

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER, 2015

Prepared By:

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



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

**Monthly Operations Report
For
Combined Sewer System
Month: July 2015**

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Monthly Operations Report for Combined Sewer System
Month: July 2015

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (DC Water) operates a wastewater collection system comprised of separate and combined sewers. Separate storm and sanitary sewers serve parts 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 wastewater treatment plant at Blue Plains (BPWWTP or the Blue Plains WWTP). 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	07/21/15	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/21/15	*			
5	Poplar Point Pumping Station	004	07/21/15	*			
6	Chicago Street and Railroad Ave, SE	005	07/06/15	*			
7	W Street and Railroad Ave, SE	005	07/06/15	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE	007	07/07/15	*			
11	"O" Street Pumping Station	011(a)	07/01/15	*			
12	Storm Pump Discharge at Main Pumping Station	011	07/01/15	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	07/14/15	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	07/14/15	*			
15	South Capitol and E Streets	010	07/20/15	*			
15a	Half and L Streets, SE	010	07/20/15	*			
15b	South Capitol and I Streets	010	07/20/15	*			
15c	South Capitol and I Streets	010	07/20/15	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	N/A				Under Construction ²
17	4 th and N Streets, SE, Both Extended	013	07/20/15	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	07/14/15	*			
18	6 th and M Streets, SE	014	07/07/15	*			
19	9 th and M Streets, SE	015	07/15/15	*			
19a	9 th and M Streets, SE	015	07/16/15	*			
20	12 th and M Streets, SE	016	07/16/15	*			
20a	12 th and M Streets, SE	016	07/13/15	*			
21	14 th and M Streets, SE	017	07/13/15	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	07/17/15	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	07/17/15	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	07/17/15	*			
22d	Kentucky Ave and Potomac Street, SE	018	07/20/15	*			
22e	14 th Street and Kentucky Ave, SE	018	07/20/15	*			
23	Independence Ave, 21 st Street, SE, Extended	019	07/07/15	*			
24a	East Capitol St, west of RFK stadium	019	07/07/15	*			
28	21 st and Constitution Ave, NW	020	07/08/15	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	07/08/15	*			
30	17 th and D Streets, NW	020	07/09/15	*			
31	15 th Street and Pennsylvania Ave, NW	020	07/09/15	*			
33	10 th and F Streets, NW	020	07/08/15	*			
34	23 rd Street, north of Constitution Ave, NW	020	07/08/15	*			
34a	23 rd Street near C Street, NW	020	07/08/15	*			
35	Northeast of Roosevelt Bridge, NW	021	07/09/15	*			
36	27 th and I Streets, NW	022	07/08/15	*			
36a	New Hampshire Ave and Eye Street, NW	022	07/08/15	*			
36b	19 th and L Streets, NW	022, 034	07/07/15	*			
36d	17 th and L Streets, NW	022, 034	07/07/15	*			
36g	18 th and M Streets, NW	022, 034	07/07/15	*			
36h	18 th and M Streets, NW	022, 034	07/07/15	*			
37	27 th and Eye Streets, NW	022	07/08/15	*			
38	29 th and K Streets, NW	024	07/08/15	*			
38a	30 th Street, south of K Street, NW	024	07/07/15	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
39a	30 th and K Streets, NW	024	07/07/15	*			
39b	30 th and K Streets, NW	024	07/07/15	*			
41b	31 st and K Streets, NW	025	07/13/15	*			
41c	31 st and K Streets, NW	025	07/31/15	*			
42	Wisconsin Ave and K Street, NW	026	07/13/15	*			
43	Potomac and Water Streets, NW	027	07/13/15	*			
43a	Potomac and Water Streets, NW	027	07/13/15	*			
44	Water Street, west of Potomac St, NW	027	07/13/15	*			
45	36 th and M Streets, NW	028	07/01/15	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	07/01/15	*			
47	38 th Street and Reservoir Road, NW	029	07/01/15	*			
47a	37 th and T Streets, NW	029	07/01/15	*			
47b	37 th and T Streets, NW	029	07/01/15	*			
47c	38 th and W Streets, NW	029	07/01/15	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	07/13/15	*			
51	N Street Extended, west of 25 th Street, NW	033	07/13/15	*			
52	22 nd Street between M and N Streets, NW	034	07/20/15	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	07/20/15	*			
53	22 nd and M Streets, NW	022, 034	07/20/15	*			
53a	22 nd and M Streets, NW	022, 034	07/13/15	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	07/13/15	*			
53c	L and 22 nd Streets, NW	022	07/17/15	*			
54	23 rd and O Streets, NW	034	07/17/15	*			
55	22 nd Street, south of Q Street, NW	035	07/17/15	*			
55a	22 nd Street, south of Q Street, NW	035	07/17/15	*			
56	23 rd and Massachusetts Ave, NW	036	07/17/15	*			
57	23 rd Street, south of Q Street, NW	036	07/17/15	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	07/16/15	*			
60	Connecticut Ave, east of Rock Creek, NW	039	07/08/15	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	07/08/15	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	07/15/15	*			
63	Harvard Street and Rock Creek Parkway, NW	042	07/15/15	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
64	Adams Mill Road, south of Irving Street, NW	043	07/15/15	*			
65	Kenyon Street and Adams Mill Road, NW	044	07/15/15	*			
65a	Kenyon Street and Adams Mill Road, NW	044	07/15/15	*			
66	Adams Mill Road and Lamont Street, NW	045	07/15/15	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	07/15/15	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	07/15/15	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	07/15/15	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	07/15/15	*			
70i	5 th and Quackenbos Streets, NW	049	07/09/15	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	07/09/15	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	07/08/15	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	07/08/15	*			
73	O Street Extended and Rock Creek Parkway, NW	052	07/20/15	*			
74 ¹	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	07/16/15	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	07/16/15	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	07/16/15	*			
78 ¹	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	07/17/15	*			
84a	26 th and P Streets, NW	060	07/17/15	*			

Notes:

1. Structure no longer functions as a combined sewer overflow regulator structure.
2. Where construction is indicated to be in progress at a regulator, the contractor maintains flow (i.e. prevents DWO) during construction by flow diversion, bypass pumping, fluming, sandbagging or other means.

