

# QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER, 2020

Prepared By:

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



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

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

**Month: July 2020**

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*Monthly Operations Report for Combined Sewer System*  
*Month: July 2020*  
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## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENANCE

### 2.1 Regulators

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

**Table 2-1  
Regulator Structures**

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2 <sup>1</sup>	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 <sup>1</sup>	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	07/31/20	*			
7	W Street and Railroad Ave, SE	005	07/31/20	*			
8 <sup>1</sup>	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE (Diversion Structure)	007	07/31/20	*			
9a	13 <sup>th</sup> Street and Ridge Place, SE (Regulator Structure)	007	07/31/20	*			
9b	11 <sup>th</sup> Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	07/28/20	*			
11	"O" Street Pumping Station	011(a)	07/31/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	07/02/20	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	07/14/20	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	07/14/20	*			
15	South Capitol and E Streets	010	07/14/20	*			
15a	Half and L Streets, SE	010	07/16/20	*			
15b	South Capitol and I Streets	010	07/01/20	*			
15c	South Capitol and I Streets	010	07/01/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	07/14/20	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	07/13/20	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE (Side Overflow Weir)	013	07/31/20	*			
17b	4 <sup>th</sup> and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	07/28/20	*			
18	6 <sup>th</sup> and M Streets, SE (Diversion and Overflow Structure)	014	07/13/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	07/14/20	*			
19	9 <sup>th</sup> and M Streets, SE	015	07/28/20	*			
19a	9 <sup>th</sup> and M Streets, SE	015	07/28/20	*			
19b	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	07/28/20	*			
19c	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	07/28/20	*			
20	12 <sup>th</sup> and M Streets, SE	016	07/28/20	*			
20a	12 <sup>th</sup> and M Streets, SE	016	07/28/20	*			
20b	12 <sup>th</sup> and M Streets, SE (CSO-016 Diversion Chamber)	016	07/28/20	*			
21	14 <sup>th</sup> and M Streets, SE	017	07/28/20	*			
21a	14 <sup>th</sup> and M Streets, SE (CSO-017 Diversion Chamber)	017	07/28/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	07/31/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	07/31/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	07/31/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	07/31/20	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	07/31/20	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	07/13/20	*			
24a	East Capitol St, west of RFK stadium	019	07/13/20	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	07/13/20	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	07/13/20	*			
30	17 <sup>th</sup> and D Streets, NW	020	07/17/20	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	07/17/20	*			
33	10 <sup>th</sup> and F Streets, NW	020	07/17/20	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	07/16/20	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	07/13/20	*			
35	Northeast of Roosevelt Bridge, NW	021	07/16/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	07/16/20	*			
36	27 <sup>th</sup> and I Streets, NW	022	07/13/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
36a	New Hampshire Ave and Eye Street, NW	022	07/13/20	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	07/01/20	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	07/01/20	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	07/01/20	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	07/01/20	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	07/13/20	*			
38	29 <sup>th</sup> and K Streets, NW	024	07/13/20	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	07/13/20	*			
39a	30 <sup>th</sup> and K Streets, NW	024	07/13/20	*			
39b	30 <sup>th</sup> and K Streets, NW	024	07/13/20	*			
41b	31 <sup>st</sup> and K Streets, NW	025	07/13/20	*			
41c	31 <sup>st</sup> and K Streets, NW	025	07/13/20	*			
42	Wisconsin Ave and K Street, NW	026	07/13/20	*			
43	Potomac and Water Streets, NW	027	07/13/20	*			
43a	Potomac and Water Streets, NW	027	07/13/20	*			
44	Water Street, west of Potomac St, NW	027	07/13/20	*			
45	36 <sup>th</sup> and M Streets, NW	028	07/01/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	07/01/20	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	07/01/20	*			
47a	37 <sup>th</sup> and T Streets, NW	029	07/01/20	*			
47b	37 <sup>th</sup> and T Streets, NW	029	07/01/20	*			
47c	38 <sup>th</sup> and W Streets, NW	029	07/01/20	*			
49 <sup>l</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	07/16/20	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	07/16/20	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	07/16/20	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	07/16/20	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	07/16/20	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	07/16/20	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	07/01/20	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	07/01/20	*			
54	23 <sup>rd</sup> and O Streets, NW	034	07/17/20	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	07/17/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	07/17/20	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	07/17/20	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	07/17/20	*			
58 <sup>l</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	07/01/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	07/01/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	07/01/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	07/15/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	07/15/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	07/15/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	07/15/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	07/15/20	*			
66	Adams Mill Road and Lamont Street, NW	045	07/15/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	07/15/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	07/15/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	07/15/20	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	07/15/20	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	07/27/20	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	07/27/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	07/17/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	07/17/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	07/17/20	*			
74 <sup>l</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	07/27/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	07/27/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	07/27/20	*			
78 <sup>l</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>l</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	07/17/20	*			
84a	26 <sup>th</sup> and P Streets, NW	060	07/17/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	07/21/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	07/21/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
89	First and V St, NW (First St Tunnel)	019	07/21/20	*			
90	First and V St, NW (First St Tunnel)	019	07/21/20	*			
91	First and V St, NW (First St Tunnel)	019	07/21/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	07/29/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	07/29/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	07/28/20	*			
96	CSO 007 Shaft at 11 <sup>th</sup> St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	07/28/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	07/28/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	07/31/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	07/14/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	07/14/20	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	07/29/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	07/29/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	07/29/20	*			
104	Poplar Point PS Discharge Chamber	N/A	07/29/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	07/29/20	*			

Notes:

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

## 2.2 Outfalls, Tide Gates and CSO Signs

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

**Table 2-2  
Outfalls and Tide Gates**

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003 <sup>1</sup>	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									

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NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	07/29/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	07/30/20	*		*		*		*		
006 <sup>1</sup>	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	07/30/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	07/02/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	07/02/20	*			*			*		
011	Main Sewage Pumping Station, SE	07/02/20	*			*			*		
011a	Main Sewage Pumping Station, SE	07/02/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	07/02/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	07/02/20	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	07/02/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	07/02/20	*			*			*		
016	12th and O Streets, SE	07/30/20	*		*		*		*		
017	M and Water Street, SE	07/02/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	07/02/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	07/29/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	07/29/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	07/02/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	07/02/20	*		*		*		*		
022	Rock Creek Parkway and G St., NW	07/02/20	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	07/02/20	*		*		*		*		
025	South of 31st and K Streets, NW	07/02/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	07/02/20	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	07/02/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	07/02/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	07/02/20	*			*			*		
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	07/16/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	07/16/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	07/17/20	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
035	P St. Bridge and Rock Creek Parkway	07/17/20		*		*			*		Routine check of tide gate and outfall sign. Plates over the outfall are detached. Replaced the one that is completely off. Adjusted the other to temporarily secure it. Awaiting a repair date from contractors.
036	22nd Street, South of Q Street NW.	07/30/20	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	07/01/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	07/01/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	07/01/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	07/30/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	07/30/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	07/30/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	07/30/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	07/30/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	07/15/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	07/15/20	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	07/15/20	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	07/15/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	07/27/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	07/30/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	07/30/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is still off the hinges and the contractors have the work order to repair. Anticipated repair date September 2020.
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	07/27/20		*	*			*	*		Routine check of tide gate and outfall sign. The outfall gate at this location is off the hinges and needs to be repaired. The contractor has the work order to fix this gate still awaiting the permit from park service. Anticipated repair date Sept 2020.
056	Normanstone Dr. and Rock Creek Parkway, NW.	07/27/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is still not on hinges but inside the gate channel, contractors have been notified and are in the repair planning process. We are awaiting NPS permit. Anticipated repair date September 2020.
057 <sup>1</sup>	28th Street and Rock Creek Parkway, NW	N/A									
058 <sup>1</sup>	Connecticut Ave & Rock Creek Parkway, NW.	N/A									

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
060	North of P St. Bridge & Rock Creek Pkwy, NW	07/30/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is off the hinges still but the contractors have the work order for repair. Anticipated repair date September 2020.

Notes:

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

### 2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	31	3	4	None	-	-	-	-
Eastside	1	2	4	Pump #2	07/07/20 – 07/31/20	Variable Frequency Drive (VFD) fault, pump not running.	20-520207	Anticipated 9/30/20. The pump and motor have been disconnected for investigation and repair.
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	Pump #5	07/01/20 – 07/31/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 9/30/20. The pump and motor have been disconnected for repair and the parts have been ordered.

