · · · · · · · · · · · ·				separateu				
Street NW	032	·	Modeled	0	0.00	0.00	0.00	0.00	0.00	
Street,NW	033		Modeled	0	0.00	0.00	0.00	0.00	0.00	
035   22nd Street south of Q Street, NW   Modeled   0   0.00		· · · · · · · · · · · · · · · · · · ·								
Northwest of Belmontand Rock Creek and Potomac Parkway   Northwest of Belmontand Rock Creek and Potomac Parkway   North of Belmont Road, east of Kalorama   Circle, NW   North of Belmont Road, east of Kalorama   Circle, NW   North of Belmont Road, east of Kalorama   Circle, NW   North of Belmont Road, east of Kalorama   Circle, NW   NW   NW   NW   NW   NW   NW   NW		,								
Northwest of Belmontand Rock Creek and Potomac Parkway   North of Belmont Road,east of Kalorama Circle, NW   North of Rock Creek, NW   North of Rock Creek Parkway   North of Park Road South of Irving Street, NW   North of Rock Creek Parkway   North of Park Road south of Piney Branch Parkway   North of Park Road south of Piney Branch Parkway   North P										
North of Belmont Road, east of Kalorama   Rock Oreek   Rock Creek			ivioueled	1 4	U.UZ	ŏ. <b>∠</b> 5	2.00	J 5.UU	U. <b>∠</b> 5	
North of Belmont Road,east of Kalorama Circle, NW   Connecticut Avenue east of Rock Creek, Nodeled   O   O.00	037					separated				
Circle, NW										
Connecticut Avenue east of Rock Creek, NW   Modeled   O   O.00   O.00	038	-	Modeled	0	0.00	0.00	0.00	0.00	0.00	
NW	000		N4 = -1 - 1 - 1	_	0.00	0.00	0.00	0.00	0.00	
Note   RockCreek, NW	039	· ·	iviodeled	U	0.00	0.00	0.00	0.00	0.00	
Note   Creek   NW	040		Modeled	0	0.00	0.00	0.00	0.00	0.00	
Parkway	040		woueled	U	0.00	0.00	0.00	0.00	0.00	
Parkway	041		Modeled	n	0.00	0.00	0.00	0.00	0.00	
NW	J		MOUDIEU	ļ <u> </u>	0.00	0.00	0.00	0.00	0.00	
NW   O43   Adams Mill Road South of Irving Street, NW   Modeled   O   O.00	042	J	Modeled	0	0.00	0.00	0.00	0.00	0.00	
NW	<u> </u>						<del></del>	<del>-</del>	<del></del>	
Mark   Mark   Modeled	043	•	Modeled	0	0.00	0.00	0.00	0.00	0.00	
NW										
O45	044	,	Modeled	0	0.00	0.00	0.00	0.00	0.00	
NW						<u> </u>	<u> </u>		<u> </u>	
Dark Road south of Piney Branch Parkway, NW   Darkway, NW   Darkway, NW   Darkway, NW   Darkway, NW   Darkway, NW   Darkway   Darkway	045	-	Modeled	0	0.00	0.00	0.00	0.00	0.00	
Parkway, NW	046		Madalad	^	0.00	0.00	0.00	0.00	0.00	
Note	046	Parkway, NW	iviodeled	U	0.00	0.00	0.00	0.00	0.00	
Mt. Pleasant Street extended and Piney   Modeled   0   0.00   0	047	Ingleside Terrace extended and Piney	Modeled	n	0.00	0.00	0.00	0.00	0.00	
Note   Parkway   Modeled   O   O.00   O.00	U-71		MOUDIEU	ļ <u> </u>	0.00	0.00	0.00	0.00	0.00	
O49   Piney Branch and LamontStreet, NW   Modeled   1   0.003   0.25   0.25   0.25   0.25	048		Modeled	0	0.00	0.00	0.00	0.00	0.00	
050         28th Street west of 16th Street, NW         Modeled         0         0.00										
051         Olive Street extended and Rock Creek Parkway, NW         Modeled         0         0.00										
Darkway, NW								U.UU		
052         O Street extended and Rock Creek Parkway, NW         Modeled         0         0.00	051		Modeled	0	0.00	0.00	0.00	0.00	0.00	
Dock Creek, NW   Dock				_		<u> </u>	<u> </u>		<u> </u>	
053         O Street west of Rock Creek Parkway, NW         separated           054         West Side of Rock Creek300 ft. south of Mass. Ave, NW         Modeled         0         0.0	052		Modeled	0	0.00	0.00	0.00	0.00	0.00	
053         NW         Separated           054         West Side of Rock Creek300 ft. south of Mass. Ave, NW         0.00	OEO		, apparated							
054         Mass. Ave, NW         Modeled         0         0.00	053	NW	separated							
Mass. Ave, NW  Normanstone Drive extended west of Rock Creek, NW  28th Street extended west of Rock  Nodeled  O  O  O  O  O  O  O  O  O  O  O  O  O	054	West Side of Rock Creek300 ft. south of	Modeled	0	0.00	0.00	0.00	0.00	0.00	
Rock Creek, NW  28th Street extended west of Rock  Separated	334		MOUCIEU		0.00	0.00	0.00	0.00	0.00	
Rock Creek, NW Separated	056		Modeled	0	0.00	0.00	0.00	0.00	0.00	
I U57 I Separated	<u> </u>			<u> </u>		J. <b>J.</b>				
Cleek, NVV	057					separated				
		OICCK, INVV								

## District of Columbia Water and Sewer Authority Combined Sewer System Model Results Period: Q1 Y2023 (January, February, March)

	r criod: Q1 12020 (duridary, restrainy, march)								
	SCENARIO: QuarterlyReport_2023Q1, created on 31 March 2023								
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)	
บรห	Connecticut Avenue and Rock Creek Parkway, NW				separated				
060	P St and 26 <sup>th</sup> St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
	SUBTOTAL			0.03					
	TOTAL			16.51					

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