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
			O K	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	07/21/15	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	07/21/15	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	07/21/15	*		*		*		*		
009	O St. Sewage Pumping Station, SE	07/16/15	*		*		*		*		
010	O St. Sewage Pumping Station, SE	07/16/15	*			*			*		
011	Main Sewage Pumping Station, SE	07/16/15	*			*			*		
011(a)	Main Sewage Pumping Station, SE	07/16/15	*		*		*		*		
012	Main Sewage Pumping Station, SE	07/16/15	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	07/16/15	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	07/16/15	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	07/16/15	*			*			*		
016	12th and O Streets, SE	07/01/15	*		*		*		*		
017	M and Water Street, SE	07/01/15	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	07/16/15	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	07/21/15	*			*			*		
020	Rock Creek Parkway and Independence, NW	07/14/15	*		*		*		*		
021	Rock Creek Parkway and C St., NW	07/14/15	*			*			*		
022	Rock Creek Parkway and G St., NW	07/14/15	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	07/14/15	*		*		*		*		
025	South of 31st and K Streets, NW	07/14/15	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	07/14/15	*		*		*		*		
027	33 rd and Water Sts., NW	07/14/15	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	07/14/15	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	07/14/15	*		*		*		*		
031 ¹	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
			O K	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
032	26th and M Street, NW.	07/13/15	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	07/13/15	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	07/17/15	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	07/17/15	*			*			*		
036	22nd Street, South of Q Street NW.	07/20/15	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	07/16/15	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	07/08/15	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	07/08/15	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	07/21/15	*		*		*		*		
042	Harvard St. and Beach Dr NW.	07/21/15	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	07/21/15	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	07/21/15	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	07/21/15	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	07/15/15	*		*		*		*		
047	Piney Branch Parkway and Ingleside Terrace	07/15/15	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	07/15/15	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	07/15/15	*		*		*		*		
050	Rock Creek Parkway and L St., NW	07/09/15	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	07/16/15	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	07/16/15	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	07/16/15	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	07/16/15	*		*		*		*		
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	07/20/15	*		*		*		*		

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 Service¹</i>
Main	31	3	6	Screen #1	7/26/15-7/30/15	Screen repair	15-266354	Returned to service on 7/30/15
				Screen #2	7/29/15-7/31/15	Screen repair	15-296850	8/31/15
				Screen #4	7/01/15-7/31/15	Screen being rehabbed	15-244329	8/31/15
				Pump #4	7/01/15-7/24/15	Pump being rehabbed	15-194822	Returned to service on 7/24/15
Eastside	4	2	4	Screen #1	7/19/15-7/31/15	Screen being rehabbed	15-279291	8/31/15
				Pump #1	7/01/15-7/31/15	Pump being rehabbed	15-229504	8/31/15
Poplar Point	4	3	3	Screen #2	7/01/15-7/31/15	Screen being rehabbed	15-238976	8/31/15
Potomac	31	4	5	Screen #2	7/07/15-7/09/15	Screen repair	15-275352	Returned to service on 7/09/15
				Screen #2	7/16/15-7/20/15	Screen repair	15-278353	Returned to service on 7/20/15
				Pump #4	7/19/15-7/31/15	Oil pump repair	15-270256	10/31/15
				Pump #5	7/01/15-7/09/15	Pump being rehabbed	15-275346	Returned to service on 7/09/15

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.

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	7/27/15	Group A	15-291848	Add oil, grease bearings and replace packing if needed.
O St	7/29/15	Group A	15-282848	Add oil, grease bearings and replace packing if needed.
Eastside	7/15/15	Group A	15-271042	Add oil, grease bearings and replace packing if needed.
Poplar Point	7/27/15	Group A	15-289131	Add oil, grease bearings and replace packing if needed.
Potomac	7/15/15	Group A	15-271186	Add oil, grease bearings and replace packing if needed.
Rock Creek	7/15/15	Group A	15-273200	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	7/27/15	Group A	15-291904	Add oil, grease bearings and replace packing if needed.
Earle Place	7/22/15	Group A	15-275767	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)¹</i>
Main	2299.84	74.19	N/A	N/A	N/A
O St	140.72	4.54	7/01/2015	27.23	Normal
			7/04/2015	28.63	Normal
			7/08/2015	1.96	Normal
			7/30/2015	36.05	Normal
Eastside	273.31	8.82	N/A	N/A	N/A
Poplar Point	664.83	21.45	N/A	N/A	N/A
Potomac	3510.19	113.23	N/A	N/A	N/A
Rock Creek	317.50	10.24	N/A	N/A	N/A
Upper Anacostia	160.12	5.17	N/A	N/A	N/A
Earle Place	2.06	0.07	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># of Screens</i>	<i># of Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
7/15/15	1, 2 & 3	1, 2 & 3	N/A	N/A		

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

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
7/15/15	Group A	15-273242	

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)¹</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume (mg)²</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
7/01/2015	5	15.5	3.5	12.0	120.0
7/02/2015	3.5	5.5	5.5	0.0	48.0
7/04/2015	3	16.2	16.2	0.0	72.0
7/08/2015	3.5	8.5	8.5	0.0	24.0
7/27/2015	3	7.6	7.6	0.0	72.0
7/30/2015	3	9.4	2.4	7.0	152.0

Notes:

- Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
- Volume approximated due malfunction of ESIRS meter.

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, enterococcus and fecal coliform testing for samples taken in the Swirl Facility mix chamber and at the facility effluent outfall to the Anacostia River.

Taking a grab sample and immediately testing it with a portable analyzing kit obtain test results for residual chlorine. Samples for fecal coliform and enterococcus are taken from the designated sample point, treated with sodium bisulfate 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>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO₃ (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
N/A				Mix Chamber		Mix Chamber	
				Anacostia River ¹		Anacostia River ¹	

Notes:

1. River: River Outfall

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

<i>Date</i>	<i>Flow Compositied Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO₂-N) mg/L</i>	<i>Nitrate (NO₃-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							

2.5 Inflatable Dams

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 2-10. 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	7/31/15	No	N/A	N/A	N/A
14 - West	7/31/15	No	N/A	N/A	N/A
15	7/29/15	No	N/A	N/A	N/A
15A	7/29/15	No	N/A	N/A	N/A
16 - East	7/31/15	No	N/A	N/A	N/A
16 - West	7/31/15	No	N/A	N/A	N/A
24 - North	7/29/15	No	N/A	N/A	N/A
24 - Middle	7/29/15	No	N/A	N/A	N/A
24 - South	7/29/15	No	N/A	N/A	N/A
34	7/30/15	No	N/A	N/A	N/A
35	7/30/15	No	N/A	N/A	N/A
52	7/30/15	No	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	None	N/A
15A	7/30/15	1 hr
16 (E & W)	None	N/A
24	7/02/15 7/30/15	6 mins 9 mins
34	None	N/A
35	7/27/15	3 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 was no dry weather combined sewer overflow during July 2015.

Sanitary Sewer Overflows:

Location	Morrow Drive and 16 th St., NW
Cause	National Park Services (NPS) – during overnight storm a tree fell across an 8-inch sanitary sewer in Rock Creek Park causing seepage from a joint in the pipe to flow into the stream.
Date/ Time Discovered	July 1, 2015 at approximately 9:30 AM
Action Taken	The crew applied quick setting cement to stop the leak.
Date/Time Discharge Ceased	July 1, 2015 at 1:30 PM
Estimated Volume	< 20 gallons.
Did Overflow Reach Receiving water?	Yes.
Action taken to prevent reoccurrence	DC Water has submitted a permit application with NPS to rehabilitate the 8-inch pipe in Rock Creek Park using CIPP lining to prevent a recurrence at this location.

Location	Audubon Terrace and 29 th Street, NW
Cause	Staff from our Sewer Program Management group observed cloudy discharge in stream near 2983 Audubon Terr., NW. Sewer Services crew responded and dye tested sanitary sewer. Dye showed in the creek confirming leakage into the creek.
Date/ Time Discovered	July 13, 2015 at approximately 1:30 PM
Action Taken	Anchor Construction set up by-pass pumping system to redirect the flow around defective pipe.
Date/Time Discharge Ceased	July 13, 2015 at 11:00 PM
Estimated Volume	Undetermined.
Did Overflow Reach Receiving water?	Yes.
Action taken to prevent reoccurrence	DC Water has re-lined the sanitary sewer to prevent a recurrence at this location.