Notes:

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed</i> <sup>1,2</sup>	<i>Work Order Number</i>	<i>Comments</i>
Main	7/20/20	Group A	20-448002	Add oil, grease bearings and replace packing if needed.
O St	7/8/20	Group A	20-496473	Add oil, grease bearings and replace packing if needed.
Eastside	7/5/20	Group A	20-465927	Add oil, grease bearings and replace packing if needed.
Poplar Point	7/18/20	Group A	20-450902	Add oil, grease bearings and replace packing if needed.
Potomac	7/27/20	Group A	20-468053	Add oil, grease bearings and replace packing if needed.
Rock Creek	7/5/20	Group A	20-450916	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	7/18/20	Group A	20-451064	Add oil, grease bearings and replace packing if needed.
Earl Place	7/5/20	Group A	20-425195	Add oil, grease bearings and replace packing if needed.
1 <sup>st</sup> Street Tunnel Dewatering	7/31/20	Group B	20-587904	

Notes:

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

**Table 2-5  
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)<sup>1</sup></i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main <sup>1,2</sup>	1304.00	42.06	N/A	N/A	N/A
O St <sup>1,2</sup>	145.34	4.69	N/A	N/A	N/A
Eastside	116.39	3.75	N/A	N/A	N/A
Poplar Point	321.13	10.36	N/A	N/A	N/A
Potomac	3868.76	124.80	N/A	N/A	N/A
Rock Creek	117.11	3.78	N/A	N/A	N/A
Upper Anacostia	42.69	1.38	N/A	N/A	N/A
Earl Place	0.154	0.005	N/A	N/A	N/A
1 <sup>st</sup> Street Tunnel Dewatering <sup>3</sup>	N/A	N/A	N/A	7/6/20 7/7/20 7/20/20 7/22/20 7/30/20	0.23 1.22 0.06 0.99 0.05

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
3. The flow meter for the pumping station was found to be defective and did not record discharges. DC Water has ordered and received a replacement flow meter; however, the meter will not be installed until the current contractor at the 1<sup>st</sup> Street Tunnel pumping station demobilizes. The installation of the flow meter is not possible at this time due to space limitations. In the interim, the flow will be estimated based on pump run times and pump capacity. Pump data indicate activity on five occurrences in the month of July: 106 minutes on 7/6/2020, 556 minutes on 7/7/20, 30 minutes on 7/20/20, 319 minutes on 7/22/20, and 23 minutes on 7/30/20. \*\*The estimated volume is 2.55 MG for the month of July 2020.

## 2.4 Inflatable Dams and SCADA System

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

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

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
14 - West	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
15	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
15A	7/16/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
16 - East	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
16 - West	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
34	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
35	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
52	7/14/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

Notes:

**Table 2-7**

**Inflatable Dams & SCADA Sites - Wet Weather Operations**

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W) <sup>1</sup>	<i>7/20/20</i>	<i>1 hr. 23 mins</i>
34	<i>None</i>	<i>N/A</i>
35	<i>7/6/20</i>	<i>0 hrs. 25 mins</i>
	<i>7/21/20</i>	<i>0 hrs. 30 mins</i>
	<i>7/22/20</i>	<i>0 hrs. 38 mins</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	<i>None</i>	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	<i>None</i>	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	<i>None</i>	<i>N/A</i>
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No.1	<i>Operational</i>	<i>Open</i>
Outfall Sewer Control Gate No.2	<i>Operational</i>	This structure has been bulk headed. Overflows are no longer possible
Outfall Sewer Control Gate No.2	<i>Operational</i>	This structure has been bulk headed. Overflows are no longer possible

Notes:

1. On 7/20/20, Structure 16 had corrective maintenance performed to install an air compressor. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.



### **3. DRY WEATHER OVERFLOWS**

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

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

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

**Table 4-1  
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	652	652	652	1218	1200	126	126	1344	1326
2	2792	2642	476	476	44	704	370	1706	1706	2410	2076
3	3687	187	0	0	0	2256	5	176	176	2432	181
4	3495	1723	0	0	0	3002	1495	10	10	3012	1505
5	4007	1769	1692	1692	4	126	55	31	31	157	86
6	3316	2666	2647	2647	6	128	42	9	9	137	51
7	3785	43	41	41	0	1550	0	0	0	1550	0
8	2832	212	209	209	197	1915	5	0	0	1915	5
<b>Grand Total</b>	<b>25363<sup>1</sup></b>	<b>10668<sup>1</sup></b>	<b>5717<sup>1</sup></b>	<b>5717<sup>2</sup></b>	<b>903<sup>2</sup></b>	<b>10899<sup>2</sup></b>	<b>3172<sup>2</sup></b>	<b>2058<sup>2</sup></b>	<b>2058<sup>2</sup></b>	<b>12957<sup>2</sup></b>	<b>5230<sup>2</sup></b>
% Cleaned/Inspected to Date				<b>100%</b>	<b>16%</b>					<b>51%</b>	<b>49%</b>

Notes:

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

#### 4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

**Table 4-2**  
**BMP Demonstration Projects – Report**

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Bar Rack CSO 040	07/01/2020	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	07/30/2020	Good	None	Routine Cleaning	(1)

Notes:

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

**4.3 Anacostia River Floating Debris Removal Program**

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

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	22
<i>Days not Operating</i>	10
<i>Reason not Operating</i>	Maintenance, wind, low water levels.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer
<i>Dates</i>	B32: 7/1 - 7/30.
<i>Reason</i>	B32: Number one screen not working.
<i>Plan to Restore to Service</i>	B32: returned to operations on 7/31.
<i>Amount Material Collected</i>	20 tons this month. Calendar year to date 100 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

**4.4 CSS Litter Control**

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

No Activity this month.

## 5. MONITORING

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

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

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

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	7/31/20	X		20-530284		
Bar Racks at Main Storm Pumps (CSO 011)	KW	7/31/20	X		20-530277		

## **5.2 Rain Data**

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
7/1/2020	0	0	0	0	0.12
7/2/2020	0	0	0	0	0
7/3/2020	0	0	0	0	0
7/4/2020	0	0	0	0	0
7/5/2020	0	0	0	0.09	0
7/6/2020	0.79	0.43	0.30	0.22	0.43
7/7/2020	0.93	1.62	2.10	2.87	2.04
7/8/2020	0	0	0	0	0
7/9/2020	0	0	0	0	0
7/10/2020	0	0	0	0	0
7/11/2020	0	0	0	0	0
7/12/2020	0	0	0	0	0.01
7/13/2020	0.04	0.01	0.12	0.18	0.14
7/14/2020	0	0	0	0	0
7/15/2020	0	0	0	0	0
7/16/2020	0	0	0	0	0
7/17/2020	0	0	0	0	0
7/18/2020	0	0	0	0	0
7/19/2020	0	0	0	0	0
7/20/2020	0	0	0	0	0.15
7/21/2020	0.16	0.09	0.34	0.30	0.52
7/22/2020	0.77	1.11	0.58	0.02	0.56
7/23/2020	0.57	0.69	1.47	0	1.89
7/24/2020	0.27	0.27	0.35	0	0.43
7/25/2020	0	0	0	0	0
7/26/2020	0	0	0	0	0
7/27/2020	0	0	0	0	0
7/28/2020	0	0	0	0	0
7/29/2020	0	0	0	0	0
7/30/2020	0.14	0.07	0.18	0.44	0.15
7/31/2020	0.11	0.15	0.08	0.15	0.07
TOTAL	3.53	4.22	5.26	3.68	6.29

### **5.3 Wet Weather Overflows**

Combined Sewer System Model Results are summarized below.



