



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

**Monthly Operations Report  
For  
*Combined Sewer System*  
Month: Jan 2017**

**Prepared By:**  
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*Monthly Operations Report for Combined Sewer System*  
*Month: Jan 2017*

**Table of Contents**

- 1. INTRODUCTION**
- 2. OPERATION AND MAINTENANCE**
  - 2.1 Regulators
  - 2.2 Outfalls, Tide Gates and CSO Signs
  - 2.3 Pumping Stations
  - 2.4 Northeast Boundary Swirl Facility
  - 2.5 Inflatable Dams and SCADA Systems
- 3. DRY WEATHER OVERFLOWS**
- 4. SOLIDS AND FLOATABLES CONTROL**
  - 4.1 Catch Basin Cleaning
  - 4.2 BMP Demonstration for Solid and Floatable Control
  - 4.3 Anacostia River Floating Debris Removal Program
  - 4.4 CSS Litter Control
- 5. MONITORING**
  - 5.1 Bar Racks at Main & O Street
  - 5.2 Rainfall Data
  - 5.3 Wet Weather Overflows

## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENANCE

### 2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to 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	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	01/18/17	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	01/18/17	*			
5	Poplar Point Pumping Station	004	01/18/17	*			
6	Chicago Street and Railroad Ave, SE	005	01/05/17	*			
7	W Street and Railroad Ave, SE	005	01/05/17	*			
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	007	01/05/17	*			
11	"O" Street Pumping Station	011(a)	01/24/17	*			
12	Storm Pump Discharge at Main Pumping Station	011	01/18/17	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	01/18/17	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	01/18/17	*			
15	South Capitol and E Streets	010	01/23/17	*			
15a	Half and L Streets, SE	010	01/23/17	*			
15b	South Capitol and I Streets	010	01/04/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
15c	South Capitol and I Streets	010	01/03/17	*			
16	North of Main Sewage Pumping Station	012	01/18/17	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	01/18/17	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	01/18/17	*			
18	6 <sup>th</sup> and M Streets, SE	014	01/04/17	*			
19	9 <sup>th</sup> and M Streets, SE	015	01/10/17	*			
19a	9 <sup>th</sup> and M Streets, SE	015	01/10/17	*			
20	12 <sup>th</sup> and M Streets, SE	016	01/10/17	*			
20a	12 <sup>th</sup> and M Streets, SE	016	01/11/17	*			
21	14 <sup>th</sup> and M Streets, SE	017	01/10/17	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	01/10/17	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	01/10/17	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	01/10/17	*			
22d	Kentucky Ave and Potomac Street, SE	018	01/05/17	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	01/05/17	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	01/10/17	*			
24a	East Capitol St, west of RFK stadium	019	01/10/17	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	01/09/17	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	01/09/17	*			
30	17 <sup>th</sup> and D Streets, NW	020	01/05/17	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	01/05/17	*			
33	10 <sup>th</sup> and F Streets, NW	020	01/05/17	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	01/23/17	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	01/09/17	*			
35	Northeast of Roosevelt Bridge, NW	021	01/23/17	*			
36	27 <sup>th</sup> and I Streets, NW	022	01/05/17	*			
36a	New Hampshire Ave and Eye Street, NW	022	01/05/17	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	01/09/17	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	01/09/17	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	01/09/17	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	01/09/17	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	01/05/17	*			
38	29 <sup>th</sup> and K Streets, NW	024	01/05/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
38a	30 <sup>th</sup> Street, south of K Street, NW	024	01/05/17	*			
39a	30 <sup>th</sup> and K Streets, NW	024	01/05/17	*			
39b	30 <sup>th</sup> and K Streets, NW	024	01/05/17	*			
41b	31 <sup>st</sup> and K Streets, NW	025	01/09/17	*			
41c	31 <sup>st</sup> and K Streets, NW	025	01/09/17	*			
42	Wisconsin Ave and K Street, NW	026	01/09/17	*			
43	Potomac and Water Streets, NW	027	01/09/17	*			
43a	Potomac and Water Streets, NW	027	01/09/17	*			
44	Water Street, west of Potomac St, NW	027	01/09/17	*			
45	36 <sup>th</sup> and M Streets, NW	028	01/04/17	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	01/04/17	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	01/04/17	*			
47a	37 <sup>th</sup> and T Streets, NW	029	01/04/17	*			
47b	37 <sup>th</sup> and T Streets, NW	029	01/04/17	*			
47c	38 <sup>th</sup> and W Streets, NW	029	01/04/17	*			
49 <sup>l</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	01/18/17	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	01/18/17	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	01/23/17	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	01/23/17	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	01/23/17	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	01/23/17	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	01/18/17	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	01/18/17	*			
54	23 <sup>rd</sup> and O Streets, NW	034	01/13/17	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	01/13/17	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	01/13/17	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	01/13/17	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	01/13/17	*			
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	01/12/17	*			
60	Connecticut Ave, east of Rock Creek, NW	039	01/12/17	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	01/12/17	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	01/11/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
63	Harvard Street and Rock Creek Parkway, NW	042	01/11/17	*			
64	Adams Mill Road, south of Irving Street, NW	043	01/11/17	*			
65	Kenyon Street and Adams Mill Road, NW	044	01/11/17	*			
65a	Kenyon Street and Adams Mill Road, NW	044	01/11/17	*			
66	Adams Mill Road and Lamont Street, NW	045	01/11/17	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	01/11/17	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	01/11/17	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	01/11/17	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	01/11/17	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	01/18/17	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	01/18/17	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	01/13/17	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	01/13/17	*			
73	O Street Extended and Rock Creek Parkway, NW	052	01/13/17	*			
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	01/12/17	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	01/12/17	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	01/12/17	*			
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	01/13/17	*			
84a	26 <sup>th</sup> and P Streets, NW	060	01/13/17	*			

Notes:

1. Structure no longer functions 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	Bolling Air Force Base, at Giavanolli and Chanute, SW	01/05/17	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	01/05/17	*		*		*		*		
006 <sup>1</sup>	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	01/05/17	*		*		*		*		
009	O St. Sewage Pumping Station, SE	01/05/17	*			*			*		
010	O St. Sewage Pumping Station, SE	01/05/17	*			*			*		
011	Main Sewage Pumping Station, SE	01/05/17	*			*			*		
011(a)	Main Sewage Pumping Station, SE	01/05/17	*		*		*		*		
012	Main Sewage Pumping Station, SE	01/05/17	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	01/05/17	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	01/05/17	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	01/05/17	*			*			*		
016	12th and O Streets, SE	01/05/17	*		*		*		*		
017	M and Water Street, SE	01/05/17	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	01/05/17	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	01/05/17	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	01/06/17	*		*		*		*		
021	Rock Creek Parkway and C St., NW	01/06/17	*		*		*		*		
022	Rock Creek Parkway and G St., NW	01/06/17	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	01/06/17	*		*		*		*		
025	South of 31st and K Streets, NW	01/06/17	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	01/06/17	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	01/06/17	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	01/06/17	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	01/05/17	*			*			*		17-136668 sign vandalized (paint). See February 2017, for updates.
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	01/18/17	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	01/18/17	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	01/13/17	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
035	P St. Bridge and Rock Creek Parkway	01/13/17	*			*			*		
036	22nd Street, South of Q Street NW.	01/24/17	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	01/12/17	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	01/12/17	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	01/12/17	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	01/24/17	*		*		*		*		
042	Harvard St. and Beach Dr NW.	01/24/17	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	01/24/17	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	01/24/17	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	01/24/17	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	01/11/17	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	01/11/17	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	01/11/17	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	01/11/17	*		*		*		*		
050	Rock Creek Parkway and L St., NW	01/18/17	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	01/24/17	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	01/24/17	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	01/12/17	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	01/12/17	*		*		*		*		
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	01/24/17	*		*		*		*		

Notes:

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



### 2.3 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<sup>1</sup></i>
Main	31	3	4	Screen #2	01/03/17-01/23/17	Bearing ring replacement	17-148660	Returned to service on 01/23/17
Eastside	2	2	4	Pump #2	01/24/17-01/27/17	Excessive vibration	17-174015	Returned to service on 01/27/17
				Screen #1	01/25/17-01/31/17	High differential alarm	17-174084	Anticipated 03/10/17
Poplar Point	2	2	3	Pump #3	01/01/17-01/18/17	Excessive noise	17-126260	Returned to service on 01/18/17
Potomac	31	4	5	N/A	N/A	N/A	N/A	N/A

Notes:

1. The schedule to restore to service is impacted by the type and age of equipment. In some cases, the condition of equipment and the lack of availability of replacement parts necessitate complete replacement of the unit or element or custom fabrication of needed parts to return the units to service. For these and other reasons, projects are underway for the rehabilitation of the pumping stations, including replacement of mechanical screens. The Potomac Pumping Station Phase 3 upgrade project is currently ongoing and replacement of the mechanical screens, sluice gates, and discharge isolations valves began in September 2016 and is anticipated to be completed by December 2017.