Location	49 th Street and Fulton Street, NW
Cause	Staff from National Park Services (NPS) reported a sanitary discharge from the storm outfall near Battery Kimble Park. DC Water dispatched a sewer maintenance crew to investigate the complaint. The crew found a broken 10-inch sanitary pipe caused by soil erosion leaking into the creek.
Date/ Time Discovered	July 23, 2015 at approximately 1:00 PM
Action Taken	Anchor Construction replaced the broken pipe.
Date/Time Discharge Ceased	July 24, 2015 at 4:30 PM
Estimated Volume	4,000 gallons.
Did Overflow Reach Receiving water?	Yes.
Action taken to prevent reoccurrence	DC Water replaced the defective pipe to prevent a recurrence at this location.

Location	5011A Broad Branch Road, NW
Cause	Unconfirmed sanitary sewer overflow - Staff from Sewer Services responded to an odor complaint from the District's Department of the Environment near storm outfall at 5011A Broad Branch Rd., NW. and collected outfall water sample for laboratory tests.
Date/ Time Discovered	July 9, 2015 at approximately 1:00 PM
Action Taken	No discharge observed – crew collected water sample for testing.
Date/Time Discharge Ceased	July 9, 2015 – sample collected.
Estimated Volume	Undetermined – water sample taken.
Did Overflow Reach Receiving water?	No. Sample result showed high bacteria count.
Action taken to prevent reoccurrence	DC Water developing a systematic approach with dye testing and additional sampling to identify sources.

SOLIDS AND FLOATABLES CONTROL

3.1 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	1338	1338	1338	97	0	117	117	36	36	153	153
2	3320	2961	911	426	6	588	478	34	34	622	512
3	3237	374	0	0	0	132	0	451	0	583	0
4	3002	1683	31	0	0	1900	1040	1039	902	2939	1942
5	3703	1886	1738	396	1	522	369	86	68	608	437
6	3686	3106	3068	1921	139	2086	1696	49	49	2135	1745
7	3144	52	33	33	33	4031	79	176	0	4207	79
8	2512	347	347	347	151	2250	351	51	3	2302	354
Subtotal	23942	11747	7466	3220	330	11626	4130	1922	1092		
DDOT (via VMS) Subtotal											
Grand Total	23942	11747	7466	3220						13549	5222
% Cleaned/Inspected to Date				43%	4%					56%	44%

3.2 BMP Demonstration Projects

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 3-2
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 (CY)</i>
Netting System CSO 018	7/29/2015	Good	Replace nets.	Nets replaced.	400 pounds.
Bar Rack CSO 040	7/8/2015	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	7/21/2015	Good	None	Routine Cleaning	(1)

Notes:

(1) System is designed such that captured solids and floatable are conveyed to Blue Plains for treatment.

3.3 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 3-3
Anacostia River Floating Debris Removal Program – Summary**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	22
<i>Days not Operating</i>	15
<i>Reason not Operating</i>	Offloading conveyor removed for repair (12). Fleet troubleshooting and maintenance (3).
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	2 Skimmers
<i>Dates</i>	B28: 7/1 - 7/31 B29: 7/24 - 7/31 B32: 7/1 - 7/23
<i>Reason</i>	B28: no power in reverse. B29: wing screen loose and no. 1 conveyor rods sticking out. B32: wing screen jammed and prop motor leaking.
<i>Plan to Restore to Service</i>	B28: send to contractor for repairs. ETR unknown. B29: repair no 1 conveyor and tighten screens. ETR Aug 2015. B32: returned to service on 7/24.
<i>Volume Material Collected</i>	20 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

3.4 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.

4. MONITORING

4.1 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 4-1
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	7/29/15	X			
Bar Racks at Main Storm Pumps (CSO 011)	KW	7/27/15	X			

4.2 Rain Data

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

Date	Brentwood Pumping	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
7/1/2015	0.05	0.99	1.08	0	1.30
7/2/2015	0.02	0.22	0.06	0	0.02
7/3/2015	0.02	0	0.03	0	0.03
7/4/2015	1.21	0.45	1.72	0	0.85
7/5/2015	0.08	0	0	0	0
7/6/2015	0.03	0.02	0.08	0	0.02
7/7/2015	0.02	0	0	0	0
7/8/2015	0.24	0.36	0.60	0	1.12
7/9/2015	0.04	0.04	0.19	0	0.03
7/10/2015	0	0	0	0.04	0
7/11/2015	0.01	0.02	0.03	0.03	0.09
7/12/2015	0	0	0	0	0
7/13/2015	0.01	0.01	0.03	0.02	0.03
7/14/2015	0	0	0	0	0
7/15/2015	0.05	0.20	0.06	0.01	0.01
7/16/2015	0	0	0	0	0
7/17/2015	0	0	0	0	0
7/18/2015	0.04	0.02	0.03	0.09	0.04
7/19/2015	0	0	0	0	0
7/20/2015	0	0	0	0	0
7/21/2015	0	0.03	0	0.02	0
7/22/2015	0	0	0	0	0
7/23/2015	0	0	0	0	0
7/24/2015	0	0	0	0	0
7/25/2015	0	0	0	0	0
7/26/2015	0	0	0	0	0
7/27/2015	0.30	0.35	0.21	1.07	0.94
7/28/2015	0	0.03	0.01	0.06	0
7/29/2015	0	0	0	0	0
7/30/2015	0.55	0.35	0.47	0.26	0.53
7/31/2015	0	0	0	0	0
TOTAL	2.67	3.09	4.60	1.60	5.02