District of Columbia Water and Sewer Authority

Combined Sewer System Model Results  
 Period: July, August, September 2020

SCENARIO: QuarterlyReport\_2020Q3 , created on October 8, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
<b>Anacostia CSOs</b>								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave., SE	separated						
007	13 <sup>th</sup> Street and Ridge Place, SE	Modeled*	2	0.19	1.00	0.50	0.75	0.25
009	2nd Street, 300 feet North of N Place, SE	Metered	4	0.31	2.83	0.71	1.00	0.50
010	O Street Sewage Pumping Station, SE (pumped Overflow)	Modeled*	2	19.79	3.00	1.50	1.50	1.50
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Modeled	2	6.46	1.25	0.63	0.75	0.50
013	4th and N Streets, SE	Modeled	2	0.86	1.75	0.88	1.00	0.75
014	6th and M Streets, SE	Modeled	3	2.43	2.25	0.75	1.25	0.25
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Modeled*	4	160.56	4.00	1.00	1.75	0.25
019A	Northeast Boundary - Tunnel OF	Metered	2	94.78	6.50	3.25	4.00	2.50
	<b>SUBTOTAL</b>			<b>285.38</b>				
<b>Potomac CSOs</b>								
003A	JBAB Tunnel OF	Metered	3	67.48	7.58	2.53	4.17	0.42
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	14	94.00	35.75	2.55	9.50	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	14	303.01	38.25	2.73	8.50	0.25
022	27th and K Streets, NW	Modeled	21	111.34	45.75	2.18	10.00	0.25
024	30th and K Streets, NW	Modeled	15	40.65	58.25	3.88	16.00	0.25
025	31st & K St NW	Modeled	11	0.75	6.75	0.61	1.50	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	Modeled	17	21.99	46.75	2.75	9.50	0.25
028	36th and M Streets, NW	Modeled	28	6.89	113.25	4.04	15.50	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	Modeled	20	32.32	48.25	2.41	9.25	0.25
	<b>SUBTOTAL</b>			<b>678.43</b>				
<b>Rock Creek</b>								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extended west of 25th Street, NW	Modeled	3	2.45	4.00	1.33	1.50	1.25
034	23rd and O Streets, SW	Modeled	2	3.80	1.25	0.63	0.75	0.50
035	22nd Street south of O Street, NW	Modeled	2	12.91	1.75	0.88	1.00	0.75
036	22nd Street South of O Street, NW	Modeled	13	2.406	34.50	2.65	8.25	0.75
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road, east of Kalorama Circle, NW	Modeled	1	0.0001	0.25	0.25	0.25	0.25
039	Connecticut Avenue east of Rock Creek, NW	Modeled	2	0.59	1.25	0.63	0.75	0.50
040	Biltmore Street extended east of Rock Creek, NW	Modeled	2	0.76	1.50	0.75	0.75	0.75
041	Ontario extended and Rock Creek Parkway	Modeled	1	0.09	0.50	0.50	0.50	0.50
042	Harvard Street and Rock Creek Parkway, NW	Modeled	3	1.05	2.00	0.67	1.00	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	6	4.73	5.25	0.88	1.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	4	0.61	2.75	0.69	1.00	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	7	0.48	5.00	0.71	1.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	5	0.20	4.25	0.85	1.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	5	0.58	4.25	0.85	1.25	0.25
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	5	1.27	4.25	0.85	1.25	0.25
049	Piney Branch and Lamont Street, NW	Modeled	9	129.42	12.50	1.39	3.00	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	1	0.41	0.50	0.50	0.50	0.50
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 <sup>th</sup> St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	<b>SUBTOTAL</b>			<b>161.77</b>				
	<b>TOTAL</b>			<b>1,125.58</b>				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results  
Period: July, August, September 2020

SCENARIO: QuarterlyReport\_2020Q3 , created on October 8, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
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\* Overflow flow meter out of service; model output has been used for report

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



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

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

**Month: August 2020**

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

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

*Monthly Operations Report for Combined Sewer System*  
*Month: August 2020*  
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## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENANCE

### 2.1 Regulators

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

**Table 2-1  
Regulator Structures**

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2 <sup>1</sup>	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 <sup>1</sup>	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	08/05/20	*			
7	W Street and Railroad Ave, SE	005	08/05/20	*			
8 <sup>1</sup>	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE (Diversion Structure)	007	08/05/20	*			
9a	13 <sup>th</sup> Street and Ridge Place, SE (Regulator Structure)	007	08/05/20	*			
9b	11 <sup>th</sup> Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	08/14/20	*			
11	"O" Street Pumping Station	011(a)	08/21/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	08/20/20	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	08/19/20	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	08/19/20	*			
15	South Capitol and E Streets	010	08/19/20	*			
15a	Half and L Streets, SE	010	08/25/20	*			
15b	South Capitol and I Streets	010	08/12/20	*			
15c	South Capitol and I Streets	010	08/12/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	08/19/20	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	08/10/20	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE (Side Overflow Weir)	013	08/13/20	*			
17b	4 <sup>th</sup> and N Streets, SE, Both Extended (CSO-013 Diversion Chamber)	013	08/21/20	*			
18	6 <sup>th</sup> and M Streets, SE (Diversion and Overflow Structure)	014	08/07/20	*			
18a	Tingey Street SE and 5 1 / 2 Street SE (CSO-014 Diversion Chamber)	014	08/10/20	*			
19	9 <sup>th</sup> and M Streets, SE	015	08/10/20	*			
19a	9 <sup>th</sup> and M Streets, SE	015	08/10/20	*			
19b	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	08/10/20	*			
19c	9 <sup>th</sup> and M Streets, SE (Diversion Chamber)	015	08/10/20	*			
20	12 <sup>th</sup> and M Streets, SE	016	08/10/20	*			
20a	12 <sup>th</sup> and M Streets, SE	016	08/10/20	*			
20b	12 <sup>th</sup> and M Streets, SE (CSO-016 Diversion Chamber)	016	08/10/20	*			
21	14 <sup>th</sup> and M Streets, SE	017	08/10/20	*			
21a	14 <sup>th</sup> and M Streets, SE (CSO-017 Diversion Chamber)	017	08/10/20	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	08/10/20	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	08/10/20	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	08/10/20	*			
22d	Kentucky Ave and Potomac Street, SE	018	08/10/20	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	08/10/20	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	08/10/20	*			
24a	East Capitol St, west of RFK stadium	019	08/10/20	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	08/07/20	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	08/07/20	*			
30	17 <sup>th</sup> and D Streets, NW	020	08/07/20	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	08/07/20	*			
33	10 <sup>th</sup> and F Streets, NW	020	08/07/20	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	08/25/20	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	08/07/20	*			
35	Northeast of Roosevelt Bridge, NW	021	08/25/20	*			
35c	Kennedy Center Rock Creek and Potomac Pkwy Northeast of Roosevelt Bridge, NW	021	08/24/20	*			
36	27 <sup>th</sup> and I Streets, NW	022	08/07/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
36a	New Hampshire Ave and Eye Street, NW	022	08/07/20	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	08/11/20	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	08/11/20	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	08/11/20	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	08/11/20	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	08/07/20	*			
38	29 <sup>th</sup> and K Streets, NW	024	08/05/20	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	08/05/20	*			
39a	30 <sup>th</sup> and K Streets, NW	024	08/05/20	*			
39b	30 <sup>th</sup> and K Streets, NW	024	08/05/20	*			
41b	31 <sup>st</sup> and K Streets, NW	025	08/05/20	*			
41c	31 <sup>st</sup> and K Streets, NW	025	08/05/20	*			
42	Wisconsin Ave and K Street, NW	026	08/05/20	*			
43	Potomac and Water Streets, NW	027	08/05/20	*			
43a	Potomac and Water Streets, NW	027	08/05/20	*			
44	Water Street, west of Potomac St, NW	027	08/05/20	*			
45	36 <sup>th</sup> and M Streets, NW	028	08/03/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	08/03/20	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	08/03/20	*			
47a	37 <sup>th</sup> and T Streets, NW	029	08/03/20	*			
47b	37 <sup>th</sup> and T Streets, NW	029	08/03/20	*			
47c	38 <sup>th</sup> and W Streets, NW	029	08/03/20	*			
49 <sup>l</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	08/18/20	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	08/18/20	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	08/25/20	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	08/24/20	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	08/13/20	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	08/13/20	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	08/13/20	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	08/13/20	*			
54	23 <sup>rd</sup> and O Streets, NW	034	08/11/20	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	08/11/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	08/11/20	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	08/11/20	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	08/11/20	*			
58 <sup>l</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	08/03/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	08/03/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	08/03/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	08/12/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	08/12/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	08/12/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	08/12/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	08/12/20	*			
66	Adams Mill Road and Lamont Street, NW	045	08/12/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	08/12/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	08/12/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	08/12/20	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	08/12/20	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	08/05/20	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	08/03/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	08/11/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	08/11/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	08/11/20	*			
74 <sup>l</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	08/18/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	08/18/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	08/18/20	*			
78 <sup>l</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>l</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	08/11/20	*			
84a	26 <sup>th</sup> and P Streets, NW	060	08/11/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	08/19/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	08/19/20	*			



Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
89	First and V St, NW (First St Tunnel)	019	08/19/20	*			
90	First and V St, NW (First St Tunnel)	019	08/19/20	*			
91	First and V St, NW (First St Tunnel)	019	08/19/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	08/14/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	08/14/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	08/10/20	*			
96	CSO 007 Shaft at 11 <sup>th</sup> St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	08/14/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	08/14/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	08/24/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	08/19/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	08/19/20	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	08/17/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	08/17/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	08/17/20	*			
104	Poplar Point PS Discharge Chamber	N/A	08/17/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	08/17/20	*			

Notes:

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

## 2.2 Outfalls, Tide Gates and CSO Signs

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

**Table 2-2  
Outfalls and Tide Gates**

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003 <sup>1</sup>	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									