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	<i>Work Order Number</i>	<i>Comments</i>
Main	01/01/17	Group A	17-115337	Add oil, grease bearings and replace packing if needed.
O St	01/01/17	Group A	17-132142	Add oil, grease bearings and replace packing if needed.
Eastside	01/07/17	Group A	17-121932	Add oil, grease bearings and replace packing if needed.
Poplar Point	01/07/17	Group A	17-113174	Add oil, grease bearings and replace packing if needed.
Potomac	01/01/17	Group A	17-122072	Add oil, grease bearings and replace packing if needed.
Rock Creek	01/07/17	Group A	17-107294	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	01/07/17	Group A	17-115351	Add oil, grease bearings and replace packing if needed.

Notes:

- Group A consists of:  
 Exercise bar screens  
 Exercise all sump pumps  
 Drain condensation from air compressor storage tank  
 Check depth of screening in the screen room and schedule Vactor truck as required  
 Check all safety equipment  
 Issue work order requests as required

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

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Storm Water/CSO Pumped To Anacostia River</i>		
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>	<i>Date</i>	<i>Volume (mg)</i>	<i>Screenings Collected (units)<sup>1</sup></i>
Main	1743.34	56.24	N/A	N/A	N/A
O St	116.81	3.77	01/03/17 01/23/17	25.13 7.84	Normal Normal
Eastside	151.03	4.87	N/A	N/A	N/A
Poplar Point	523.12	16.87	N/A	N/A	N/A
Potomac	3134.46	101.11	N/A	N/A	N/A
Rock Creek	125.66	4.05	N/A	N/A	N/A
Upper Anacostia	40.93	1.32	N/A	N/A	N/A
Earl Place	0.147	0.005	N/A	N/A	N/A

Notes:

- Screening consists of vertical trash racks, with no mechanical cleaning. Quantification of captured materials is not possible on monthly basis.

## 2.4 Northeast Boundary Swirl Facility

The Northeast Boundary Swirl Facility provides screening, swirl concentration, chlorination and dechlorination of CSO overflow from CSO 019. The capacity of the facility is 400 MGD. Facility operations are summarized below:

**Table 2-6  
Northeast Boundary Swirl Facility – Inspections and Equipment in Service**

<i>Date Inspected</i>	<i>No. Screens</i>	<i>No. Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
01/07/17	3	3	Screen #3 Screen #2	01/01/17-01/31/17 01/01/17-01/04/17	Bent bars & back plate Chain and rake misaligned	Anticipated 05/31/17 Returned to service on 01/04/17

**Table 2-7  
Northeast Boundary Swirl Facility – Preventive Maintenance**

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	<i>Work Order Number</i>	<i>Comments</i>
01/07/17	Group A	17-123567	

Notes:

- Group A consists of:  
 Exercise bar screens  
 Exercise wash down system  
 Exercise knife gates full travel both directions  
 Check depth of grit in grit channel and schedule Vector truck as required  
 Change chart paper on strip chart recorders at the end of each month  
 Thoroughly clean each Swirl tank and channels  
 Issue work order requests as required  
 Drain condensation from air compress  
 Check all safety equipment

**Table 2-8  
Northeast Boundary Swirl Facility – Wet Weather Operations**

<i>Date</i>	<i>Approx. Storm Duration (hrs)<sup>1</sup></i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume (mg)</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
01/03/17	8.4	14.99	6.80	8.27	72
01/17/17	3.5	0.77	0.77	0	96
01/23/17	8	24.52	6.57	17.95	104

Notes:

- Approx. length of time influent flow rate was above the 15 mgd threshold but does not reflect the discharge duration through outfall 019.

Chlorination/Dechlorination Systems.

The table below summarizes the information about operation of Swirl Facility chlorination and dechlorination systems during storm events. Chemical feed systems were activated during the storms in which flows were substantial enough to overflow the mix chamber weir. Included in the table are results of residual chlorine and fecal coliform testing for samples taken in the Swirl Facility mix chamber and at the facility effluent outfall to the Anacostia River.

A grab sample is collected and immediately tested with an AutoCat 9000 chlorine residual titrator to obtain test results for residual chlorine. Samples for fecal coliform are taken from the designated sample point, treated with sodium bisulfite to remove any residual chlorine, and conveyed to the Blue Plains Wastewater Treatment Plant Laboratory for testing.

**Table 2-9  
Northeast Boundary Swirl Facility – Disinfection Performance**

<i>Date</i>	<i>Chlor/ Dechlor System Used?</i>	<i>Dosage</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO<sub>3</sub> (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
01/03/17	Yes	4.7	22.4	Mix Chamber	1.3	Mix Chamber	<10
				Anacostia River <sup>1</sup>	0	Anacostia River <sup>1</sup>	16,400
01/23/17	Yes	1.1	13.0	Mix Chamber	0.24	Mix Chamber	3,800
				Anacostia River <sup>1</sup>	0.0	Anacostia River <sup>1</sup>	52,000

Notes:

1. River: River Outfall

**Table 2-10**  
**Northeast Boundary Swirl Facility – Effluent Sampling Results**

<i>Date</i>	<i>Flow Composited Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO<sub>2</sub>-N) (mg/L)</i>	<i>Nitrate (NO<sub>3</sub>-N) (mg/L)</i>	<i>Total Kjeldahl Nitrogen (mg/L as N)</i>	<i>Total Nitrogen (mg/L)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Carbonaceous Biological Oxygen Demand (mg/L)</i>
1/03/17	77.0	0.00	0.49	2.79	3.28	0.50	19.9
1/23/17	87.0	0.04	0.41	2.20	2.65	0.50	18.2

## 2.5 Inflatable Dams and SCADA System

DC Water operates and maintains twelve inflatable dams at eight different locations. The structure number, location and number of dams per site are presented in Table 2-11. 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 2-11  
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	01/19/17	<b>No</b>	N/A	N/A	N/A
14 - West	01/19/17	<b>No</b>	N/A	N/A	N/A
15	01/19/17	<b>No</b>	N/A	N/A	N/A
15A	01/19/17	<b>No</b>	N/A	N/A	N/A
16 - East	01/19/17	<b>No</b>	N/A	N/A	N/A
16 - West	01/19/17	<b>No</b>	N/A	N/A	N/A
24 - North	01/25/17	<b>No</b>	N/A	N/A	N/A
24 - Middle	01/25/17	<b>No</b>	N/A	N/A	N/A
24 - South	01/25/17	<b>No</b>	N/A	N/A	N/A
34	01/19/17	<b>No</b>	N/A	N/A	N/A
35	01/19/17	<b>No</b>	N/A	N/A	N/A
52	01/19/17	<b>No</b>	N/A	N/A	N/A

**Table 2-12  
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)	None	N/A
15	01/23/17	1 hr 39 mins
15A	01/03/17 01/23/17	5 hrs 41 mins 3 hrs 4 mins
16 (E & W)	01/03/17 01/23/17	1 hr 55 mins 1 hr 3 mins
24	01/03/17 01/23/17	1 hr 50 mins 56 mins
34	None	N/A
35	01/03/17 01/23/17	1 hr 34 mins 57 mins
52	None	N/A
<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	None
<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

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

There were no dry weather combined sewer overflow during January 2017.



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:

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	1457	1430	608	4	0	1508	1453	13	13	13	13
2	2940	2745	558	12	0	2975	2713	229	227	229	227
3	3678	184	0	0	0	3863	281	43	4	43	4
4	3453	1707	0	0	0	3646	1798	28	21	28	21
5	3892	1782	1724	45	0	4368	1827	599	52	599	52
6	3530	2914	2906	300	0	3967	3125	315	303	315	303
7	3459	35	33	0	0	4140	47	632	1	632	1
8	2689	202	202	11		2802	223	141	13	141	13
<b>Grand Total</b>	<b>25098</b>	<b>10999</b>	<b>6031</b>	<b>372</b>	<b>0</b>	<b>27269</b>	<b>11467</b>	<b>2000</b>	<b>634</b>	<b>2000</b>	<b>634</b>
% Cleaned/Inspected to Date				<b>6%</b>	<b>0%</b>	<b>109%</b>	<b>105%</b>			<b>8%</b>	<b>6%</b>

Note: The totals have changed due to information that is more accurate. The Catch Basin Application was deployed in May 2016. We are now just completing a full cleaning cycle of the entire city using the Catch Basin Application. The Engineering/GIS process verifying the information regarding catch basins identified as being removed and new catch basins identified in the field may take a few weeks.