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

**Monthly Operations Report
For
Combined Sewer System
Month: August 2015**

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: August 2015

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (DC Water) operates a wastewater collection system comprised of separate and combined sewers. Separate storm and sanitary sewers serve parts 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 wastewater treatment plant at Blue Plains (BPWWTP or the Blue Plains WWTP). 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	8/12/2015	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	8/12/2015	*			
5	Poplar Point Pumping Station	004	8/26/2015	*			
6	Chicago Street and Railroad Ave, SE	005	8/10/2015	*			
7	W Street and Railroad Ave, SE	005	8/10/2015	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE	007	8/4/2015	*			
11	"O" Street Pumping Station	011(a)	8/26/2015	*			
12	Storm Pump Discharge at Main Pumping Station	011	8/3/2015	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	8/19/2015	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	8/19/2015	*			
15	South Capitol and E Streets	010	8/21/2015	*			
15a	Half and L Streets, SE	010	8/21/2015	*			
15b	South Capitol and I Streets	010	8/3/2015	*			
15c	South Capitol and I Streets	010	8/3/2015	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	N/A				Under Construction ²
17	4 th and N Streets, SE, Both Extended	013	8/21/2015	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	8/21/2015	*			
18	6 th and M Streets, SE	014	8/3/2015	*			
19	9 th and M Streets, SE	015	8/4/2015	*			
19a	9 th and M Streets, SE	015	8/4/2015	*			
20	12 th and M Streets, SE	016	8/4/2015	*			
20a	12 th and M Streets, SE	016	8/4/2015	*			
21	14 th and M Streets, SE	017	8/7/2015	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	8/12/2015	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	8/12/2015	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	8/12/2015	*			
22d	Kentucky Ave and Potomac Street, SE	018	8/12/2015	*			
22e	14 th Street and Kentucky Ave, SE	018	8/12/2015	*			
23	Independence Ave, 21 st Street, SE, Extended	019	8/14/2015	*			
24a	East Capitol St, west of RFK stadium	019	8/14/2015	*			
28	21 st and Constitution Ave, NW	020	8/11/2015	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	8/11/2015	*			
30	17 th and D Streets, NW	020	8/4/2015	*			
31	15 th Street and Pennsylvania Ave, NW	020	8/4/2015	*			
33	10 th and F Streets, NW	020	8/4/2015	*			
34	23 rd Street, north of Constitution Ave, NW	020	8/11/2015	*			
34a	23 rd Street near C Street, NW	020	8/11/2015	*			
35	Northeast of Roosevelt Bridge, NW	021	8/19/2015	*			
36	27 th and I Streets, NW	022	8/11/2015	*			
36a	New Hampshire Ave and Eye Street, NW	022	8/11/2015	*			
36b	19 th and L Streets, NW	022, 034	8/11/2015	*			
36d	17 th and L Streets, NW	022, 034	8/11/2015	*			
36g	18 th and M Streets, NW	022, 034	8/11/2015	*			
36h	18 th and M Streets, NW	022, 034	8/11/2015	*			
37	27 th and Eye Streets, NW	022	8/11/2015	*			
38	29 th and K Streets, NW	024	8/4/2015	*			
38a	30 th Street, south of K Street, NW	024	8/4/2015	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
39a	30 th and K Streets, NW	024	8/4/2015	*			
39b	30 th and K Streets, NW	024	8/11/2015	*			
41b	31 st and K Streets, NW	025	8/10/2015	*			
41c	31 st and K Streets, NW	025	8/10/2015	*			
42	Wisconsin Ave and K Street, NW	026	8/10/2015	*			
43	Potomac and Water Streets, NW	027	8/10/2015	*			
43a	Potomac and Water Streets, NW	027	8/10/2015	*			
44	Water Street, west of Potomac St, NW	027	8/10/2015	*			
45	36 th and M Streets, NW	028	8/3/2015	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	8/11/2015	*			
47	38 th Street and Reservoir Road, NW	029	8/11/2015	*			
47a	37 th and T Streets, NW	029	8/11/2015	*			
47b	37 th and T Streets, NW	029	8/11/2015	*			
47c	38 th and W Streets, NW	029	8/11/2015	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	8/18/2015	*			
51	N Street Extended, west of 25 th Street, NW	033	8/18/2015	*			
52	22 nd Street between M and N Streets, NW	034	8/21/2015	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	8/21/2015	*			
53	22 nd and M Streets, NW	022, 034	8/21/2015	*			
53a	22 nd and M Streets, NW	022, 034	8/21/2015	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	8/11/2015	*			
53c	L and 22 nd Streets, NW	022	8/11/2015	*			
54	23 rd and O Streets, NW	034	8/14/2015	*			
55	22 nd Street, south of Q Street, NW	035	8/14/2015	*			
55a	22 nd Street, south of Q Street, NW	035	8/14/2015	*			
56	23 rd and Massachusetts Ave, NW	036	8/14/2015	*			
57	23 rd Street, south of Q Street, NW	036	8/14/2015	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	8/7/2015	*			
60	Connecticut Ave, east of Rock Creek, NW	039	8/7/2015	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	8/7/2015	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	8/17/2015	*			
63	Harvard Street and Rock Creek Parkway, NW	042	8/17/2015	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
64	Adams Mill Road, south of Irving Street, NW	043	8/17/2015	*			
65	Kenyon Street and Adams Mill Road, NW	044	8/17/2015	*			
65a	Kenyon Street and Adams Mill Road, NW	044	8/17/2015	*			
66	Adams Mill Road and Lamont Street, NW	045	8/17/2015	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	8/17/2015	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	8/17/2015	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	8/17/2015	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	8/17/2015	*			
70i	5 th and Quackenbos Streets, NW	049	8/3/2015	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	8/19/2015	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	8/10/2015	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	8/10/2015	*			
73	O Street Extended and Rock Creek Parkway, NW	052	8/10/2015	*			
74 ¹	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	8/19/2015	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	8/19/2015	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	8/7/2015	*			
78 ¹	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	8/10/2015	*			
84a	26 th and P Streets, NW	060	8/10/2015	*			

Notes:

1. Structure no longer functions as a combined sewer overflow regulator structure.
2. Where construction is indicated to be in progress at a regulator, the contractor maintains flow (i.e. prevents DWO) during construction by flow diversion, bypass pumping, fluming, sandbagging or other means.

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
			O K	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	8/12/2015	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	8/20/2015	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	8/20/2015	*		*		*		*		
009	O St. Sewage Pumping Station, SE	8/13/2015	*		*		*		*		
010	O St. Sewage Pumping Station, SE	8/13/2015	*			*			*		
011	Main Sewage Pumping Station, SE	8/13/2015	*			*			*		
011(a)	Main Sewage Pumping Station, SE	8/13/2015	*		*		*		*		
012	Main Sewage Pumping Station, SE	8/13/2015	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	8/13/2015	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	8/3/2015	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	8/4/2015	*			*			*		
016	12th and O Streets, SE	8/3/2015	*		*		*		*		
017	M and Water Street, SE	8/21/2015	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	8/21/2015	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	8/20/2015	*			*			*		
020	Rock Creek Parkway and Independence, NW	8/6/2015	*		*		*		*		
021	Rock Creek Parkway and C St., NW	8/6/2015	*			*			*		
022	Rock Creek Parkway and G St., NW	8/6/2015	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	8/6/2015	*		*		*		*		
025	South of 31st and K Streets, NW	8/6/2015	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	8/6/2015	*		*		*		*		
027	33 rd and Water Sts., NW	8/6/2015	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	8/3/2015	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	8/3/2015	*		*		*		*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	8/18/2015	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			O K	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
033	Across street from St. Francis Jr. High and aligned with N St., NW.	8/18/2015	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	8/20/2015	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	8/20/2015	*			*			*		
036	22nd Street, South of Q Street NW.	8/3/2015	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	8/7/2015	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	8/7/2015	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	8/7/2015	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	8/13/2015	*		*		*		*		
042	Harvard St. and Beach Dr NW.	8/13/2015	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	8/13/2015	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	8/13/2015	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	8/13/2015	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	8/17/2015	*		*		*		*		
047	Piney Branch Parkway and Ingleside Terrace	8/17/2015	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	8/17/2015	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	8/17/2015	*		*		*		*		
050	Rock Creek Parkway and L St., NW	8/19/2015	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	8/20/2015	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	8/20/2015	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	8/19/2015	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	8/19/2015	*		*		*		*		
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	8/13/2015	*		*		*		*		

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 Service¹</i>
Main	31	3	6	Screen #1	8/11/15-8/31/15	Screen repair	15-294442	9/30/15
				Screen #2	8/01/15-8/20/15	Screen repair	15-296850	Returned to service on 8/20/15
				Screen #4	8/01/15-8/31/15	Screen repair	15-322955	10/15/15
Eastside	4	2	4	Screen #1	8/01/15-8/31/15	Screen repair	15-279291	9/30/15
				Pump #1	8/01/15-8/31/15	Pump being rehabbed	15-372815	9/30/15
Poplar Point	4	3	3	Screen #2	8/01/15-8/31/15	Screen repair	15-249437	9/30/15
Potomac	31	4	5	Screen #4	8/24/15-8/28/15	Shear pin replacement	15-321615	Returned to service on 8/28/15
				Pump #4	8/01/15-8/31/15	Oil pump repair	15-270256	10/31/15
				Pump #5	8/14/15-8/31/15	72" force main closure	15-309749	10/31/15

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.