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NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	08/17/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	08/21/20	*		*		*		*		
006 <sup>1</sup>	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	08/21/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	08/20/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	08/20/20	*			*			*		
011	Main Sewage Pumping Station, SE	08/20/20	*			*			*		
011a	Main Sewage Pumping Station, SE	08/20/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	08/20/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	08/20/20	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	08/20/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	08/20/20	*			*			*		
016	12th and O Streets, SE	08/13/20	*		*		*		*		
017	M and Water Street, SE	08/13/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	08/13/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	08/14/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	08/14/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	08/06/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	08/06/20	*		*		*		*		
022	Rock Creek Parkway and G St., NW	08/06/20	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	08/06/20	*		*		*		*		
025	South of 31st and K Streets, NW	08/06/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	08/06/20	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	08/06/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	08/06/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	08/06/20	*			*			*		
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	08/18/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	08/18/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	08/11/20	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
035	P St. Bridge and Rock Creek Parkway	08/11/20	*			*			*		Outfall is functioning as normal. Contractor replaced plate and replaced broken bolts.
036	22nd Street, South of Q Street NW.	08/21/20	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	08/03/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	08/03/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	08/03/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	08/06/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	08/06/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	08/06/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	08/06/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	08/06/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	08/12/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	08/12/20	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	08/12/20	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	08/12/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	08/03/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	08/21/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	08/21/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is still off the hinges and contractors have the work order for repair. Will update once repairs are done. Expected date September 2020.
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	08/18/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is still off the hinges and in the hands of the contractors, repair work has been planned but no completion date. Expected date September 2020.
056	Normanstone Dr. and Rock Creek Parkway, NW.	08/18/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate is still off the hinges and in the hands of the contractors, repair work has been planned but no completion date. Expected date September 2020.
057 <sup>1</sup>	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	08/21/20		*	*			*	*		Routine check of tide gate and outfall sign. Tide gate still off the hinges and in the water, contractors have the work order to repair this tide gate but no date on when that will be. We will update as soon as repair work is done. Expected date September 2020.

Notes:

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

### 2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	31	3	4	None	-	-	-	-
Eastside	1	2	4	Pump #2	08/01/20 – 08/30/20	Variable Frequency Drive (VFD) fault, pump not running.	20-520207	Returned to service on 8/31/20. VFD was repaired.
Poplar Point	1	2	4	None	-	-	-	-
Potomac	31	4	5	Pump #5	08/01/20 – 08/31/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 10/31/20. The pump and motor have been disconnected for repair and the parts have been received.

Notes:

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed</i> <sup>1,2</sup>	<i>Work Order Number</i>	<i>Comments</i>
Main	8/14/20	Group A	20-523499	Add oil, grease bearings and replace packing if needed.
O St	8/10/20	Group A	20-567836	Add oil, grease bearings and replace packing if needed.
Eastside	8/29/20	Group A	20-530301	Add oil, grease bearings and replace packing if needed.
Poplar Point	8/29/20	Group A	20-524709	Add oil, grease bearings and replace packing if needed.
Potomac	8/27/20	Group A	20-532946	Add oil, grease bearings and replace packing if needed.
Rock Creek	8/30/20	Group A	20-517476	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	8/29/20	Group A	20-524723	Add oil, grease bearings and replace packing if needed.
Earl Place	8/01/20	Group A	20-503301	Add oil, grease bearings and replace packing if needed.
1 <sup>st</sup> Street Tunnel Dewatering	8/31/20	Group B	20-643941	

Notes:

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

**Table 2-5  
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Screenings Collected (tons)<sup>1</sup></i>	<i>Pumpage of CSO from First Street Tunnel back to Sewer System</i>	
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>		<i>Date</i>	<i>Volume (mg)</i>
Main <sup>1,2</sup>	1862.09	60.07	N/A	N/A	N/A
O St <sup>1,2</sup>	173.16	5.59	N/A	N/A	N/A
Eastside	133.00	4.29	N/A	N/A	N/A
Poplar Point	409.24	13.20	N/A	N/A	N/A
Potomac	4283.17	138.17	N/A	N/A	N/A
Rock Creek	147.03	4.74	N/A	N/A	N/A
Upper Anacostia	49.72	1.60	N/A	N/A	N/A
Earl Place	2.61	0.084	N/A	N/A	N/A
1 <sup>st</sup> Street Tunnel Dewatering <sup>3</sup>	N/A	N/A	N/A	8/3/20 8/4/20 8/14/20 8/16/20 8/17/20 8/26/20 8/31/20	0.02 0.56 0.16 0.07 0.12 0.07 0.02

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
3. The flow meter for the pumping station was found to be defective and did not record discharges. DC Water has ordered and received a replacement flow meter; however, the meter will not be installed until the current contractor at the 1<sup>st</sup> Street Tunnel pumping station demobilizes. The installation of the flow meter is not possible at this time due to space limitations. In the interim, the flow will be estimated based on pump run times and pump capacity. Pump data indicate activity on seven occurrences in the month of August: 12 minutes on 8/3/2020, 257 minutes on 8/4/20, 7 minutes on 8/14/20, 32 minutes on 8/16/20, 55 minutes on 8/17/20, 33 minutes on 8/26/20 and 2 minutes on 8/31/20. \*\*The estimated volume is 1.02 MG for the month of August 2020.

## 2.4 Inflatable Dams and SCADA System

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

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

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	8/19/20	<b>Yes</b>	<b>8/9/20 – 8/10/20</b>	<b>See Note 1</b>	<b>8/10/20</b>
14 - West	8/19/20	<b>Yes</b>	<b>8/9/20 – 8/10/20</b>	<b>See Note 1</b>	<b>8/10/20</b>
15	8/19/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
15A	8/25/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
16 - East	8/19/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
16 - West	8/19/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
34	8/25/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
35	8/25/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
52	8/25/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

Notes:

1. Structure 14 was out of service from August 9-10, 2020. The dam deflated due to blower belt failure. Please reference letter dated August 14, 2020 to USEPA Region III. The belt was repaired, and the dam was returned to service on 8/10/2020.”

**Table 2-7**

**Inflatable Dams & SCADA Sites - Wet Weather Operations**

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W) <sup>1,2,5</sup>	8/4/20	0 hrs. 5 mins
	8/8/20	3 hrs. 31 mins
	8/9/20	2 hrs. 52 mins
	8/10/20	1 hr. 41 mins
	8/31/20	4 hrs. 53 mins
15	None	N/A
15A	8/4/20	0 hrs. 35 mins
16 (E & W) <sup>3,4</sup>	8/4/20	2 hrs. 58 mins
	8/21/20	0 hrs. 18 mins
	8/24/20	4 hrs. 58 mins
34	8/9/20	0 hrs. 3 mins
35	8/3/20	0 hrs. 5 mins
	8/4/20	0 hrs. 11 mins
	8/28/20	0 hrs. 12 mins
52	8/9/20	0 hrs. 3 mins
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	N/A
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No.1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible

Notes:

1. On 8/8/20, Structure 14 (E & W) deflated due to a blower related issue. The blower was repaired the same day and the structure was returned to service in less than 24 hours. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
2. On 8/9/2020, Structure 14 (E & W) deflated due to a faulty blower belt which resulted in deflation. There was a period of rain causing overflow for approximately 3 hours. Please reference letter dated August 14, 2020 to USEPA Region III. The belt was repaired, and the dam was returned to service on 8/10/2020.
3. On 8/21/20, Structure 16 (E & W) partially deflated due to an incorrect high level reading from the level sensor. Instrumentation technicians investigated and found moisture on the sensor. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.
4. On 8/24/20, Structure 16 (E & W) had corrective maintenance performed to remove moisture on the level sensor. This was not an overflow to the river as the upstream levels were significantly lower than the low-level
5. On 8/31/2020, Structure 14 (E & W) deflated due to a faulty blower belt which resulted in a deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The blower belt was repaired the same day and the structure was returned to service in less than 24 hours.



### **3. DRY WEATHER OVERFLOWS**

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

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

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

**Table 4-1  
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	652	652	652	1344	1326	14	0	1358	1326
2	2792	2642	476	476	44	2410	2076	0	0	2410	2076
3	3687	187	0	0	0	2432	181	137	0	2569	181
4	3495	1723	0	0	0	3012	1505	319	0	3331	1505
5	4007	1769	1692	1692	4	157	86	2132	0	2289	86
6	3316	2666	2647	2647	6	137	51	7	0	144	51
7	3785	43	41	41	0	1550	0	101	0	1651	0
8	2832	212	209	209	197	1915	5	0	0	1915	5
<b>Grand Total</b>	<b>25363<sup>1</sup></b>	<b>10668<sup>1</sup></b>	<b>5717<sup>1</sup></b>	<b>5717<sup>2</sup></b>	<b>903<sup>2</sup></b>	<b>12957<sup>2</sup></b>	<b>5230<sup>2</sup></b>	<b>2710<sup>2</sup></b>	<b>0<sup>2</sup></b>	<b>15667<sup>2</sup></b>	<b>5230<sup>2</sup></b>
% Cleaned/Inspected to Date				<b>100%</b>	<b>16%</b>					<b>62%</b>	<b>49%</b>

Notes:

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

#### 4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

**Table 4-2**  
**BMP Demonstration Projects – Report**

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Bar Rack CSO 040	08/03/2020	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	08/06/2020	Good	None	Routine Cleaning	(1)

Notes:

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

#### 4.3 Anacostia River Floating Debris Removal Program

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

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	21
<i>Days not Operating</i>	14
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightening.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	3 Skimmers
<i>Dates</i>	B32: 8/11 - 8/31, B33: 8/11 - 8/31, B34: 8/13 - 8/31.
<i>Reason</i>	B32 fuel tank leaking. B33 port wing screen off track. B34 starboard wing screen bent.
<i>Plan to Restore to Service</i>	B32, B33, B34: Waiting for parts ETR September 2020.
<i>Amount Material Collected</i>	35 tons this month. Calendar year to date 135 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

#### 4.4 CSS Litter Control

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

No Activity this month.