**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.

- Netting system at CSO 018 to Anacostia River
- 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>
Netting System CSO 018	1/11/2017	Good	Routine cleaning	Routine cleaning	5 pounds
	1/27/2017	Good	Replace nets	Nets replaced	100 pounds
Bar Rack CSO 040	1/12/2017	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	1/24/2017	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatable 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 Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	19
<i>Days not Operating</i>	11
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightning.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer (on the last day of the month)
<i>Dates</i>	B28: 1/1 – 1/31
<i>Reason</i>	B28: Front assembly catching on hull.
<i>Plan to Restore to Service</i>	B28: Sent to contractors for repair, ETR unknown.
<i>Volume Material Collected</i>	20 tons this month. Calendar year to date 20 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.

Status: no activities 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 Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	KW	01/26/17	X			
Bar Racks at Main Storm Pumps (CSO 011)	KW	01/26/17	X			

## **5.2 Rain Data**

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
1/1/2017	0	0	0	0	0
1/2/2017	0.37	0.29	0.31	0.28	0.35
1/3/2017	0.86	0.89	0.74	0.82	0.86
1/4/2017	0.02	0.02	0.02	0.03	0
1/5/2017	0	0	0	0	0
1/6/2017	0	0	0	0	0
1/7/2017	0	0	0	0	0.01
1/8/2017	0	0	0	0	0
1/9/2017	0	0	0	0	0
1/10/2017	0	0	0	0	0
1/11/2017	0.05	0.05	0.05	0.06	0.07
1/12/2017	0	0	0	0	0.02
1/13/2017	0	0	0	0	0
1/14/2017	0.31	0.27	0.26	0.27	0.29
1/15/2017	0	0	0	0	0
1/16/2017	0	0	0	0	0.01
1/17/2017	0.24	0.23	0.21	0.23	0.21
1/18/2017	0	0	0	0	0
1/19/2017	0	0	0	0	0
1/20/2017	0	0	0	0	0.01
1/21/2017	0	0	0	0	0
1/22/2017	0.13	0.12	0.15	0.09	0.15
1/23/2017	0.87	0.97	0.69	0.66	0.67
1/24/2017	0.05	0.05	0.04	0.05	0.03
1/25/2017	0	0	0	0	0
1/26/2017	0	0	0	0	0
1/27/2017	0	0	0	0	0
1/28/2017	0	0	0	0	0
1/29/2017	0	0	0	0	0
1/30/2017	0.01	0.04	0.04	0.04	0.07
1/31/2017	0	0	0	0	0
TOTAL	2.91	2.93	2.51	2.53	2.75

### **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: January, February, March 2017**

**SCENARIO: PCCM\_QuarterlyReport\_2017Q1, produced April 7, 2017**

NPDES No.	Description	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	12	1.46	33.75	2.81	6.00	0.50
006	Good Hope Road, West of Nichols Ave.,SE	separated					
007	13 <sup>th</sup> Street and Ridge Place,SE	4	0.46	4.00	1.00	1.75	0.25
009	2nd Street, 300 feet North of N Place, SE	5	0.56	8.50	1.70	2.75	0.25
010	O Street SewagePumping Station, SE (pumped Overflow)	4	7.29	2.00	0.50	0.75	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	1	0.83	0.25	0.25	0.25	0.25
011a	South of Main SewagePumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	0	0.00	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	5	0.20	5.75	1.15	3.25	0.25
014	6th and M Streets, SE	4	0.85	8.25	2.06	3.50	0.50
015	9th and M Streets, SE	4	0.03	3.75	0.94	1.75	0.25
016	12th and M Streets, SE	3	0.37	3.00	1.00	1.00	1.00
017	14th and M Streets, SE	5	3.18	17.50	3.50	4.50	1.25
018	Barney Circle andPennsylvania Ave, SE	4	1.64	9.75	2.44	3.50	1.75
019	Northeast Boundary - Swirl Effluent	5	75.25	31.25	6.25	12.75	1.00
019	Northeast Bound. - Swirl Bypass	1	3.88	0.50	0.50	0.50	0.50
	<b>SUBTOTAL</b>		<b>96.03</b>				
<b>Potomac CSOs</b>							
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	3	0.07	4.00	1.33	1.75	1.00
021	Northeast ofRoosevelt Bridge, NW	4	55.64	14.75	3.69	4.25	2.75
022	27th and K Streets, NW	6	0.24	10.00	1.67	3.75	0.25
024	30th and K Streets, NW	4	0.44	6.50	1.63	2.75	0.75
025	31st & K St NW	0	0.00	0.00	0.00	0.00	0.00
026	Wisconsin Avenue andK St., NW	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	3	0.38	3.00	1.00	1.25	0.75
028	36th and M Streets, NW	6	0.36	9.25	1.54	3.25	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	3	0.23	3.25	1.08	1.25	0.75
	<b>SUBTOTAL</b>		<b>57.36</b>				
<b>Rock Creek</b>							
031	Pennsylvania Avenue, East Rock Creek, NW	separated					
032	26th and M Streets, NW	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	3	0.031	4.50	1.50	1.75	1.00
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated					
038	North of Belmont Road,east of Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00



District of Columbia Water and Sewer Authority

**Combined Sewer System Model Results**  
**Period: January, February, March 2017**

**SCENARIO: PCCM\_QuarterlyReport\_2017Q1, produced April 7, 2017**

NPDES No.	Description	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)
043	Adams Mill Road South of Irving Street, NW	0	0.00	0.00	0.00	0.00	0.00
044	Kenyon Street and Adams Mill Road, NW	0	0.000	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	0	0.000	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and Lamont Street, NW	4	2.65	8.75	2.19	3.25	1.50
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated					
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	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	0	0.00	0.00	0.00	0.00	0.00
	<b>SUBTOTAL</b>		<b>2.68</b>				
	<b>TOTAL</b>		<b>156.07</b>				

#N/A

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: Feb 2017**

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

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

*Monthly Operations Report for Combined Sewer System*  
*Month: Feb 2017*

**Table of Contents**

- 1. INTRODUCTION**
- 2. OPERATION AND MAINTENANCE**
  - 2.1 Regulators
  - 2.2 Outfalls, Tide Gates and CSO Signs
  - 2.3 Pumping Stations
  - 2.4 Northeast Boundary Swirl Facility
  - 2.5 Inflatable Dams and SCADA Systems
- 3. DRY WEATHER OVERFLOWS**
- 4. SOLIDS AND FLOATABLES CONTROL**
  - 4.1 Catch Basin Cleaning
  - 4.2 BMP Demonstration for Solid and Floatable Control
  - 4.3 Anacostia River Floating Debris Removal Program
  - 4.4 CSS Litter Control
- 5. MONITORING**
  - 5.1 Bar Racks at Main & O Street
  - 5.2 Rainfall Data
  - 5.3 Wet Weather Overflows

## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENANCE

### 2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to 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	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	02/15/17	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	02/15/17	*			
5	Poplar Point Pumping Station	004	02/15/17	*			
6	Chicago Street and Railroad Ave, SE	005	02/03/17	*			
7	W Street and Railroad Ave, SE	005	02/03/17	*			
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	007	02/03/17	*			
11	"O" Street Pumping Station	011(a)	02/15/17	*			
12	Storm Pump Discharge at Main Pumping Station	011	02/16/17	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	02/07/17	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	02/07/17	*			
15	South Capitol and E Streets	010	02/09/17	*			
15a	Half and L Streets, SE	010	02/09/17	*			
15b	South Capitol and I Streets	010	02/06/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
15c	South Capitol and I Streets	010	02/06/17	*			
16	North of Main Sewage Pumping Station	012	02/07/17	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	02/10/17	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	02/14/17	*			
18	6 <sup>th</sup> and M Streets, SE	014	02/07/17	*			
19	9 <sup>th</sup> and M Streets, SE	015	02/07/17	*			
19a	9 <sup>th</sup> and M Streets, SE	015	02/07/17	*			
20	12 <sup>th</sup> and M Streets, SE	016	02/07/17	*			
20a	12 <sup>th</sup> and M Streets, SE	016	02/07/17	*			
21	14 <sup>th</sup> and M Streets, SE	017	02/07/17	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	02/07/17	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	02/07/17	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	02/07/17	*			
22d	Kentucky Ave and Potomac Street, SE	018	02/01/17	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	02/01/17	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	02/13/17	*			
24a	East Capitol St, west of RFK stadium	019	02/13/17	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	02/03/17	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	02/03/17	*			
30	17 <sup>th</sup> and D Streets, NW	020	02/07/17	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	02/07/17	*			
33	10 <sup>th</sup> and F Streets, NW	020	02/07/17	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	02/09/17	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	02/03/17	*			
35	Northeast of Roosevelt Bridge, NW	021	02/23/17	*			
36	27 <sup>th</sup> and I Streets, NW	022	02/03/17	*			
36a	New Hampshire Ave and Eye Street, NW	022	02/03/17	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	02/10/17	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	02/10/17	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	02/10/17	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	02/10/17	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	02/03/17	*			
38	29 <sup>th</sup> and K Streets, NW	024	02/10/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
38a	30 <sup>th</sup> Street, south of K Street, NW	024	02/10/17	*			
39a	30 <sup>th</sup> and K Streets, NW	024	02/10/17	*			
39b	30 <sup>th</sup> and K Streets, NW	024	02/10/17	*			
41b	31 <sup>st</sup> and K Streets, NW	025	02/10/17	*			
41c	31 <sup>st</sup> and K Streets, NW	025	02/10/17	*			
42	Wisconsin Ave and K Street, NW	026	02/10/17	*			
43	Potomac and Water Streets, NW	027	02/10/17	*			
43a	Potomac and Water Streets, NW	027	02/10/17	*			
44	Water Street, west of Potomac St, NW	027	02/10/15	*			
45	36 <sup>th</sup> and M Streets, NW	028	02/01/17	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	02/01/17	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	02/01/17	*			
47a	37 <sup>th</sup> and T Streets, NW	029	02/01/17	*			
47b	37 <sup>th</sup> and T Streets, NW	029	02/01/17	*			
47c	38 <sup>th</sup> and W Streets, NW	029	02/01/17	*			
49 <sup>l</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	02/13/17	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	02/13/17	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	02/23/17	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	02/23/17	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	02/21/17	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	02/21/17	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	02/13/17	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	02/13/17	*			
54	23 <sup>rd</sup> and O Streets, NW	034	02/13/17	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	02/13/17	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	02/13/17	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	02/13/17	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	02/13/17	*			
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	02/14/17	*			
60	Connecticut Ave, east of Rock Creek, NW	039	02/14/17	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	02/14/17	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	02/08/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
63	Harvard Street and Rock Creek Parkway, NW	042	02/08/17	*			
64	Adams Mill Road, south of Irving Street, NW	043	02/08/17	*			
65	Kenyon Street and Adams Mill Road, NW	044	02/08/17	*			
65a	Kenyon Street and Adams Mill Road, NW	044	02/08/17	*			
66	Adams Mill Road and Lamont Street, NW	045	02/08/17	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	02/08/17	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	02/08/17	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	02/08/17	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	02/08/17	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	02/03/17	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	02/03/17	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	02/06/17	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	02/06/17	*			
73	O Street Extended and Rock Creek Parkway, NW	052	02/06/17	*			
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	02/06/17	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	02/06/17	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	02/06/17	*			
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	02/06/17	*			
84a	26 <sup>th</sup> and P Streets, NW	060	02/06/17	*			

Notes:

1. Structure no longer functions 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	Bolling Air Force Base, at Giavanolli and Chanute, SW	02/15/17	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	02/02/17	*		*		*		*		
006 <sup>1</sup>	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	02/02/17	*		*		*		*		
009	O St. Sewage Pumping Station, SE	02/16/17	*		*		*		*		
010	O St. Sewage Pumping Station, SE	02/16/17	*			*			*		
011	Main Sewage Pumping Station, SE	02/16/17	*			*			*		
011(a)	Main Sewage Pumping Station, SE	02/16/17	*		*		*		*		
012	Main Sewage Pumping Station, SE	02/16/17	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	02/16/17	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	02/16/17	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	02/16/17	*			*			*		
016	12th and O Streets, SE	02/15/17	*		*		*		*		
017	M and Water Street, SE	02/15/17	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	02/15/17	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	02/16/17	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	02/02/17	*		*		*		*		
021	Rock Creek Parkway and C St., NW	02/02/17	*		*		*		*		
022	Rock Creek Parkway and G St., NW	02/02/17	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	02/02/17	*		*		*		*		
025	South of 31st and K Streets, NW	02/02/17	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	02/02/17	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	02/02/17	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	02/02/17	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	02/02/17	*			*			*		17-136668 Vandalized Sign was restored (paint removed) on 2/21/17
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, 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	
032	26th and M Street, NW.	02/13/17	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	02/13/17	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	02/13/17	*			*			*		
035	P St. Bridge and Rock Creek Parkway	02/13/17	*			*			*		
036	22nd Street, South of Q Street NW.	02/16/17	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	02/14/17	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	02/14/17	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	02/14/17	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	02/16/17	*		*		*		*		
042	Harvard St. and Beach Dr NW.	02/16/17	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	02/16/17	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	02/16/17	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	02/16/17	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	02/08/17	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	02/08/17	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	02/08/17	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	02/08/17	*		*		*		*		
050	Rock Creek Parkway and L St., NW	02/03/17	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	02/21/17	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	02/21/17	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	02/06/17	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	02/06/17	*		*		*		*		
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	02/16/17	*		*		*		*		

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<sup>1</sup></i>
Main	28	3	4	Pump #2	02/19/17-02/22/17	Excessive noise	17-228128	Returned to service on 02/22/17
Eastside	2	2	4	Screen #1	02/01/17-02/28/17	High differential alarm	17-174084	Anticipated 03/10/17
Poplar Point	2	2	3	None	N/A	N/A	N/A	N/A
Potomac	28	4	5	Pump #3 Screen #2	02/01/17-02/28/17 02/25/17-02/28/17	Discharge pipe work <sup>2</sup> Shear pin & bar modification	Contractor 17-238649	Anticipated 03/06/17 Returned to service on 02/28/17

Notes:

1. The schedule to restore to service is impacted by the type and age of equipment. In some cases, the condition of equipment and the lack of availability of replacement parts necessitate complete replacement of the unit or element or custom fabrication of needed parts to return the units to service. For these and other reasons, projects are underway for the rehabilitation of the pumping stations, including replacement of mechanical screens. The Potomac Pumping Station Phase 3 upgrade project is currently ongoing and replacement of the mechanical screens, sluice gates, and discharge isolations valves began in September 2016 and is anticipated to be completed by December 2017.
2. This is part of the Potomac Pump Station Phase 3 upgrade project.

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	<i>Work Order Number</i>	<i>Comments</i>
Main	02/01/17	Group A	17-152788	Add oil, grease bearings and replace packing if needed.
O St	02/01/17	Group A	17-165830	Add oil, grease bearings and replace packing if needed.
Eastside	02/04/17	Group A	17-162005	Add oil, grease bearings and replace packing if needed.
Poplar Point	02/04/17	Group A	17-150154	Add oil, grease bearings and replace packing if needed.
Potomac	02/01/17	Group A	17-162315	Add oil, grease bearings and replace packing if needed.
Rock Creek	02/04/17	Group A	17-145601	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	02/04/17	Group A	17-152802	Add oil, grease bearings and replace packing if needed.
Earl Place	02/04/17	Group A	17-128505	Add oil, grease bearings and replace packing if needed.

Notes:

- Group A consists of:  
 Exercise bar screens  
 Exercise all sump pumps  
 Drain condensation from air compressor storage tank  
 Check depth of screening in the screen room and schedule Vector truck as required  
 Check all safety equipment  
 Issue work order requests as required

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

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Storm Water/CSO Pumped To Anacostia River</i>		
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>	<i>Date</i>	<i>Volume (mg)</i>	<i>Screenings Collected (units)<sup>1</sup></i>
Main	1429.39	51.05	N/A	N/A	N/A
O St	101.43	3.62	N/A	N/A	N/A
Eastside	111.69	3.99	N/A	N/A	N/A
Poplar Point	456.52	16.30	N/A	N/A	N/A
Potomac	2559.64	91.42	N/A	N/A	N/A
Rock Creek	106.60	3.81	N/A	N/A	N/A
Upper Anacostia	34.59	1.24	N/A	N/A	N/A
Earl Place	0.113	0.004	N/A	N/A	N/A

Notes:

- Screening consists of vertical trash racks, with no mechanical cleaning. Quantification of captured materials is not possible on monthly basis.