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	8/24/15	Group A	15-318495	Add oil, grease bearings and replace packing if needed.
O St	8/31/15	Group A	15-311063	Add oil, grease bearings and replace packing if needed.
Eastside	8/17/15	Group A	15-297466	Add oil, grease bearings and replace packing if needed.
Poplar Point	8/06/15	Group A	15-289131	Add oil, grease bearings and replace packing if needed.
Potomac	8/17/15	Group A	15-297789	Add oil, grease bearings and replace packing if needed.
Rock Creek	8/17/15	Group A	15-299393	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	8/06/15	Group A	15-291904	Add oil, grease bearings and replace packing if needed.
Earl Place	8/24/15	Group A	15-304666	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)¹</i>
Main	2217.24	71.52	N/A	N/A	N/A
O St	133.65	4.31	8/10/2015	6.16	Normal
			8/24/2015	12.88	Normal
Eastside	139.31	4.49	N/A	N/A	N/A
Poplar Point	505.66	16.31	N/A	N/A	N/A
Potomac	3087.30	99.59	N/A	N/A	N/A
Rock Creek	91.94	2.97	N/A	N/A	N/A
Upper Anacostia	81.92	2.64	N/A	N/A	N/A
Earle Place	0.14	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># of Screens</i>	<i># of Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
8/17/15	1, 2 & 3	1, 2 & 3	N/A	N/A		

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

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
8/17/15	Group A	15-299471	

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)¹</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume (mg)²</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
8/10/2015	2.5	7.9	7.9	0.0	72.0
8/24/2015	3.5	8.0	8.0	0.0	72.0
8/25/2015	2	2.5	2.5	0.0	36.0

Notes:

- Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
- Volume approximated due malfunction of ESIRS meter.

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, enterococcus and fecal coliform testing for samples taken in the Swirl Facility mix chamber and at the facility effluent outfall to the Anacostia River.

Taking a grab sample and immediately testing it with a portable analyzing kit obtain test results for residual chlorine. Samples for fecal coliform and enterococcus are taken from the designated sample point, treated with sodium bisulfate 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>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO₃ (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
N/A				Mix Chamber		Mix Chamber	
				Anacostia River ¹		Anacostia River ¹	

Notes:

1. River: River Outfall

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

<i>Date</i>	<i>Flow Compositied Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO₂-N) mg/L</i>	<i>Nitrate (NO₃-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							

2.5 Inflatable Dams

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 2-10. 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	8/21/15	No	N/A	N/A	N/A
14 - West	8/21/15	No	N/A	N/A	N/A
15	8/21/15	No	N/A	N/A	N/A
15A	8/21/15	No	N/A	N/A	N/A
16 - East	8/21/15	No	N/A	N/A	N/A
16 - West	8/21/15	No	N/A	N/A	N/A
24 - North	8/24/15	No	N/A	N/A	N/A
24 - Middle	8/24/15	No	N/A	N/A	N/A
24 - South	8/24/15	No	N/A	N/A	N/A
34	8/24/15	No	N/A	N/A	N/A
35	8/24/15	No	N/A	N/A	N/A
52	8/21/15	No	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>8/24/2015</i>	<i>4 mins</i>
34	<i>None</i>	<i>N/A</i>
35	<i>8/24/2015</i>	<i>14 mins</i>
	<i>8/25/2015</i>	<i>2 mins</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	<i>None</i>	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	<i>None</i>	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	<i>None</i>	<i>None</i>
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No. 1	<i>Operational</i>	<i>Open</i>
Outfall Sewer Control Gate No.2	<i>Operational</i>	This structure has been bulk headed. Overflows are no longer possible

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during August 2015.

SOLIDS AND FLOATABLES CONTROL

3.1 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	1338	1338	1338	99	0	153	153	35	35	188	188
2	3320	2961	911	432	8	622	512	13	13	635	525
3	3237	374	0	0	0	583	0	1362	0	1945	0
4	3002	1683	31	0	0	2939	1942	44	7	2983	1949
5	3703	1886	1738	418	1	608	437	22	22	630	459
6	3686	3106	3068	1936	142	2135	1745	15	15	2150	1760
7	3144	52	33	33	33	4207	79	10	0	4217	79
8	2512	347	347	347	151	2302	354	22	0	2324	354
Subtotal	23942	11747	7466	3265	335	13549	5222	1523	92	15072	5314
DDOT (via VMS) Subtotal											
Grand Total	23942	11747	7466	3265							
% Cleaned/Inspected to Date				44%	4%					63%	45%

3.2 BMP Demonstration Projects

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 3-2
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 (CY)</i>
Netting System CSO 018	8/21/2015	Good	Routine cleaning	Routine cleaning	None.
Bar Rack CSO 040	8/7/2015	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	8/13/2015	Good	None	Routine Cleaning	(1)

Notes:

(1) System is designed such that captured solids and floatable are conveyed to Blue Plains for treatment.

3.3 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 3-3
Anacostia River Floating Debris Removal Program – Summary**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	21
<i>Days not Operating</i>	5
<i>Reason not Operating</i>	Environmental (3). Fleet troubleshooting and maintenance (2).
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	2 Skimmers.
<i>Dates</i>	B28: 8/1 - 8/31 B29: 8/1 - 8/4, 8/19 - 8/31
<i>Reason</i>	B28: Front assembly catching on hull. B29: Wing screens loose and hydraulic oil leaks.
<i>Plan to Restore to Service</i>	B28: Send to contractor. ETR unknown. B29: Waiting for parts ETR September 2015.
<i>Volume Material Collected</i>	30 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

3.4 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.