## 5. MONITORING

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

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

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

Inspector: Keith Watts

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	KW	8/30/20	X		20-602994		
Bar Racks at Main Storm Pumps (CSO 011)	KW	8/30/20	X		20-602987		

## **5.2 Rain Data**

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
8/1/2020	0.11	0.15	0.08	0.15	0
8/2/2020	0.09	0	0.13	0	0.07
8/3/2020	0.61	0.44	0.87	0.56	0.46
8/4/2020	2.99	2.53	3.53	2.32	2.48
8/5/2020	0	0	0	0	0
8/6/2020	0.24	0.15	0.52	0.20	0.62
8/7/2020	0.02	0	0.26	0	0.30
8/8/2020	0	0	0	0	0
8/9/2020	0.65	0.85	0.34	0.75	0
8/10/2020	0	0	0	0.03	0
8/11/2020	0	0	0	0	0
8/12/2020	0.25	0.35	0.26	0.27	0.26
8/13/2020	0.46	0.45	0.53	0.88	0.59
8/14/2020	0	0	0.16	0	0.06
8/15/2020	0.01	0.02	0.01	0.01	0.21
8/16/2020	1.15	0.96	1.38	1.17	1.03
8/17/2020	1.03	4.77	0.12	0.13	0.14
8/18/2020	0	0	0	0	0
8/19/2020	0.31	0.20	0.11	0.22	0.09
8/20/2020	0	0	0	0	0
8/21/2020	0	0	0	0	0
8/22/2020	0	0	0	0	0
8/23/2020	0	0	0	0	0
8/24/2020	0.58	0.41	0.03	0.53	0.05
8/25/2020	0.08	0	0.05	0.02	0.01
8/26/2020	0.56	0.55	0	0	0
8/27/2020	0	0	0	0	0
8/28/2020	0.95	0.84	1.47	1.13	1.46
8/29/2020	0.54	0.48	0.57	0.54	0.50
8/30/2020	0	0	0	0	0
8/31/2020	0.32	0.32	0.37	0.43	0.40
TOTAL	10.95	13.47	10.79	9.34	8.73

### **5.3 Wet Weather Overflows**

Combined Sewer System Model Results are summarized below.



District of Columbia Water and Sewer Authority

Combined Sewer System Model Results  
 Period: July, August, September 2020

SCENARIO: QuarterlyReport\_2020Q3 , created on October 8, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)	
<b>Anacostia CSOs</b>									
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00	
006	Good Hope Road, West of Nichols Ave., SE	separated							
007	13 <sup>th</sup> Street and Ridge Place, SE	Modeled*	2	0.19	1.00	0.50	0.75	0.25	
009	2nd Street, 300 feet North of N Place, SE	Metered	4	0.31	2.83	0.71	1.00	0.50	
010	O Street Sewage Pumping Station, SE (pumped Overflow)	Modeled*	2	19.79	3.00	1.50	1.50	1.50	
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00	
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Modeled*	0	0.00	0.00	0.00	0.00	0.00	
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Modeled	2	6.46	1.25	0.63	0.75	0.50	
013	4th and N Streets, SE	Modeled	2	0.86	1.75	0.88	1.00	0.75	
014	6th and M Streets, SE	Modeled	3	2.43	2.25	0.75	1.25	0.25	
015	9th and M Streets, SE	consolidated to tunnel system							
016	12th and M Streets, SE	consolidated to tunnel system							
017	14th and M Streets, SE	consolidated to tunnel system							
018	Barney Circle and Pennsylvania Ave, SE	consolidated to tunnel system							
019	Northeast Boundary	Modeled*	4	160.56	4.00	1.00	1.75	0.25	
019A	Northeast Boundary - Tunnel OF	Metered	2	94.78	6.50	3.25	4.00	2.50	
	<b>SUBTOTAL</b>			<b>285.38</b>					
<b>Potomac CSOs</b>									
003A	JBAB Tunnel OF	Metered	3	67.48	7.58	2.53	4.17	0.42	
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	14	94.00	35.75	2.55	9.50	0.25	
021	Northeast of Roosevelt Bridge, NW	Modeled	14	303.01	38.25	2.73	8.50	0.25	
022	27th and K Streets, NW	Modeled	21	111.34	45.75	2.18	10.00	0.25	
024	30th and K Streets, NW	Modeled	15	40.65	58.25	3.88	16.00	0.25	
025	31st & K St NW	Modeled	11	0.75	6.75	0.61	1.50	0.25	
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
027	Water Street West of Street, NW	Modeled	17	21.99	46.75	2.75	9.50	0.25	
028	36th and M Streets, NW	Modeled	28	6.89	113.25	4.04	15.50	0.25	
029	Canal Road 1000 feet east of Rock Creek, NW	Modeled	20	32.32	48.25	2.41	9.25	0.25	
	<b>SUBTOTAL</b>			<b>678.43</b>					
<b>Rock Creek</b>									
031	Pennsylvania Avenue, East Rock Creek, NW	separated							
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
033	N Street extended west of 25th Street, NW	Modeled	3	2.45	4.00	1.33	1.50	1.25	
034	23rd and O Streets, SW	Modeled	2	3.80	1.25	0.63	0.75	0.50	
035	22nd Street south of O Street, NW	Modeled	2	12.91	1.75	0.88	1.00	0.75	
036	22nd Street South of O Street, NW	Modeled	13	2.406	34.50	2.65	8.25	0.75	
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated							
038	North of Belmont Road, east of Kalorama Circle, NW	Modeled	1	0.0001	0.25	0.25	0.25	0.25	
039	Connecticut Avenue east of Rock Creek, NW	Modeled	2	0.59	1.25	0.63	0.75	0.50	
040	Biltmore Street extended east of Rock Creek, NW	Modeled	2	0.76	1.50	0.75	0.75	0.75	
041	Ontario extended and Rock Creek Parkway	Modeled	1	0.09	0.50	0.50	0.50	0.50	
042	Harvard Street and Rock Creek Parkway, NW	Modeled	3	1.05	2.00	0.67	1.00	0.25	
043	Adams Mill Road South of Irving Street, NW	Modeled	6	4.73	5.25	0.88	1.25	0.25	
044	Kenyon Street and Adams Mill Road, NW	Modeled	4	0.61	2.75	0.69	1.00	0.25	
045	Adams Mill Road and Lamont Street, NW	Modeled	7	0.48	5.00	0.71	1.25	0.25	
046	Park Road south of Piney Branch Parkway, NW	Modeled	5	0.20	4.25	0.85	1.25	0.25	
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	5	0.58	4.25	0.85	1.25	0.25	
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	5	1.27	4.25	0.85	1.25	0.25	
049	Piney Branch and Lamont Street, NW	Modeled	9	129.42	12.50	1.39	3.00	0.25	
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
052	O Street extended and Rock Creek Parkway, NW	Modeled	1	0.41	0.50	0.50	0.50	0.50	
053	O Street west of Rock Creek Parkway, NW	separated							
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
057	28th Street extended west of Rock Creek, NW	separated							
058	Connecticut Avenue and Rock Creek Parkway, NW	separated							
060	P St and 26 <sup>th</sup> St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00	
	<b>SUBTOTAL</b>			<b>161.77</b>					
	<b>TOTAL</b>			<b>1,125.58</b>					

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results  
Period: July, August, September 2020

SCENARIO: QuarterlyReport\_2020Q3 , created on October 8, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
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\* Overflow flow meter out of service; model output has been used for report

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



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

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

**Month: September 2020**

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

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

*Monthly Operations Report for Combined Sewer System*  
*Month: September 2020*  
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## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENANCE

### 2.1 Regulators

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

**Table 2-1  
Regulator Structures**

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2 <sup>1</sup>	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	N/A				
4 <sup>1</sup>	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	09/18/20	*			
7	W Street and Railroad Ave, SE	005	09/18/20	*			
8 <sup>1</sup>	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE (Diversion Structure)	007	09/15/20	*			
9a	13 <sup>th</sup> Street and Ridge Place, SE (Regulator Structure)	007	09/15/20	*			
9b	11 <sup>th</sup> Street Bridge and DC 295 SB (CSO-007 Diversion Chamber)	007	09/18/20	*			
11	"O" Street Pumping Station	011(a)	09/18/20	*			
12	Storm Pump Discharge at Main Pumping Station	011	09/23/20	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	09/10/20	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	09/16/20	*			
15	South Capitol and E Streets	010	09/16/20	*			
15a	Half and L Streets, SE	010	09/24/20	*			
15b	South Capitol and I Streets	010	09/08/20	*			
15c	South Capitol and I Streets	010	09/08/20	*			