## 2.4 Northeast Boundary Swirl Facility

The Northeast Boundary Swirl Facility provides screening, swirl concentration, chlorination and dechlorination of CSO overflow from CSO 019. The capacity of the facility is 400 MGD. Facility operations are summarized below:

**Table 2-6  
Northeast Boundary Swirl Facility – Inspections and Equipment in Service**

<i>Date Inspected</i>	<i>No. Screens</i>	<i>No. Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
02/04/17	3	3	Screen #3	02/01/17-02/28/17	Bent bars & back plate	Anticipated 05/31/17

**Table 2-7  
Northeast Boundary Swirl Facility – Preventive Maintenance**

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	<i>Work Order Number</i>	<i>Comments</i>
02/04/17	Group A	17-165948	

Notes:

- Group A consists of:  
 Exercise bar screens  
 Exercise wash down system  
 Exercise knife gates full travel both directions  
 Check depth of grit in grit channel and schedule Vactor truck as required  
 Change chart paper on strip chart recorders at the end of each month  
 Thoroughly clean each Swirl tank and channels  
 Issue work order requests as required  
 Drain condensation from air compress  
 Check all safety equipment

**Table 2-8  
Northeast Boundary Swirl Facility – Wet Weather Operations**

<i>Date</i>	<i>Approx. Storm Duration (hrs)<sup>1</sup></i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume (mg)</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
02/25/17	6.5	3.89	3.89	0	96
02/28/17	3	3.76	3.76	0	80

Notes:

- Approx. length of time influent flow rate was above the 15 mgd threshold but does not reflect the discharge duration through outfall 019.

Chlorination/Dechlorination Systems.

The table below summarizes the information about operation of Swirl Facility chlorination and dechlorination systems during storm events. Chemical feed systems were activated during the storms in which flows were substantial enough to overflow the mix chamber weir. Included in the table are results of residual chlorine and fecal coliform testing for samples taken in the Swirl Facility mix chamber and at the facility effluent outfall to the Anacostia River.

A grab sample is collected and immediately tested with an AutoCat 9000 chlorine residual titrator to obtain test results for residual chlorine. Samples for fecal coliform are taken from the designated sample point, treated with sodium bisulfite to remove any residual chlorine, and conveyed to the Blue Plains Wastewater Treatment Plant Laboratory for testing.

**Table 2-9  
Northeast Boundary Swirl Facility – Disinfection Performance**

<i>Date</i>	<i>Chlor/ Dechlor System Used?</i>	<i>Dosage</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO<sub>3</sub> (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
N/A	N/A	N/A	N/A	Mix Chamber	N/A	Mix Chamber	N/A
				Anacostia River <sup>1</sup>	N/A	Anacostia River <sup>1</sup>	N/A

Notes:

1. River: River Outfall

**Table 2-10**  
**Northeast Boundary Swirl Facility – Effluent Sampling Results**

<i>Date</i>	<i>Flow Composited Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO<sub>2</sub>-N) mg/L</i>	<i>Nitrate (NO<sub>3</sub>-N) mg/L</i>	<i>Total Kjeldahl Nitrogen (mg/L as N)</i>	<i>Total Nitrogen (mg/L)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Carbonaceous Biological Oxygen Demand (mg/L)</i>
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

## 2.5 Inflatable Dams and SCADA System

DC Water operates and maintains twelve inflatable dams at eight different locations. The structure number, location and number of dams per site are presented in Table 2-11. 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 2-11  
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	02/09/17	<b>No</b>	N/A	N/A	N/A
14 - West	02/09/17	<b>No</b>	N/A	N/A	N/A
15	02/09/17	<b>No</b>	N/A	N/A	N/A
15A	02/09/17	<b>No</b>	N/A	N/A	N/A
16 - East	02/09/17	<b>No</b>	N/A	N/A	N/A
16 - West	02/09/17	<b>No</b>	N/A	N/A	N/A
24 - North	02/23/17	<b>No</b>	N/A	N/A	N/A
24 - Middle	02/23/17	<b>No</b>	N/A	N/A	N/A
24 - South	02/23/17	<b>No</b>	N/A	N/A	N/A
34	02/09/17	<b>No</b>	N/A	N/A	N/A
35	02/23/17	<b>No</b>	N/A	N/A	N/A
52	02/23/17	<b>No</b>	N/A	N/A	N/A

**Table 2-12  
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)	<i>None</i>	<i>N/A</i>
24	<i>None</i>	<i>N/A</i>
34	<i>None</i>	<i>N/A</i>
35	<i>None</i>	<i>N/A</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	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	None
<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



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

There were no dry weather combined sewer overflow during February 2017.

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	1457	1430	608	13	0	13	13	24	24	37	37
2	2940	2745	558	12	0	229	227	31	27	260	254
3	3678	184	0	0	0	43	4	4	4	47	8
4	3453	1707	0	0	0	28	21	8	8	36	29
5	3892	1782	1724	57	0	599	52	24	13	623	65
6	3523	2908	2900	478	0	315	303	195	178	510	481
7	3458	35	33	0	0	632	1	2196	1	2828	2
8	2689	202	202	11		141	13	9	0	150	13
<b>Grand Total</b>	<b>25090</b>	<b>10993</b>	<b>6025</b>	<b>571</b>	<b>0</b>	<b>2000</b>	<b>634</b>	<b>2491</b>	<b>255</b>	<b>4491</b>	<b>889</b>
% Cleaned/Inspected to Date				<b>9%</b>	<b>0%</b>	<b>8%</b>	<b>6%</b>			<b>18%</b>	<b>8%</b>

Note: The totals have changed due to information that is more accurate. The Catch Basin Application was deployed in May 2016. We are now just completing a full cleaning cycle of the entire city using the Catch Basin Application. The Engineering/GIS process verifying the information regarding catch basins identified as being removed and new catch basins identified in the field may take a few weeks.

**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.

- Netting system at CSO 018 to Anacostia River
- 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>
Netting System CSO 018	2/3/2017	Good	Routine Cleaning	Routine Cleaning	1 pound
Bar Rack CSO 040	2/14/2017	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	2/16/2017	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatable 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 Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	19
<i>Days not Operating</i>	2
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightning.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer (on the last day of the month)
<i>Dates</i>	B28: 2/1 – 2/28
<i>Reason</i>	B28: Front assembly catching on hull.
<i>Plan to Restore to Service</i>	B28: Sent to contractors for repair, ETR unknown.
<i>Volume Material Collected</i>	20 tons this month. Calendar year to date 40 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.

Status: no activities 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 Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	KW	02/19/17	X			
Bar Racks at Main Storm Pumps (CSO 011)	KW	02/19/17	X			

## **5.2 Rain Data**

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
2/1/2017	0	0	0	0	0
2/2/2017	0	0	0	0	0
2/3/2017	0	0	0	0	0
2/4/2017	0	0	0	0	0
2/5/2017	0	0	0	0	0
2/6/2017	0	0	0	0	0
2/7/2017	0	0	0	0	0
2/8/2017	0	0	0	0	0
2/9/2017	0.13	0.13	0.14	0.13	0.12
2/10/2017	0	0	0	0	0
2/11/2017	0	0	0	0	0
2/12/2017	0.04	0.04	0.03	0.03	0.03
2/13/2017	0	0	0	0	0
2/14/2017	0	0	0	0	0
2/15/2017	0	0	0	0	0
2/16/2017	0	0	0	0	0
2/17/2017	0	0	0	0	0
2/18/2017	0	0	0	0	0
2/19/2017	0	0	0	0	0.01
2/20/2017	0	0	0	0	0
2/21/2017	0	0	0	0	0
2/22/2017	0	0	0	0	0
2/23/2017	0	0	0	0	0
2/24/2017	0	0	0	0	0
2/25/2017	0.12	0.17	0.17	0.18	0.18
2/26/2017	0	0	0	0	0
2/27/2017	0	0	0	0	0
2/28/2017	0.37	0.34	0.33	0.33	0.34
TOTAL	0.66	0.68	0.67	0.67	0.68