4. MONITORING

4.1 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 4-1
Bar Racks at Main & O Street Pumping Stations**

Inspector: Wayne Reed

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)	WR w/ O'Brien & Gere	8/05/15	X			
Bar Racks at Main Storm Pumps (CSO 011)	WR	8/05/15	X			

4.2 Rain Data

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

Date	Brentwood Pumping	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
8/1/2015	0	0	0.01	0	0
8/2/2015	0	0	0	0	0
8/3/2015	0	0	0	0	0
8/4/2015	0	0	0	0	0.04
8/5/2015	0	0	0	0	0
8/6/2015	0	0	0	0	0
8/7/2015	0.01	0.02	0.02	0.03	0.05
8/8/2015	0	0	0	0	0
8/9/2015	0	0	0	0	0
8/10/2015	0.59	0.64	0.13	0.59	0.15
8/11/2015	0.18	0.20	0.26	0.18	0.34
8/12/2015	0	0	0	0	0
8/13/2015	0	0	0	0	0
8/14/2015	0	0	0	0	0
8/15/2015	0	0	0	0	0
8/16/2015	0	0	0	0	0
8/17/2015	0	0	0	0	0
8/18/2015	0.02	0	0	0	0
8/19/2015	0	0	0	0	0
8/20/2015	0.07	0.09	0.13	0.04	0.17
8/21/2015	0	0	0	0	0
8/22/2015	0	0	0	0	0
8/23/2015	0	0	0	0	0
8/24/2015	0.39	0.33	0.25	0.70	0.41
8/25/2015	0	0.05	0	0.03	0
8/26/2015	0	0	0	0	0
8/27/2015	0	0	0	0	0
8/28/2015	0	0	0	0	0
8/29/2015	0	0	0	0	0
8/30/2015	0	0	0	0	0
8/31/2015	0	0	0	0	0
TOTAL	1.26	1.33	0.80	1.57	1.16



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

**Monthly Operations Report
For
Combined Sewer System
Month: September 2015**

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: September 2015

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (DC Water) operates a wastewater collection system comprised of separate and combined sewers. Separate storm and sanitary sewers serve parts 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 wastewater treatment plant at Blue Plains (BPWWTP or the Blue Plains WWTP). 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	9/15/2015	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	9/15/2015	*			
5	Poplar Point Pumping Station	004	9/24/2015	*			
6	Chicago Street and Railroad Ave, SE	005	9/1/2015	*			
7	W Street and Railroad Ave, SE	005	9/1/2015	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE	007	9/1/2015	*			
11	"O" Street Pumping Station	011(a)	9/22/2015	*			
12	Storm Pump Discharge at Main Pumping Station	011	9/22/2015	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	9/18/2015	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	9/18/2015	*			
15	South Capitol and E Streets	010	9/18/2015	*			
15a	Half and L Streets, SE	010	9/18/2015	*			
15b	South Capitol and I Streets	010	9/9/2015	*			
15c	South Capitol and I Streets	010	9/9/2015	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
16	North of Main Sewage Pumping Station	012	N/A				Under Construction ²
17	4 th and N Streets, SE, Both Extended	013	9/8/2015	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	9/8/2015	*			
18	6 th and M Streets, SE	014	9/22/2015	*			
19	9 th and M Streets, SE	015	9/1/2015	*			
19a	9 th and M Streets, SE	015	9/1/2015	*			
20	12 th and M Streets, SE	016	9/2/2015	*			
20a	12 th and M Streets, SE	016	9/2/2015	*			
21	14 th and M Streets, SE	017	9/2/2015	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	9/2/2015	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	9/2/2015	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	9/2/2015	*			
22d	Kentucky Ave and Potomac Street, SE	018	9/2/2015	*			
22e	14 th Street and Kentucky Ave, SE	018	9/2/2015	*			
23	Independence Ave, 21 st Street, SE, Extended	019	9/8/2015	*			
24a	East Capitol St, west of RFK stadium	019	9/8/2015	*			
28	21 st and Constitution Ave, NW	020	9/15/2015	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	9/15/2015	*			
30	17 th and D Streets, NW	020	9/2/2015	*			
31	15 th Street and Pennsylvania Ave, NW	020	9/2/2015	*			
33	10 th and F Streets, NW	020	9/2/2015	*			
34	23 rd Street, north of Constitution Ave, NW	020	9/15/2015	*			
34a	23 rd Street near C Street, NW	020	9/15/2015	*			
35	Northeast of Roosevelt Bridge, NW	021	9/15/2015	*			
36	27 th and I Streets, NW	022	9/8/2015	*			
36a	New Hampshire Ave and Eye Street, NW	022	9/8/2015	*			
36b	19 th and L Streets, NW	022, 034	9/11/2015	*			
36d	17 th and L Streets, NW	022, 034	9/11/2015	*			
36g	18 th and M Streets, NW	022, 034	9/11/2015	*			
36h	18 th and M Streets, NW	022, 034	9/8/2015	*			
37	27 th and Eye Streets, NW	022	9/4/2015	*			
38	29 th and K Streets, NW	024	9/4/2015	*			
38a	30 th Street, south of K Street, NW	024	9/4/2015	*			
39a	30 th and K Streets, NW	024	9/4/2015	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
39b	30 th and K Streets, NW	024	9/2/2015	*			
41b	31 st and K Streets, NW	025	9/4/2015	*			
41c	31 st and K Streets, NW	025	9/4/2015	*			
42	Wisconsin Ave and K Street, NW	026	9/8/2015	*			
43	Potomac and Water Streets, NW	027	9/8/2015	*			
43a	Potomac and Water Streets, NW	027	9/8/2015	*			
44	Water Street, west of Potomac St, NW	027	9/8/2015	*			
45	36 th and M Streets, NW	028	9/1/2015	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	9/1/2015	*			
47	38 th Street and Reservoir Road, NW	029	9/1/2015	*			
47a	37 th and T Streets, NW	029	9/1/2015	*			
47b	37 th and T Streets, NW	029	9/1/2015	*			
47c	38 th and W Streets, NW	029	9/1/2015	*			
49 ¹	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	9/11/2015	*			
51	N Street Extended, west of 25 th Street, NW	033	9/11/2015	*			
52	22 nd Street between M and N Streets, NW	034	9/16/2015	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	9/16/2015	*			
53	22 nd and M Streets, NW	022, 034	9/16/2015	*			
53a	22 nd and M Streets, NW	022, 034	9/16/2015	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	9/16/2015	*			
53c	L and 22 nd Streets, NW	022	9/16/2015	*			
54	23 rd and O Streets, NW	034	9/14/2015	*			
55	22 nd Street, south of Q Street, NW	035	9/14/2015	*			
55a	22 nd Street, south of Q Street, NW	035	9/14/2015	*			
56	23 rd and Massachusetts Ave, NW	036	9/14/2015	*			
57	23 rd Street, south of Q Street, NW	036	9/14/2015	*			
58 ¹	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	9/2/2015	*			
60	Connecticut Ave, east of Rock Creek, NW	039	9/2/2015	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	9/2/2015	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	9/9/2015	*			
63	Harvard Street and Rock Creek Parkway, NW	042	9/9/2015	*			
64	Adams Mill Road, south of Irving Street, NW	043	9/9/2015	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
65	Kenyon Street and Adams Mill Road, NW	044	9/9/2015	*			
65a	Kenyon Street and Adams Mill Road, NW	044	9/9/2015	*			
66	Adams Mill Road and Lamont Street, NW	045	9/9/2015	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	9/9/2015	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	9/9/2015	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	9/9/2015	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	9/9/2015	*			
70i	5 th and Quackenbos Streets, NW	049	9/1/2015	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	9/14/2015	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	9/14/2015	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	9/14/2015	*			
73	O Street Extended and Rock Creek Parkway, NW	052	9/14/2015	*			
74 ¹	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	9/16/2015	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	9/16/2015	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	9/16/2015	*			
78 ¹	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 ¹	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 th and P Streets, NW	060	9/14/2015	*			
84a	26 th and P Streets, NW	060	9/14/2015	*			

Notes:

1. Structure no longer functions as a combined sewer overflow regulator structure.
2. Where construction is indicated to be in progress at a regulator, the contractor maintains flow (i.e. prevents DWO) during construction by flow diversion, bypass pumping, fluming, sandbagging or other means.