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

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
36a	New Hampshire Ave and Eye Street, NW	022	09/04/20	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	09/02/20	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	09/02/20	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	09/02/20	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	09/02/20	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	09/04/20	*			
38	29 <sup>th</sup> and K Streets, NW	024	09/02/20	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	09/02/20	*			
39a	30 <sup>th</sup> and K Streets, NW	024	09/02/20	*			
39b	30 <sup>th</sup> and K Streets, NW	024	09/02/20	*			
41b	31 <sup>st</sup> and K Streets, NW	025	09/02/20	*			
41c	31 <sup>st</sup> and K Streets, NW	025	09/02/20	*			
42	Wisconsin Ave and K Street, NW	026	09/02/20	*			
43	Potomac and Water Streets, NW	027	09/02/20	*			
43a	Potomac and Water Streets, NW	027	09/02/20	*			
44	Water Street, west of Potomac St, NW	027	09/02/20	*			
45	36 <sup>th</sup> and M Streets, NW	028	09/01/20	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	09/01/20	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	09/01/20	*			
47a	37 <sup>th</sup> and T Streets, NW	029	09/01/20	*			
47b	37 <sup>th</sup> and T Streets, NW	029	09/01/20	*			
47c	38 <sup>th</sup> and W Streets, NW	029	09/01/20	*			
49 <sup>l</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	09/17/20	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	09/17/20	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	09/24/20	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	09/17/20	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	09/17/20	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	09/17/20	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	09/17/20	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	09/17/20	*			
54	23 <sup>rd</sup> and O Streets, NW	034	09/14/20	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	09/14/20	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	09/14/20	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	09/14/20	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	09/14/20	*			
58 <sup>l</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	09/01/20	*			
60	Connecticut Ave, east of Rock Creek, NW	039	09/01/20	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	09/01/20	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	09/09/20	*			
63	Harvard Street and Rock Creek Parkway, NW	042	09/09/20	*			
64	Adams Mill Road, south of Irving Street, NW	043	09/09/20	*			
65	Kenyon Street and Adams Mill Road, NW	044	09/09/20	*			
65a	Kenyon Street and Adams Mill Road, NW	044	09/09/20	*			
66	Adams Mill Road and Lamont Street, NW	045	09/09/20	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	09/09/20	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	09/09/20	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	09/09/20	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	09/09/20	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	09/01/20	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	09/09/20	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	09/14/20	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	09/14/20	*			
73	O Street Extended and Rock Creek Parkway, NW	052	09/14/20	*			
74 <sup>l</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	09/15/20	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	09/15/20	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	09/15/20	*			
78 <sup>l</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>l</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	09/14/20	*			
84a	26 <sup>th</sup> and P Streets, NW	060	09/14/20	*			
86	Diversion Chamber and Vortex Drop at First and Channing St, NW (First St Tunnel)	019	09/04/20	*			
88	Flagler and Adams St. NW (First St Tunnel)	019	09/04/20	*			



Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
89	First and V St, NW (First St Tunnel)	019	09/04/20	*			
90	First and V St, NW (First St Tunnel)	019	09/04/20	*			
91	First and V St, NW (First St Tunnel)	019	09/04/20	*			
92	CSO 019 Diversion Near Eastside PS (Anacostia River Tunnel)	019	09/22/20	*			
93	CSO 018 Diversion Near Barney Circle (Anacostia River Tunnel)	018	09/22/20	*			
95	M Street Approach Channel M and Water St SE (Anacostia River Tunnel)	015, 016, 017	09/08/20	*			
96	CSO 007 Shaft at 11 <sup>th</sup> St Bridge and DC I-295 SB Diversion Facilities (Anacostia River Tunnel)	007	09/21/20	*			
97	CSO 005 Diversion at Chicago St Trunk Sewer, I295 SB (Anacostia River Tunnel)	005	09/21/20	*			
98	Main Pumping Station Diversions (Anacostia River Tunnel)	009 - 012	09/22/20	*			
99	CSO 009 and 011a Diversion Facilities (Anacostia River Tunnel)	009, 011a	09/16/20	*			
100	CSO 012 Diversion Facilities (Anacostia River Tunnel)	012	09/10/20	*			
101	Main Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	N/A	09/11/20	*			
102	Anacostia Main Interceptor Diversion Chamber	N/A	09/11/20	*			
103	Poplar Point PS Emergency Overflow Chamber (Anacostia River Tunnel)	N/A	09/11/20	*			
104	Poplar Point PS Discharge Chamber	N/A	09/11/20	*			
105	Potomac Outfall Sewer Diversion Chamber (Anacostia River Tunnel)	003A	09/11/20	*			

Notes:

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

## 2.2 Outfalls, Tide Gates and CSO Signs

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

**Table 2-2  
Outfalls and Tide Gates**

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003 <sup>1</sup>	Bolling Air Force Base, at Giavanolli and Chanute, SW	N/A									

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NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003a	Joint Base Anacostia Bolling Macdill and Arnold Ave SW	09/11/20	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	09/17/20	*		*		*		*		
006 <sup>1</sup>	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	09/17/20	*		*		*		*		
009	O St. Sewage Pumping Station, SE	09/23/20	*		*		*		*		
010	O St. Sewage Pumping Station, SE	09/23/20	*			*			*		
011	Main Sewage Pumping Station, SE	09/23/20	*			*			*		
011a	Main Sewage Pumping Station, SE	09/23/20	*		*		*		*		
012	Main Sewage Pumping Station, SE	09/23/20	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	09/23/20	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	09/23/20	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	09/23/20	*			*			*		
016	12th and O Streets, SE	09/17/20	*		*		*		*		
017	M and Water Street, SE	09/17/20	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	09/17/20	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	09/22/20	*		*		*		*		
019a	Adjacent to Service Drive behind swirl facility & D.C. General Hospital (Tunnel Overflow Structure)	09/22/20	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	09/03/20	*		*		*		*		
021	Rock Creek Parkway and C St., NW	09/03/20	*		*		*		*		
022	Rock Creek Parkway and G St., NW	09/03/20	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	09/03/20	*		*		*		*		
025	South of 31st and K Streets, NW	09/03/20	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	09/03/20	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	09/03/20	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	09/03/20	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	09/03/20	*			*			*		
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW	09/17/20	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	09/17/20	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	09/14/20	*			*			*		
035	P St. Bridge and Rock Creek Parkway	09/14/20	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
036	22nd Street, South of Q Street NW.	09/21/20	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	09/01/20	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	09/01/20	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	09/01/20	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	09/21/20	*		*		*		*		
042	Harvard St. and Beach Dr NW.	09/21/20	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	09/21/20	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	09/21/20	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	09/21/20	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	09/09/20	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	09/09/20	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	09/09/20	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	09/09/20	*		*		*		*		
050	Rock Creek Parkway and L St., NW	09/09/20	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	09/21/20	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	09/21/20	*		*		*		*		Routine check of tide gate and outfall sign. Tide gate has been repaired and put back in place and the outfall is operating normal. Repair completed 9/5/2020.
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	09/15/20	*		*		*		*		Routine check of tide gate and outfall sign. Tide gate has been repaired and put back in place and the outfall is operating normal. Repair completed 9/5/2020.
056	Normanstone Dr. and Rock Creek Parkway, NW.	09/15/20	*		*		*		*		Routine check of tide gate and outfall sign. Tide gate has been repaired and put back in place and the outfall is operating normal. Repair completed 9/5/2020.
057 <sup>1</sup>	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	09/21/20	*		*		*		*		Routine check of tide gate and outfall sign. Tide gate has been repaired and put back in place and the outfall is operating normal. Repair completed 9/5/2020.

Notes:

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

### 2.3.1 Pumping Stations

Pumping station operations are summarized in the table below.

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

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Work Order Number</i>	<i>Schedule to Restore to Service</i>
Main	30	3	4	None	-	-	-	-
Eastside	1	2	4	None	-	-	-	-
Poplar Point	1	2	4	None	-	-	-	-
Potomac	30	4	5	Screen #1	09/26/20 – 9/30/20	Bent rake and scraper bar, screen is off track.	20-675279	Anticipated 11/30/20. The screen has been disconnected for repair. Awaiting parts from manufacturer.
				Pump #5	09/01/20 – 09/30/20	Bearing and vibration issue, pump not running.	20-404901	Anticipated 11/30/20. The pump and motor have been disconnected for repair and the parts have been received. After further visual inspection, additional damage of the impeller welding was found. Repair is ongoing.