### **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: January, February, March 2017**

**SCENARIO: PCCM\_QuarterlyReport\_2017Q1, produced April 7, 2017**

NPDES No.	Description	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	12	1.46	33.75	2.81	6.00	0.50
006	Good Hope Road, West of Nichols Ave.,SE	separated					
007	13 <sup>th</sup> Street and Ridge Place,SE	4	0.46	4.00	1.00	1.75	0.25
009	2nd Street, 300 feet North of N Place, SE	5	0.56	8.50	1.70	2.75	0.25
010	O Street SewagePumping Station, SE (pumped Overflow)	4	7.29	2.00	0.50	0.75	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	1	0.83	0.25	0.25	0.25	0.25
011a	South of Main SewagePumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	0	0.00	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	5	0.20	5.75	1.15	3.25	0.25
014	6th and M Streets, SE	4	0.85	8.25	2.06	3.50	0.50
015	9th and M Streets, SE	4	0.03	3.75	0.94	1.75	0.25
016	12th and M Streets, SE	3	0.37	3.00	1.00	1.00	1.00
017	14th and M Streets, SE	5	3.18	17.50	3.50	4.50	1.25
018	Barney Circle andPennsylvania Ave, SE	4	1.64	9.75	2.44	3.50	1.75
019	Northeast Boundary - Swirl Effluent	5	75.25	31.25	6.25	12.75	1.00
019	Northeast Bound. - Swirl Bypass	1	3.88	0.50	0.50	0.50	0.50
	<b>SUBTOTAL</b>		<b>96.03</b>				
<b>Potomac CSOs</b>							
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	3	0.07	4.00	1.33	1.75	1.00
021	Northeast ofRoosevelt Bridge, NW	4	55.64	14.75	3.69	4.25	2.75
022	27th and K Streets, NW	6	0.24	10.00	1.67	3.75	0.25
024	30th and K Streets, NW	4	0.44	6.50	1.63	2.75	0.75
025	31st & K St NW	0	0.00	0.00	0.00	0.00	0.00
026	Wisconsin Avenue andK St., NW	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	3	0.38	3.00	1.00	1.25	0.75
028	36th and M Streets, NW	6	0.36	9.25	1.54	3.25	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	3	0.23	3.25	1.08	1.25	0.75
	<b>SUBTOTAL</b>		<b>57.36</b>				
<b>Rock Creek</b>							
031	Pennsylvania Avenue, East Rock Creek, NW	separated					
032	26th and M Streets, NW	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	3	0.031	4.50	1.50	1.75	1.00
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated					
038	North of Belmont Road,east of Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00

District of Columbia Water and Sewer Authority

**Combined Sewer System Model Results**  
**Period: January, February, March 2017**

**SCENARIO: PCCM\_QuarterlyReport\_2017Q1, produced April 7, 2017**

NPDES No.	Description	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)
043	Adams Mill Road South of Irving Street, NW	0	0.00	0.00	0.00	0.00	0.00
044	Kenyon Street and Adams Mill Road, NW	0	0.000	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	0	0.000	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and Lamont Street, NW	4	2.65	8.75	2.19	3.25	1.50
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated					
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	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	0	0.00	0.00	0.00	0.00	0.00
	<b>SUBTOTAL</b>		<b>2.68</b>				
	<b>TOTAL</b>		<b>156.07</b>				

#N/A

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: Mar 2017**

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

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

*Monthly Operations Report for Combined Sewer System*  
*Month: Mar 2017*

**Table of Contents**

- 1. INTRODUCTION**
- 2. OPERATION AND MAINTENANCE**
  - 2.1 Regulators
  - 2.2 Outfalls, Tide Gates and CSO Signs
  - 2.3 Pumping Stations
  - 2.4 Northeast Boundary Swirl Facility
  - 2.5 Inflatable Dams and SCADA Systems
- 3. DRY WEATHER OVERFLOWS**
- 4. SOLIDS AND FLOATABLES CONTROL**
  - 4.1 Catch Basin Cleaning
  - 4.2 BMP Demonstration for Solid and Floatable Control
  - 4.3 Anacostia River Floating Debris Removal Program
  - 4.4 CSS Litter Control
- 5. MONITORING**
  - 5.1 Bar Racks at Main & O Street
  - 5.2 Rainfall Data
  - 5.3 Wet Weather Overflows

## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENANCE

### 2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPAWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to 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	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	03/17/17	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	03/17/17	*			
5	Poplar Point Pumping Station	004	03/17/17	*			
6	Chicago Street and Railroad Ave, SE	005	03/06/17	*			
7	W Street and Railroad Ave, SE	005	03/06/17	*			
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	007	03/06/17	*			
11	"O" Street Pumping Station	011(a)	03/21/17	*			
12	Storm Pump Discharge at Main Pumping Station	011	03/23/17	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	03/10/17	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	03/10/17	*			
15	South Capitol and E Streets	010	03/09/17	*			
15a	Half and L Streets, SE	010	03/09/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
15b	South Capitol and I Streets	010	03/20/17	*			
15c	South Capitol and I Streets	010	03/20/17	*			
16	North of Main Sewage Pumping Station	012	03/10/17	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	03/20/17	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	03/21/17	*			
18	6 <sup>th</sup> and M Streets, SE	014	03/03/17	*			
19	9 <sup>th</sup> and M Streets, SE	015	03/10/17	*			
19a	9 <sup>th</sup> and M Streets, SE	015	03/10/17	*			
20	12 <sup>th</sup> and M Streets, SE	016	03/10/17	*			
20a	12 <sup>th</sup> and M Streets, SE	016	03/10/17	*			
21	14 <sup>th</sup> and M Streets, SE	017	03/10/17	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	03/07/17	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	03/07/17	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	03/07/17	*			
22d	Kentucky Ave and Potomac Street, SE	018	03/01/17	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	03/01/17	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	03/20/17	*			
24a	East Capitol St, west of RFK stadium	019	03/20/17	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	03/03/17	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	03/03/17	*			
30	17 <sup>th</sup> and D Streets, NW	020	03/06/17	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	03/06/17	*			
33	10 <sup>th</sup> and F Streets, NW	020	03/06/17	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	03/09/17	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	03/03/17	*			
35	Northeast of Roosevelt Bridge, NW	021	03/09/17	*			
36	27 <sup>th</sup> and I Streets, NW	022	03/03/17	*			
36a	New Hampshire Ave and Eye Street, NW	022	03/03/17	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	03/03/17	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	03/03/17	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	03/03/17	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	03/03/17	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	03/03/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
38	29 <sup>th</sup> and K Streets, NW	024	03/06/17	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	03/06/17	*			
39a	30 <sup>th</sup> and K Streets, NW	024	03/06/17	*			
39b	30 <sup>th</sup> and K Streets, NW	024	03/06/17	*			
41b	31 <sup>st</sup> and K Streets, NW	025	03/06/17	*			
41c	31 <sup>st</sup> and K Streets, NW	025	03/06/17	*			
42	Wisconsin Ave and K Street, NW	026	03/10/17	*			
43	Potomac and Water Streets, NW	027	03/10/17	*			
43a	Potomac and Water Streets, NW	027	03/10/17	*			
44	Water Street, west of Potomac St, NW	027	03/10/17	*			
45	36 <sup>th</sup> and M Streets, NW	028	03/01/17	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	03/01/17	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	03/01/17	*			
47a	37 <sup>th</sup> and T Streets, NW	029	03/01/17	*			
47b	37 <sup>th</sup> and T Streets, NW	029	03/01/17	*			
47c	38 <sup>th</sup> and W Streets, NW	029	03/01/17	*			
49 <sup>l</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	03/20/17	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	03/20/17	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	03/09/17	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	03/09/17	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	03/20/17	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	03/20/17	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	03/07/17	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	03/07/17	*			
54	23 <sup>rd</sup> and O Streets, NW	034	03/07/17	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	03/07/17	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	03/07/17	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	03/07/17	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	03/07/17	*			
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	03/01/17	*			
60	Connecticut Ave, east of Rock Creek, NW	039	03/01/17	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	03/01/17	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	03/08/17	*			
63	Harvard Street and Rock Creek Parkway, NW	042	03/08/17	*			
64	Adams Mill Road, south of Irving Street, NW	043	03/08/17	*			
65	Kenyon Street and Adams Mill Road, NW	044	03/08/17	*			
65a	Kenyon Street and Adams Mill Road, NW	044	03/08/17	*			
66	Adams Mill Road and Lamont Street, NW	045	03/08/17	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	03/08/17	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	03/08/17	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	03/08/17	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	03/08/17	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	03/01/17	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	03/13/17	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	03/07/17	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	03/07/17	*			
73	O Street Extended and Rock Creek Parkway, NW	052	03/07/17	*			
74 <sup>1</sup>	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	03/13/17	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	03/13/17	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	03/13/17	*			
78 <sup>1</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>1</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	03/07/017	*			
84a	26 <sup>th</sup> and P Streets, NW	060	03/07/17	*			

Notes:

1. Structure no longer functions 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	Bolling Air Force Base, at Giavanolli and Chanute, SW	03/17/17	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	03/02/17	*		*		*		*		
006 <sup>1</sup>	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	03/02/17	*		*		*		*		
009	O St. Sewage Pumping Station, SE	03/23/17	*		*		*		*		
010	O St. Sewage Pumping Station, SE	03/23/17	*			*			*		
011	Main Sewage Pumping Station, SE	03/23/17	*			*			*		
011(a)	Main Sewage Pumping Station, SE	03/23/17	*		*		*		*		
012	Main Sewage Pumping Station, SE	03/23/17	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	03/23/17	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	03/23/17	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	03/23/17	*			*			*		
016	12th and O Streets, SE	03/21/17	*		*		*		*		
017	M and Water Street, SE	03/21/17	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	03/21/17	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	03/02/17	*		*		*		*		
020	Rock Creek Parkway and Independence, NW	03/02/17	*		*		*		*		
021	Rock Creek Parkway and C St., NW	03/02/17	*		*		*		*		
022	Rock Creek Parkway and G St., NW	03/02/17	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	03/02/17	*		*		*		*		
025	South of 31st and K Streets, NW	03/02/17	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	03/02/17	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	03/02/17	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	03/02/17	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	03/02/17	*			*			*		
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, 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	
032	26th and M Street, NW.	03/20/17	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	03/20/17	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	03/07/17	*			*			*		
035	P St. Bridge and Rock Creek Parkway	03/07/17	*			*			*		
036	22nd Street, South of Q Street NW.	03/16/17	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	03/01/17	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	03/01/17	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	03/01/17	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	03/16/17	*		*		*		*		
042	Harvard St. and Beach Dr NW.	03/16/17	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	03/16/17	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	03/16/17	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	03/16/17	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	03/08/17	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	03/08/17	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	03/08/17	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	03/08/17	*		*		*		*		
050	Rock Creek Parkway and L St., NW	03/13/17	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	03/21/17	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	03/21/17	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	03/13/17	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	03/13/17	*		*		*		*		
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	03/16/17	*		*		*		*		

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<sup>1</sup></i>
Main	31	3	4	Pump #2	03/14/17-03/31/17	Motor problem	17-359642	Anticipated 05/26/17
Eastside	3	2	4	Screen #1	03/01/17-03/10/17	High differential alarm	17-174084	Returned to service on 03/10/17
				Screen #2	03/21/17-03/31/17	Motor issue	17-345548	Anticipated 04/05/17
Poplar Point	3	2	3	None	N/A	N/A	N/A	N/A
Potomac	31	4	5	Pump #3	03/01/17-03/06/17	Discharge pipe work <sup>2</sup>	Contractor	Returned to service on 03/06/17
				Screen #2	03/10/17-03/31/17	Phase 3 upgrade work <sup>2</sup>	Contractor	Anticipated 06/11/17
				Pump #2	03/10/17-03/31/17	Phase 3 upgrade work <sup>2</sup>	Contractor	Anticipated 06/11/17
				Screen #4	03/25/17-03/31/17 <sup>3</sup>	Rakes fell into channel	17-346610	Anticipated 04/03/17
				Screen #3	03/31/17	Chain link came apart	17-360850	Anticipated 04/03/17

Notes:

1. The schedule to restore to service is impacted by the type and age of equipment. In some cases, the condition of equipment and the lack of availability of replacement parts necessitate complete replacement of the unit or element or custom fabrication of needed parts to return the units to service. For these and other reasons, projects are underway for the rehabilitation of the pumping stations, including replacement of mechanical screens. The Potomac Pumping Station Phase 3 upgrade project is currently ongoing and replacement of the mechanical screens, sluice gates, and discharge isolations valves began in September 2016 and is anticipated to be completed by December 2017.
2. This is part of the Potomac Pump Station Phase 3 upgrade project.
3. Due to the failure of Screen #4, pump #5 was not operational on March 31, 2017. Consequently, the Potomac Pumping Station was unable to meet its firm capacity during the wet weather event on March 31, 2017. See letter sent to the EPA on April 5, 2017.

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	<i>Work Order Number</i>	<i>Comments</i>
Main	03/01/17	Group A	17-195270	Add oil, grease bearings and replace packing if needed.
O St	03/01/17	Group A	17-232312	Add oil, grease bearings and replace packing if needed.
Eastside	03/12/17	Group A	17-228256	Add oil, grease bearings and replace packing if needed.
Poplar Point	03/12/17	Group A	17-190955	Add oil, grease bearings and replace packing if needed.
Potomac	03/01/17	Group A	17-228586	Add oil, grease bearings and replace packing if needed.
Rock Creek	03/12/17	Group A	17-178834	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	03/12/17	Group A	17-195284	Add oil, grease bearings and replace packing if needed.
Earl Place	03/12/17	Group A	17-162019	Add oil, grease bearings and replace packing if needed.

Notes:

- Group A consists of:  
Exercise bar screens  
Exercise all sump pumps  
Drain condensation from air compressor storage tank  
Check depth of screening in the screen room and schedule Vector truck as required  
Check all safety equipment  
Issue work order requests as required

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

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Storm Water/CSO Pumped To Anacostia River</i>		
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>	<i>Date</i>	<i>Volume (mg)</i>	<i>Screenings Collected (units)<sup>1</sup></i>
Main	1870.43	60.34	N/A	N/A	N/A
O St	136.48	4.40	3/31/17	42.0	Normal
Eastside	168.41	5.43	N/A	N/A	N/A
Poplar Point	521.03	16.81	N/A	N/A	N/A
Potomac	2945.85	95.03	N/A	N/A	N/A
Rock Creek	140.45	4.53	N/A	N/A	N/A
Upper Anacostia	39.20	1.26	N/A	N/A	N/A
Earl Place	0.143	0.005	N/A	N/A	N/A

Notes:

- Screening consists of vertical trash racks, with no mechanical cleaning. Quantification of captured materials is not possible on monthly basis.

## 2.4 Northeast Boundary Swirl Facility

The Northeast Boundary Swirl Facility provides screening, swirl concentration, chlorination and dechlorination of CSO overflow from CSO 019. The capacity of the facility is 400 MGD. Facility operations are summarized below:

**Table 2-6  
Northeast Boundary Swirl Facility – Inspections and Equipment in Service**

<i>Date Inspected</i>	<i>No. Screens</i>	<i>No. Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
03/01/17	3	3	Screen #3	03/01/17-03/31/17	Bent bars & back plate	Anticipated 05/31/17

**Table 2-7  
Northeast Boundary Swirl Facility – Preventive Maintenance**

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	<i>Work Order Number</i>	<i>Comments</i>
03/01/17	Group A	17-232458	

Notes:

- Group A consists of:  
 Exercise bar screens  
 Exercise wash down system  
 Exercise knife gates full travel both directions  
 Check depth of grit in grit channel and schedule Vector truck as required  
 Change chart paper on strip chart recorders at the end of each month  
 Thoroughly clean each Swirl tank and channels  
 Issue work order requests as required  
 Drain condensation from air compress  
 Check all safety equipment

**Table 2-8  
Northeast Boundary Swirl Facility – Wet Weather Operations**

<i>Date</i>	<i>Approx. Storm Duration (hrs)<sup>1</sup></i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume (mg)</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
03/01/17	2.5	2.41	2.41	0	40
03/19/17	5.5	6.37	6.37	0	40
03/31/17	12	27.46	7.12	20.34	144

Notes:

- Approx. length of time influent flow rate was above the 15 mgd threshold but does not reflect the discharge duration through outfall 019.

Chlorination/Dechlorination Systems.

The table below summarizes the information about operation of Swirl Facility chlorination and dechlorination systems during storm events. Chemical feed systems were activated during the storms in which flows were substantial enough to overflow the mix chamber weir. Included in the table are results of residual chlorine and fecal coliform testing for samples taken in the Swirl Facility mix chamber and at the facility effluent outfall to the Anacostia River.

A grab sample is collected and immediately tested with an AutoCat 9000 chlorine residual titrator to obtain test results for residual chlorine. Samples for fecal coliform are taken from the designated sample point, treated with sodium bisulfite to remove any residual chlorine, and conveyed to the Blue Plains Wastewater Treatment Plant Laboratory for testing.

**Table 2-9  
Northeast Boundary Swirl Facility – Disinfection Performance**

<i>Date</i>	<i>Chlor/ Dechlor System Used?</i>	<i>Dosage</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO<sub>3</sub> (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
3/31/17	Yes	6.35	4.10	Mix Chamber	0.4	Mix Chamber	54,000
				Anacostia River <sup>1</sup>	0.0	Anacostia River <sup>1</sup>	80,900

Notes:

1. River: River Outfall

**Table 2-10**  
**Northeast Boundary Swirl Facility – Effluent Sampling Results**

<i>Date</i>	<i>Flow Composited Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO<sub>2</sub>-N) (mg/L)</i>	<i>Nitrate (NO<sub>3</sub>-N) (mg/L)</i>	<i>Total Kjeldahl Nitrogen (mg/L as N)</i>	<i>Total Nitrogen (mg/L)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Carbonaceous Biological Oxygen Demand (mg/L)</i>
3/31/17	98.0	0.00	0.48	5.22	5.70	0.89	40.6

## 2.5 Inflatable Dams and SCADA System

DC Water operates and maintains twelve inflatable dams at eight different locations. The structure number, location and number of dams per site are presented in Table 2-11. 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 2-11  
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	03/09/17	<b>No</b>	N/A	N/A	N/A
14 - West	03/09/17	<b>No</b>	N/A	N/A	N/A
15	03/09/17	<b>No</b>	N/A	N/A	N/A
15A	03/09/17	<b>No</b>	N/A	N/A	N/A
16 - East	03/09/17	<b>No</b>	N/A	N/A	N/A
16 - West	03/09/17	<b>No</b>	N/A	N/A	N/A
24 - North	03/17/17	<b>No</b>	N/A	N/A	N/A
24 - Middle	03/17/17	<b>No</b>	N/A	N/A	N/A
24 - South	03/17/17	<b>No</b>	N/A	N/A	N/A
34	03/09/17	<b>No</b>	N/A	N/A	N/A
35	03/09/17	<b>No</b>	N/A	N/A	N/A
52	03/09/17	<b>No</b>	N/A	N/A	N/A



**Table 2-12  
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)	None	N/A
15	3/31/17	3 hrs 5 mins
15A	3/31/17	3 hrs 57 mins
16 (E & W)	3/31/17	1 hr 30 mins
24	3/31/17	1 hr 15 mins
34	None	N/A
35	3/31/17	2 hrs 19 mins
52	None	N/A
<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	None
<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

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

There were no dry weather combined sewer overflow during March 2017.