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
			O K	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	9/15/2015	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	9/22/2015	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	9/22/2015	*		*		*		*		
009	O St. Sewage Pumping Station, SE	9/22/2015	*		*		*		*		
010	O St. Sewage Pumping Station, SE	9/22/2015	*			*			*		
011	Main Sewage Pumping Station, SE	9/22/2015	*			*			*		
011(a)	Main Sewage Pumping Station, SE	9/22/2015	*		*		*		*		
012	Main Sewage Pumping Station, SE	9/22/2015	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	9/22/2015	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	9/22/2015	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	9/22/2015	*			*			*		
016	12th and O Streets, SE	9/21/2015	*		*		*		*		
017	M and Water Street, SE	9/21/2015	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	9/21/2015	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	9/21/2015	*			*			*		
020	Rock Creek Parkway and Independence, NW	9/4/2015	*		*		*		*		
021	Rock Creek Parkway and C St., NW	9/4/2015	*			*			*		
022	Rock Creek Parkway and G St., NW	9/4/2015	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	9/4/2015	*		*		*		*		
025	South of 31st and K Streets, NW	9/3/2015	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	9/3/2015	*		*		*		*		
027	33 rd and Water Sts., NW	9/3/2015	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	9/3/2015	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	9/3/2015	*		*		*		*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	9/11/2015	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	9/11/2015	*		*		*		*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			O K	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
034	Just west of St. Francis Jr. High and north of N St., NW	9/14/2015	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	9/14/2015	*			*			*		
036	22nd Street, South of Q Street NW.	9/21/2015	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	9/2/2015	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	9/2/2015	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	9/2/2015	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	9/10/2015	*		*		*		*		
042	Harvard St. and Beach Dr NW.	9/10/2015	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	9/10/2015	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	9/10/2015	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	9/10/2015	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	9/9/2015	*		*		*		*		
047	Piney Branch Parkway and Ingleside Terrace	9/9/2015	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	9/9/2015	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	9/9/2015	*		*		*		*		
050	Rock Creek Parkway and L St., NW	9/14/2015	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	9/10/2015	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	9/10/2015	*		*		*		*		
053 ¹	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	9/16/2015	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	9/16/2015	*		*		*		*		
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	9/21/2015	*		*		*		*		

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 Service¹</i>
Main	30	3	6	Screen #1	9/01/15-9/30/15	Screen repair	15-294442	10/31/15
				Screen #4	9/01/15-9/29/15	Screen repair	15-322955	Returned to service on 9/29/15
Eastside	4	2	4	Screen #1	9/01/15-9/30/15	Screen repair	15-279291	10/31/15
				Pump #1	9/01/15-9/28/15	Check valve repair	15-372815	Returned to service on 9/28/15
Poplar Point	4	3	3	Screen #2	9/01/15-9/30/15	Screen repair	15-249437	10/31/15
Potomac	30	4	5	Pump #4	9/01/15-9/30/15	Oil pump repair	15-270256	10/31/15
				Pump #5	9/01/15-9/30/15	72" force main closure	15-309749	10/31/15

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.

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

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
Main	9/28/15	Group A	15-382308	Add oil, grease bearings and replace packing if needed.
O St	9/30/15	Group A	15-344644	Add oil, grease bearings and replace packing if needed.
Eastside	9/17/15	Group A	15-330429	Add oil, grease bearings and replace packing if needed.
Poplar Point	9/28/15	Group A	15-379034	Add oil, grease bearings and replace packing if needed.
Potomac	9/17/15	Group A	15-332398	Add oil, grease bearings and replace packing if needed.
Rock Creek	9/17/15	Group A	15-344714	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	9/28/15	Group A	15-382364	Add oil, grease bearings and replace packing if needed.
Earl Place	9/24/15	Group A	15-330569	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)¹</i>
Main	2,147.07	71.57	N/A	N/A	N/A
O St	125.16	4.17	9/29/15	59.29	Normal
			9/30/15	18.41	Normal
Eastside	122.71	4.09	N/A	N/A	N/A
Poplar Point	489.17	16.31	N/A	N/A	N/A
Potomac	2,923.55	97.45	N/A	N/A	N/A
Rock Creek	134.68	4.49	N/A	N/A	N/A
Upper Anacostia	78.90	2.63	N/A	N/A	N/A
Earl Place	0.13	0.01	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># of Screens</i>	<i># of Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
9/17/15	1, 2 & 3	1, 2 & 3	N/A	N/A		

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

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Work Order Number</i>	<i>Comments</i>
9/17/15	Group A	15-344984	

Notes:

1. 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)¹</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume (mg)²</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
9/29/15	5	23.6	3.2	20.5	36
9/30/15	6	2.0	2.0	0	32

Notes:

1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
2. Volume approximated due malfunction of ESIRS meter.

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, enterococcus and fecal coliform testing for samples taken in the Swirl Facility mix chamber and at the facility effluent outfall to the Anacostia River.

Taking a grab sample and immediately testing it with a portable analyzing kit obtain test results for residual chlorine. Samples for fecal coliform and enterococcus are taken from the designated sample point, treated with sodium bisulfate 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>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO₃ (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
9/29/15	Yes	10.5	0	Mix Chamber	0.2	Mix Chamber	310,000
				Anacostia River ¹	0.0	Anacostia River ¹	2,100

Notes:

1. River: River Outfall

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

<i>Date</i>	<i>Flow Compositied Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO₂-N) mg/L</i>	<i>Nitrate (NO₃-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>
9/29/15	72.0	0.03	0.66	4.80	5.49	0.44	11.6

2.5 Inflatable Dams

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 2-10. 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	9/29/15	No	N/A	N/A	N/A
14 - West	9/29/15	No	N/A	N/A	N/A
15	9/29/15	No	N/A	N/A	N/A
15A	9/29/15	No	N/A	N/A	N/A
16 - East	9/29/15	No	N/A	N/A	N/A
16 - West	9/29/15	No	N/A	N/A	N/A
24 - North	9/29/15	No	N/A	N/A	N/A
24 - Middle	9/29/15	No	N/A	N/A	N/A
24 - South	9/29/15	No	N/A	N/A	N/A
34	9/29/15	No	N/A	N/A	N/A
35	9/29/15	No	N/A	N/A	N/A
52	9/29/15	No	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	9/29/15	53 mins
15A	9/29/15	1 hr
16 (E & W)	None	N/A
24	9/29/15	24 mins
34	9/29/15	51 mins
35	9/29/15	40 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 was no dry weather combined sewer overflow during September 2015.

Sanitary Sewer Overflows:

Location	4705 6 th Place, NE
Cause	DC Water received a complaint from the homeowner at 4705 6 th Place, NE regarding a sewer backup in their home. The backup was caused by a buildup of roots in the 10-inch public sewer.
Date/ Time Discovered	September 10, 2015 at approximately 5:14 PM
Action Taken	The crew was able to clear a blockage in the 10-inch public sewer that serves the property to relieve the resident.
Date/Time Discharge Ceased	September 10, 2015 at 8:00 PM
Estimated Volume	10 gallons.
Did Overflow Reach Receiving water?	No.
Action taken to prevent reoccurrence	DC Water will apply a chemical agent to treat roots and inspect the pipe by closed circuit television to assess the condition of the 10-inch line more thoroughly to determine whether additional steps may be needed to prevent a recurrence.