Notes:

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed</i> <sup>1,2</sup>	<i>Work Order Number</i>	<i>Comments</i>
Main	9/21/20	Group A	20-590632	Add oil, grease bearings and replace packing if needed.
O St	9/28/20	Group A	20-617246	Add oil, grease bearings and replace packing if needed.
Eastside	9/27/20	Group A	20-603101	Add oil, grease bearings and replace packing if needed.
Poplar Point	9/27/20	Group A	20-594562	Add oil, grease bearings and replace packing if needed.
Potomac	9/27/20	Group A	20-532946	Add oil, grease bearings and replace packing if needed.
Rock Creek	9/27/20	Group A	20-594576	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	9/27/20	Group A	20-594590	Add oil, grease bearings and replace packing if needed.
Earl Place	9/28/20	Group A	20-562749	Add oil, grease bearings and replace packing if needed.
1 <sup>st</sup> Street Tunnel Dewatering	9/29/20	Group B	21-19329	

Notes:

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

**Table 2-5  
Pumping Stations – Pumpage**

Pumping Station	Sanitary Pumpage		Screenings Collected (tons) <sup>1</sup>	Pumpage of CSO from First Street Tunnel back to Sewer System	
	Total Wastewater (mg)	Daily Average Wastewater (mg)		Date	Volume (mg)
Main <sup>1,2</sup>	1576.26	52.54	N/A	N/A	N/A
O St <sup>1,2</sup>	147.63	4.92	N/A	N/A	N/A
Eastside	134.33	4.48	N/A	N/A	N/A
Poplar Point	405.43	13.51	N/A	N/A	N/A
Potomac	3780.41	126.01	N/A	N/A	N/A
Rock Creek	178.20	5.94	N/A	N/A	N/A
Upper Anacostia	49.51	1.65	N/A	N/A	N/A
Earl Place	1.27	0.042	N/A	N/A	N/A
1 <sup>st</sup> Street Tunnel Dewatering <sup>3,4</sup>	N/A	N/A	N/A	9/1/20	0.08
				9/3/20	0.27
				9/10/20	0.05
				9/11/20	0.34
				9/16/20	0.34
				9/17/20	2.99
				9/18/20	0.72
				9/21/20	0.22
				9/22/20	0.18
				9/30/20	0.05

Notes:

1. Screenings collected from the Main and O Street Pumping Stations are combined from the sanitary flow and combined sewer overflows, due to the design of the screening system that consists of vertical trash racks, with no mechanical cleaning. Therefore, quantification of captured screening materials, specifically from combined sewer overflows, is not feasible.
2. Flow meters have been installed in accordance with NPDES Permit No. DC002199 to record CSO discharges from Main and O Street Pumping Stations. This data is reported via Discharge Monitoring Reports submitted to the EPA on a monthly basis. A summary of metered and modeled CSO discharges is included in Section 5.
3. The flow meter for the pumping station was found to be defective and did not record discharges. DC Water has ordered and received a replacement flow meter; however, the meter will not be installed until the current contractor at the 1<sup>st</sup> Street Tunnel pumping station demobilizes. The installation of the flow meter is not possible at this time due to space limitations. In the interim, the flow will be estimated based on pump run times and pump capacity. Pump data indicate activity on eleven occurrences in the month of September: 38 minutes on 9/1/2020, 124 minutes on 9/3/20, 22 minutes on 9/10/20, 156 minutes on 9/11/20, 1,728 minutes on 9/16/20, 1,361 minutes on 9/17/20, 330 minutes on 9/18/20, 100 minutes on 9/21/20, 83 minutes on 9/22/20, 64 minutes on 9/24/20 and 24 minutes on 9/30/20. \*\*The estimated volume is 16.17 MG for the month of September 2020.
4. On 9/10/20, there was a severe rain event in the region. The First Street Tunnel filled to capacity and there was substantial flooding in the area. The First Street Pumping Station is designed to empty the Tunnel after the rain event. The severe flooding necessitated manual operation of the pumping station. Please reference letter dated September 20, 2020 to the USEPA Region III. After the tunnel was dewatered, scheduled maintenance was performed on the PS to clean the wet well.

## 2.4 Inflatable Dams and SCADA System

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

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

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	9/16/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
14 - West	9/16/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
15	9/16/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
15A	9/24/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
16 - East	9/10/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
16 - West	9/10/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
34	9/24/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
35	9/24/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
52	9/24/20	<b>No</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

Notes:

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

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W) <sup>2, 5,6</sup>	9/3/20	0 hrs. 28 mins
	9/9/20	0 hrs. 7 mins
	9/10/20	3 hrs. 24 mins
	9/12/20	3 hrs. 18 mins
	9/20/20	6 hrs. 0 mins
15 <sup>1</sup>	9/1/20	0 hrs. 20 mins
	9/10/20	3 hrs. 54 mins
15A	9/9/20	2 hrs. 1 min
	9/10/20	5 hrs. 1 mins
16 (E & W) <sup>3,5</sup>	9/4/20	0 hrs. 17 mins
	9/9/20	0 hrs. 6 mins
	9/10/20	3 hrs. 28 mins
34 <sup>4</sup>	9/1/20	0 hrs. 31 mins
	9/7/20	4 hrs. 53 mins
	9/10/20	1 hr. 7 mins
35 <sup>7</sup>	9/1/20	0 hrs. 34 mins
	9/3/20	0 hrs. 10 mins
	9/10/20	2 hrs. 22 mins
	9/30/20	0 hrs. 37 mins
52	None	N/A
<b>Structures on Outfall Sewers</b>		
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	N/A
<b>Outfall Sewer Control Gates</b>		
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No.1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible
Outfall Sewer Control Gate No.2	Operational	This structure has been bulk headed. Overflows are no longer possible

**Notes:**

- On 9/1/20, Structure 15 deflated for approximately 20 minutes. This was not an overflow to the river as any overflow from Structure 15 goes to O Street Pumping Station and is not discharged to the river unless the storm pumps are turned on.
- On 9/03/20, Structure 14 (E & W) had scheduled preventive maintenance performed on the pressure sensors which resulted in a pressure drop. This was not an overflow to the river as the downstream levels were higher than the upstream levels.
- On 9/04/20, Structure 16 (E & W) had scheduled preventive maintenance performed on the pressure sensors which resulted in a pressure drop. This was not an overflow to the river as the downstream levels were higher than the upstream levels.
- On 9/7/2020, Structure 34 (E & W) deflated due to a compressor belt failure which resulted in deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The compressor belt was repaired the same day and the structure was returned to service in less than 24 hours.
- On 9/9/20, a power outage occurred in the area that caused Structure 14 and 16 to deflate. The outage lasted approximately 15 minutes. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold.



6. On 9/20/2020, Structure 14 (E & W) deflated due to a faulty blower belt which resulted in deflation. This was not an overflow to the river as the upstream levels were significantly lower than the low-level threshold. The blower belt was repaired the same day and the structure was returned to service in less than 24 hours.
7. On 9/30/20, Structure 35 deflated due to testing of a software modification required for the structure and River Lights activation. High upstream levels were simulated to cause the deflation. This was not an overflow to the river as the actual upstream levels were significantly lower than the low-level threshold.

### **3. DRY WEATHER OVERFLOWS**

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

On October 19, 2020, DC Water responded to a Dry Weather Overflow (DWO) that was discharging to CSO 029 from September 16, 2020 to October 19, 2020. Details regarding this DWO and DC Water's response were reported to EPA and DOEE in the letter dated October 23, 2020. DC Water determined approximately 4 million gallons discharged in the month of September, 2020. A copy of the letter is provided in Attachment A.

4. **SOLIDS AND FLOATABLES CONTROL**

4.1 **Catch Basin Cleaning**

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

**Table 4-1  
Catch Basin Cleaning**

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned This Month		Total CBs Cleaned This Year to Date	
				Total	In CSS	Total	In CSS	Total	In CSS		
1	1449	1426	652	652	652	1358	1326	12	12	1370	1338
2	2792	2642	476	476	72	2410	2076	76	40	2486	2116
3	3687	187	0	0	0	2569	181	885	0	3454	181
4	3495	1723	0	0	0	3331	1505	2	0	3333	1505
5	4007	1769	1692	1692	411	2289	86	428	416	2717	502
6	3316	2666	2647	2647	59	144	51	119	110	263	161
7	3785	43	41	41	0	1651	0	493	0	2144	0
8	2832	212	209	209	197	1915	5	135	0	2050	5
<b>Grand Total</b>	<b>25363<sup>1</sup></b>	<b>10668<sup>1</sup></b>	<b>5717<sup>1</sup></b>	<b>5717<sup>2</sup></b>	<b>1391<sup>2</sup></b>	<b>15667<sup>2</sup></b>	<b>5230<sup>2</sup></b>	<b>2150<sup>2</sup></b>	<b>578<sup>2</sup></b>	<b>17817<sup>2</sup></b>	<b>5808<sup>2</sup></b>
% Cleaned/Inspected to Date				<b>100%</b>	<b>24%</b>					<b>70%</b>	<b>54%</b>

Notes:

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

#### 4.2 BMP Demonstration for Solid and Floatable Control

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

- Bar Rack at CSO 040 and 041 to Rock Creek

**Table 4-2**  
**BMP Demonstration Projects – Report**

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (LB)</i>
Bar Rack CSO 040	09/01/2020	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	09/21/2020	Good	None	Routine Cleaning	(1)

Notes:

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

**4.3 Anacostia River Floating Debris Removal Program**

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

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	21
<i>Days not Operating</i>	9
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightening.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	3 Skimmers
<i>Dates</i>	B32: 9/1 - 9/18. B33: 9/1 - 9/30. B34: 9/1 - 9/8.
<i>Reason</i>	B32 fuel tank leaking. B33 port wing screen off track and hydraulic ram leaking. B34 starboard wing screen bent.
<i>Plan to Restore to Service</i>	B32: returned to operations on 9/19. B33: waiting for parts ETR unknown. B34: Returned to operations on 9/9.
<i>Amount Material Collected</i>	20 tons this month. Calendar year to date 155 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

**4.4 CSS Litter Control**

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

No Activity this month.