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	1457	1430	608	36	0	37	37	35	34	72	71
2	2940	2745	558	19	1	260	254	37	36	297	290
3	3678	184	0	0	0	47	8	22	0	69	8
4	3453	1707	0	0	0	36	29	12	5	48	34
5	3892	1782	1724	75	2	623	65	28	20	651	85
6	3523	2908	2900	928	6	510	481	519	453	1029	934
7	3456	36	33	0	0	2828	3	218	1	3046	4
8	2671	203	202	135	2	150	13	1427	125	1577	138
<b>Grand Total</b>	<b>25070</b>	<b>10995</b>	<b>6025</b>	<b>1193</b>	<b>11</b>	<b>4491</b>	<b>890</b>	<b>2298</b>	<b>674</b>	<b>6789</b>	<b>1564</b>
% Cleaned/Inspected to Date				<b>20%</b>	<b>&lt;1%</b>	<b>18%</b>	<b>8%</b>			<b>27%</b>	<b>14%</b>

Note: The totals have changed due to information that is more accurate. The Catch Basin Application was deployed in May 2016. We are now just completing a full cleaning cycle of the entire city using the Catch Basin Application. The Engineering/GIS process verifying the information regarding catch basins identified as being removed and new catch basins identified in the field may take a few weeks.

#### 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.

- Netting system at CSO 018 to Anacostia River
- 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>
Netting System CSO 018	3/15/2017	Good	Routine Cleaning	Routine Cleaning	5 pounds
Bar Rack CSO 040	3/1/2017	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	3/16/2017	Good	None	Routine Cleaning	(1)

Notes:

(1) System was designed so that captured solids and floatable 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 Services. 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>	23
<i>Days not Operating</i>	9
<i>Reason not Operating</i>	Maintenance, wind, low water levels, lightning.
<i># Skimmer in Fleet</i>	5 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer (on the last day of the month)
<i>Dates</i>	B28: 3/1 – 3/31 B29: 3/10 – 3/19
<i>Reason</i>	B28: Front assembly catching on hull. B29: Number one screen off track.
<i>Plan to Restore to Service</i>	B28: Sent to contractors for repair, ETR unknown. B29: Returned to operations on 3/20.
<i>Volume Material Collected</i>	10 tons this month. Calendar year to date 50 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.

Status: no activities 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 Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	KW	03/31/17	X			
Bar Racks at Main Storm Pumps (CSO 011)	KW	03/31/17	X			

## **5.2 Rain Data**

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
3/1/2017	0.11	0.12	0.14	0.11	0.02
3/2/2017	0	0	0	0	0.01
3/3/2017	0	0	0	0	0
3/4/2017	0	0	0	0	0
3/5/2017	0	0	0	0	0
3/6/2017	0	0	0	0	0
3/7/2017	0.07	0.08	0.06	0.08	0.07
3/8/2017	0.01	0.01	0.01	0.01	0.01
3/9/2017	0	0	0	0	0
3/10/2017	0.08	0.09	0.10	0.08	0.09
3/11/2017	0	0	0	0	0
3/12/2017	0	0	0	0	0
3/13/2017	0	0	0.01	0.01	0.34
3/14/2017	0.78	0.58	0.73	0.63	0.89
3/15/2017	0	0.01	0.01	0.01	0
3/16/2017	0.16	0.41	0.27	0.18	0
3/17/2017	0	0.01	0	0	0.01
3/18/2017	0.26	0.18	0.25	0.24	0.37
3/19/2017	0.38	0.37	0.37	0.34	0.26
3/20/2017	0	0	0	0	0
3/21/2017	0	0	0.01	0.01	0
3/22/2017	0	0	0	0	0
3/23/2017	0	0	0	0	0
3/24/2017	0.05	0.06	0.06	0.09	0.13
3/25/2017	0	0	0	0	0
3/26/2017	0	0	0	0	0
3/27/2017	0.01	0	0	0	0.01
3/28/2017	0.15	0.13	0.06	0.05	0.02
3/29/2017	0	0	0	0	0
3/30/2017	0	0	0	0	0
3/31/2017	0.99	1.06	0.89	0.96	0.96
TOTAL	3.05	3.11	2.97	2.80	3.19



### **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: January, February, March 2017**

**SCENARIO: PCCM\_QuarterlyReport\_2017Q1, produced April 7, 2017**

NPDES No.	Description	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	12	1.46	33.75	2.81	6.00	0.50
006	Good Hope Road, West of Nichols Ave.,SE	separated					
007	13 <sup>th</sup> Street and Ridge Place,SE	4	0.46	4.00	1.00	1.75	0.25
009	2nd Street, 300 feet North of N Place, SE	5	0.56	8.50	1.70	2.75	0.25
010	O Street SewagePumping Station, SE (pumped Overflow)	4	7.29	2.00	0.50	0.75	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	1	0.83	0.25	0.25	0.25	0.25
011a	South of Main SewagePumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	0	0.00	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	5	0.20	5.75	1.15	3.25	0.25
014	6th and M Streets, SE	4	0.85	8.25	2.06	3.50	0.50
015	9th and M Streets, SE	4	0.03	3.75	0.94	1.75	0.25
016	12th and M Streets, SE	3	0.37	3.00	1.00	1.00	1.00
017	14th and M Streets, SE	5	3.18	17.50	3.50	4.50	1.25
018	Barney Circle andPennsylvania Ave, SE	4	1.64	9.75	2.44	3.50	1.75
019	Northeast Boundary - Swirl Effluent	5	75.25	31.25	6.25	12.75	1.00
019	Northeast Bound. - Swirl Bypass	1	3.88	0.50	0.50	0.50	0.50
	<b>SUBTOTAL</b>		<b>96.03</b>				
<b>Potomac CSOs</b>							
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	3	0.07	4.00	1.33	1.75	1.00
021	Northeast ofRoosevelt Bridge, NW	4	55.64	14.75	3.69	4.25	2.75
022	27th and K Streets, NW	6	0.24	10.00	1.67	3.75	0.25
024	30th and K Streets, NW	4	0.44	6.50	1.63	2.75	0.75
025	31st & K St NW	0	0.00	0.00	0.00	0.00	0.00
026	Wisconsin Avenue andK St., NW	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	3	0.38	3.00	1.00	1.25	0.75
028	36th and M Streets, NW	6	0.36	9.25	1.54	3.25	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	3	0.23	3.25	1.08	1.25	0.75
	<b>SUBTOTAL</b>		<b>57.36</b>				
<b>Rock Creek</b>							
031	Pennsylvania Avenue, East Rock Creek, NW	separated					
032	26th and M Streets, NW	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	3	0.031	4.50	1.50	1.75	1.00
037	Northwest of Belmontand Rock Creek and Potomac Parkway	separated					
038	North of Belmont Road,east of Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00

District of Columbia Water and Sewer Authority

**Combined Sewer System Model Results**  
**Period: January, February, March 2017**

**SCENARIO: PCCM\_QuarterlyReport\_2017Q1, produced April 7, 2017**

NPDES No.	Description	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)
043	Adams Mill Road South of Irving Street, NW	0	0.00	0.00	0.00	0.00	0.00
044	Kenyon Street and Adams Mill Road, NW	0	0.000	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	0	0.000	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and Lamont Street, NW	4	2.65	8.75	2.19	3.25	1.50
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	separated					
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	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	0	0.00	0.00	0.00	0.00	0.00
	<b>SUBTOTAL</b>		<b>2.68</b>				
	<b>TOTAL</b>		<b>156.07</b>				

#N/A

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