SOLIDS AND FLOATABLES CONTROL

3.1 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	1338	1338	1338	500	447	188	188	655	655	843	843
2	3320	2961	911	460	11	635	525	376	376	1011	1001
3	3237	374	0	0	0	1945	0	893	0	2838	0
4	3002	1683	31	31	31	2983	1949	498	73	3481	2022
5	3703	1886	1738	689	85	630	459	424	271	1054	730
6	3686	3106	3068	2260	207	2150	1760	343	324	2493	2084
7	3144	52	33	33	33	4217	79	79	7	4296	86
8	2512	347	347	347	151	2324	354	7	0	2331	354
Subtotal	23942	11747	7466	4007	965	15072	5314	3275	1706	18347	7120
DDOT (via VMS) Subtotal											
Grand Total	23942	11747	7466								
% Cleaned/Inspected to Date				54%	13%					77%	61%

3.2 BMP Demonstration Projects

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 3-2
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 (CY)</i>
Netting System CSO 018	9/21/2015	Good	Routine cleaning	Routine cleaning	None.
Bar Rack CSO 040	9/10/2015	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	9/10/2015	Good	None	Routine Cleaning	(1)

Notes:

(1) System is designed such that captured solids and floatable are conveyed to Blue Plains for treatment.

3.3 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 3-3
Anacostia River Floating Debris Removal Program – Summary**

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	21
<i>Days not Operating</i>	2
<i>Reason not Operating</i>	Environmental
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	2 Skimmers.
<i>Dates</i>	B28: 9/1 - 9/30 B29: 9/1 - 9/24
<i>Reason</i>	B28: front assembly catching on hull B29: hydraulic oil leaks
<i>Plan to Restore to Service</i>	B28: ETR unknown B29: returned to service on 9/25
<i>Volume Material Collected</i>	20 tons
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

3.4 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.

4. MONITORING

4.1 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 4-1
Bar Racks at Main & O Street Pumping Stations**

Inspector: Wayne Reed

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)	WR	9/23/15	X			
Bar Racks at Main Storm Pumps (CSO 011)	WR	9/23/15	X			

4.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station	National Airport
9/1/2015	0	0	0	0	0
9/2/2015	0	0	0	0	0
9/3/2015	0.02	0	0	0	0
9/4/2015	0	0	0	0	0
9/5/2015	0	0	0	0	0
9/6/2015	0	0	0	0	0
9/7/2015	0	0	0	0	0
9/8/2015	0	0	0	0	0
9/9/2015	0	0	0	0	0
9/10/2015	0.11	0.10	0.08	0.13	0.11
9/11/2015	0	0	0	0	0
9/12/2015	0.15	0.18	0.11	0.26	0.16
9/13/2015	0	0	0	0	0
9/14/2015	0	0	0	0	0
9/15/2015	0	0	0	0	0
9/16/2015	0	0	0	0	0
9/17/2015	0	0	0	0	0
9/18/2015	0	0	0	0	0
9/19/2015	0	0	0	0	0
9/20/2015	0	0	0	0	0
9/21/2015	0.21	0.23	0.24	0.25	0.23
9/22/2015	0	0	0	0	0
9/23/2015	0	0	0	0	0
9/24/2015	0	0	0	0	0
9/25/2015	0	0	0	0	0
9/26/2015	0	0	0	0	0
9/27/2015	0	0	0	0	0
9/28/2015	0	0	0	0	0
9/29/2015	1.93	1.84	1.77	1.79	1.65
9/30/2015	0	0.02	0	0	0
TOTAL	2.42	2.37	2.20	2.43	2.15

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: July, August, September 2015

SCENARIO: Y2015_Q3, produced October 13, 2015

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)
Anacostia CSOs							
005	Chicago St and Railroad Station SE	13	4.15	23.25	1.79	6.00	0.25
006	Good Hope Road, West of Nichols Ave., SE	separated					
007	13 th Street and Ridge Place, SE	8	4.87	10.00	1.25	5.25	0.25
009	2nd Street, 300 feet North of N Place, SE	7	2.56	9.25	1.32	3.50	0.25
010	O Street Sewage Pumping Station, SE (pumped overflow)	6	25.73	5.50	0.92	3.00	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	0	0.00	0.00	0.00	0.00	0.00
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	1	12.50	2.50	2.50	2.50	2.50
013	4th and N Streets, SE	7	2.00	10.25	1.46	4.50	0.25
014	6th and M Streets, SE	7	6.05	12.00	1.71	5.00	0.25
015	9th and M Streets, SE	7	1.97	6.75	0.96	3.25	0.25
016	12th and M Streets, SE	6	5.31	8.00	1.33	3.50	0.25
017	14th and M Streets, SE	9	8.72	21.00	2.33	6.25	1.00
018	Barney Circle and Pennsylvania Ave, SE	9	5.80	12.00	1.33	4.75	0.25
019	Northeast Boundary - Swirl Effluent	10	100.79	32.75	3.28	6.75	0.75
019	Northeast Bound. - Swirl Bypass	3	55.34	3.50	1.17	2.50	0.25
	SUBTOTAL		235.79				
Potomac CSOs							
003	Bolling AFB	1	0.11	1.50	1.50	1.50	1.50
020	23rd Street, North of Constitution Ave, NW (Easby Point)	5	8.03	7.75	1.55	4.50	0.75
021	Northeast of Roosevelt Bridge, NW	6	55.69	8.50	1.42	4.50	0.25
022	27th and K Streets, NW	9	9.41	12.25	1.36	5.00	0.25
024	30th and K Streets, NW	7	4.56	10.00	1.43	5.75	0.25
025	31st & K St NW	4	0.20	2.75	0.69	1.25	0.25
026	Wisconsin Avenue and K St., NW	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	11	6.28	27.50	2.50	6.50	0.25
028	36th and M Streets, NW	9	1.06	10.00	1.11	4.75	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	4	2.36	5.00	1.25	2.75	0.50
	SUBTOTAL		87.71				
Rock Creek							
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 extended west 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	7	0.245	7.75	1.11	3.50	0.50
037	Northwest of Belmont and 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 Rock Creek, 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

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: July, August, September 2015

SCENARIO: Y2015_Q3, produced October 13, 2015

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)
042	Harvard Street and RockCreek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	2	0.24	0.75	0.38	0.50	0.25
044	Kenyon Street and Adams Mill Road, NW	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	3	0.04	0.75	0.25	0.25	0.25
046	Park Road south of Piney Branch Parkway, NW	1	0.01	0.25	0.25	0.25	0.25
047	Ingleside Terrace extended and Piney Branch Parkway	1	0.002	0.25	0.25	0.25	0.25
048	Mt. Pleasant Street extended and Piney Branch Parkway	2	0.07	0.50	0.25	0.25	0.25
049	Piney Branch and LamontStreet, NW	7	10.699	10.50	1.50	4.50	0.75
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 Creek300 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 th St, NW	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL		11.30				
	TOTAL		334.80				

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