## 5. MONITORING

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

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

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

Inspector: Gregory Stephens

Pumping Station	Inspector	Date Inspected	Condition		Work Order Number	Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work			
Bar Racks at O Street Storm Pumps (CSO 010)	GS	9/26/20	X		20-649283		
Bar Racks at Main Storm Pumps (CSO 011)	GS	9/26/20	X		20-649276		

## **5.2 Rain Data**

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
9/1/2020	0.09	0.02	0.17	0.02	0.11
9/2/2020	0.01	0.09	0	0.05	0.01
9/3/2020	1.19	0.76	0.70	0.60	0.38
9/4/2020	0	0	0	0	0
9/5/2020	0	0	0	0	0
9/6/2020	0	0	0	0	0
9/7/2020	0	0	0	0	0
9/8/2020	0	0	0	0	0
9/9/2020	0.31	0.32	1.04	0.76	0.64
9/10/2020	3.09	3.02	2.83	2.37	2.88
9/11/2020	0	0	0	0	0
9/12/2020	0.08	0.14	0.02	0.06	0
9/13/2020	0	0	0	0	0
9/14/2020	0	0	0	0	0
9/15/2020	0	0	0	0	0
9/16/2020	0	0	0	0	0
9/17/2020	0.32	0.32	0.37	0.40	0.39
9/18/2020	0.02	0.01	0.02	0.01	0.07
9/19/2020	0	0	0	0	0
9/20/2020	0	0	0	0	0
9/21/2020	0	0	0	0	0
9/22/2020	0	0	0	0	0
9/23/2020	0	0	0	0	0
9/24/2020	0	0	0	0	0
9/25/2020	0.13	0.14	0.24	0.16	0.40
9/26/2020	0.46	0.43	0.50	0.45	0.29
9/27/2020	0.05	0.04	0.05	0.04	0.05
9/28/2020	0	0.03	0	0	0.01
9/29/2020	0.18	0.14	0.18	0.20	0.20
9/30/2020	0.15	0.11	0.18	0.11	0.10
TOTAL	6.08	5.57	6.30	5.23	5.53



### **5.3 Wet Weather Overflows**

Combined Sewer System Model Results are summarized below.

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results  
 Period: July, August, September 2020

SCENARIO: QuarterlyReport\_2020Q3 , created on October 8, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
<b>Anacostia CSOs</b>								
005	Chicago St and Railroad Station SE	Modeled	0	0.00	0.00	0.00	0.00	0.00
006	Good Hope Road, West of Nichols Ave., SE	separated						
007	13 <sup>th</sup> Street and Ridge Place, SE	Modeled*	2	0.19	1.00	0.50	0.75	0.25
009	2nd Street, 300 feet North of N Place, SE	Metered	4	0.31	2.83	0.71	1.00	0.50
010	O Street Sewage Pumping Station, SE (pumped Overflow)	Modeled*	2	19.79	3.00	1.50	1.50	1.50
011	South of Main Sewage Pumping Station, SE (pumped overflow)	Metered	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	Modeled*	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	Modeled	2	6.46	1.25	0.63	0.75	0.50
013	4th and N Streets, SE	Modeled	2	0.86	1.75	0.88	1.00	0.75
014	6th and M Streets, SE	Modeled	3	2.43	2.25	0.75	1.25	0.25
015	9th and M Streets, SE	consolidated to tunnel system						
016	12th and M Streets, SE	consolidated to tunnel system						
017	14th and M Streets, SE	consolidated to tunnel system						
018	Barney Circle and Pennsylvania Ave, SE	consolidated to tunnel system						
019	Northeast Boundary	Modeled*	4	160.56	4.00	1.00	1.75	0.25
019A	Northeast Boundary - Tunnel OF	Metered	2	94.78	6.50	3.25	4.00	2.50
	<b>SUBTOTAL</b>			<b>285.38</b>				
<b>Potomac CSOs</b>								
003A	JBAB Tunnel OF	Metered	3	67.48	7.58	2.53	4.17	0.42
020	23rd Street, North of Constitution Ave, NW (Easby Point)	Modeled	14	94.00	35.75	2.55	9.50	0.25
021	Northeast of Roosevelt Bridge, NW	Modeled	14	303.01	38.25	2.73	8.50	0.25
022	27th and K Streets, NW	Modeled	21	111.34	45.75	2.18	10.00	0.25
024	30th and K Streets, NW	Modeled	15	40.65	58.25	3.88	16.00	0.25
025	31st & K St NW	Modeled	11	0.75	6.75	0.61	1.50	0.25
026	Wisconsin Avenue and K St., NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	Modeled	17	21.99	46.75	2.75	9.50	0.25
028	36th and M Streets, NW	Modeled	28	6.89	113.25	4.04	15.50	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	Modeled	20	32.32	48.25	2.41	9.25	0.25
	<b>SUBTOTAL</b>			<b>678.43</b>				
<b>Rock Creek</b>								
031	Pennsylvania Avenue, East Rock Creek, NW	separated						
032	26th and M Streets, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
033	N Street extended west of 25th Street, NW	Modeled	3	2.45	4.00	1.33	1.50	1.25
034	23rd and O Streets, SW	Modeled	2	3.80	1.25	0.63	0.75	0.50
035	22nd Street south of O Street, NW	Modeled	2	12.91	1.75	0.88	1.00	0.75
036	22nd Street South of O Street, NW	Modeled	13	2.406	34.50	2.65	8.25	0.75
037	Northwest of Belmont and Rock Creek and Potomac Parkway	separated						
038	North of Belmont Road, east of Kalorama Circle, NW	Modeled	1	0.0001	0.25	0.25	0.25	0.25
039	Connecticut Avenue east of Rock Creek, NW	Modeled	2	0.59	1.25	0.63	0.75	0.50
040	Biltmore Street extended east of Rock Creek, NW	Modeled	2	0.76	1.50	0.75	0.75	0.75
041	Ontario extended and Rock Creek Parkway	Modeled	1	0.09	0.50	0.50	0.50	0.50
042	Harvard Street and Rock Creek Parkway, NW	Modeled	3	1.05	2.00	0.67	1.00	0.25
043	Adams Mill Road South of Irving Street, NW	Modeled	6	4.73	5.25	0.88	1.25	0.25
044	Kenyon Street and Adams Mill Road, NW	Modeled	4	0.61	2.75	0.69	1.00	0.25
045	Adams Mill Road and Lamont Street, NW	Modeled	7	0.48	5.00	0.71	1.25	0.25
046	Park Road south of Piney Branch Parkway, NW	Modeled	5	0.20	4.25	0.85	1.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	Modeled	5	0.58	4.25	0.85	1.25	0.25
048	Mt. Pleasant Street extended and Piney Branch Parkway	Modeled	5	1.27	4.25	0.85	1.25	0.25
049	Piney Branch and Lamont Street, NW	Modeled	9	129.42	12.50	1.39	3.00	0.25
050	28th Street west of 16th Street, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	Modeled	1	0.41	0.50	0.50	0.50	0.50
053	O Street west of Rock Creek Parkway, NW	separated						
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	separated						
058	Connecticut Avenue and Rock Creek Parkway, NW	separated						
060	P St and 26 <sup>th</sup> St, NW	Modeled	0	0.00	0.00	0.00	0.00	0.00
	<b>SUBTOTAL</b>			<b>161.77</b>				
	<b>TOTAL</b>			<b>1,125.58</b>				

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results  
Period: July, August, September 2020

SCENARIO: QuarterlyReport\_2020Q3 , created on October 8, 2020

NPDES No.	Description	Data Source	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
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\* Overflow flow meter out of service; model output has been used for report

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