

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

FOURTH QUARTER, 2013

Prepared By:

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



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

**Monthly Operations Report
For
Combined Sewer System
Month: October 2013**

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Monthly Operations Report for Combined Sewer System
Month: October 2013

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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 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	10/24/13	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	10/24/13	*			
5	Poplar Point Pumping Station	004	10/29/13	*			
6	Chicago Street and Railroad Ave, SE	005	10/01/13	*			
7	W Street and Railroad Ave, SE	005	10/01/13	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE	007	10/03/13	*			
11	"O" Street Pumping Station	011(a)	10/03/13	*			
12	Storm Pump Discharge at Main Pumping Station	011	10/01/13	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	10/29/13	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	10/29/13	*			
15	South Capitol and E Streets	010	10/29/13	*			
15a	Half and L Streets, SE	010	10/29/13	*			
15b	South Capitol and I Streets	010	10/03/13	*			
15c	South Capitol and I Streets	010	10/03/13	*			
16	North of Main Sewage Pumping Station	012	10/29/13	*			
17	4 th and N Streets, SE, Both Extended	013	N/A				Construction for Clean Rivers Project
17a	K Street between 6 th Street and 7 th Street, SE	013	10/02/13	*			
18	6 th and M Streets, SE	014	10/29/13	*			
19	9 th and M Streets, SE	015	N/A				Construction for Clean Rivers Project
19a	9 th and M Streets, SE	015	N/A				Construction for Clean Rivers Project
20	12 th and M Streets, SE	016	10/9/13	*			
20a	12 th and M Streets, SE	016	10/9/13	*			
21	14 th and M Streets, SE	017	N/A				Construction for Clean Rivers Project
22a	Barney Circle and Pennsylvania Ave, SE	018	10/03/13	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	10/03/13	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	10/02/13	*			
22d	Kentucky Ave and Potomac Street, SE	018	10/02/13	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22e	14 th Street and Kentucky Ave, SE	018	10/02/13	*			
23	Independence Ave, 21 st Street, SE, Extended	019	10/08/13	*			
24a	East Capitol St, west of RFK stadium	019	10/08/13	*			
28	21 st and Constitution Ave, NW	020	10/04/13	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	10/04/13	*			
30	17 th and D Streets, NW	020	10/04/13	*			
31	15 th Street and Pennsylvania Ave, NW	020	10/04/13	*			
33	10 th and F Streets, NW	020	10/04/13	*			
34	23 rd Street, north of Constitution Ave, NW	020	10/31/13	*			
34a	23 rd Street near C Street, NW	020	10/04/13	*			
35	Northeast of Roosevelt Bridge, NW	021	10/31/13	*			
36	27 th and I Streets, NW	022	10/04/13	*			
36a	New Hampshire Ave and Eye Street, NW	022	10/04/13	*			
36b	19 th and L Streets, NW	022, 034	10/04/13	*			
36d	17 th and L Streets, NW	022, 034	10/04/13	*			
36g	18 th and M Streets, NW	022, 034	10/04/13	*			
36h	18 th and M Streets, NW	022, 034	10/04/13	*			
37	27 th and Eye Streets, NW	022	10/04/13	*			
38	29 th and K Streets, NW	024	10/01/13	*			
38a	30 th Street, south of K Street, NW	024	10/01/13	*			
39a	30 th and K Streets, NW	024	10/01/13	*			
39b	30 th and K Streets, NW	024	10/01/13	*			
41b	31 st and K Streets, NW	025	10/01/13	*			
41c	31 st and K Streets, NW	025	10/01/13	*			
42	Wisconsin Ave and K Street, NW	026	10/08/13	*			
43	Potomac and Water Streets, NW	027	10/08/13	*			
43a	Potomac and Water Streets, NW	027	10/08/13	*			
44	Water Street, west of Potomac St, NW	027	10/08/13	*			
45	36 th and M Streets, NW	028	10/03/13	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	10/03/13	*			
47	38 th Street and Reservoir Road, NW	029	10/03/13	*			
47a	37 th and T Streets, NW	029	10/03/13	*			
47b	37 th and T Streets, NW	029	10/03/13	*			
47c	38 th and W Streets, NW	029	10/03/13	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
50	26 and M Streets, NW	032	10/02/13	*			
51	N Street Extended, west of 25 th Street, NW	033	10/02/13	*			
52	22 nd Street between M and N Streets, NW	034	10/31/13	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	10/31/13	*			
53	22 nd and M Streets, NW	022, 034	10/31/13	*			
53a	22 nd and M Streets, NW	022, 034	10/31/13	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	10/04/13	*			
53c	L and 22 nd Streets, NW	022	10/04/13	*			
54	23 rd and O Streets, NW	034	10/08/13	*			
55	22 nd Street, south of Q Street, NW	035	10/08/13	*			
55a	22 nd Street, south of Q Street, NW	035	10/08/13	*			
56	23 rd and Massachusetts Ave, NW	036	10/08/13	*			
57	23 rd Street, south of Q Street, NW	036	10/08/13	*			
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	10/02/13	*			
60	Connecticut Ave, east of Rock Creek, NW	039	10/02/13	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	10/02/13	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	10/15/13	*			
63	Harvard Street and Rock Creek Parkway, NW	042	10/15/13	*			
64	Adams Mill Road, south of Irving Street, NW	043	10/15/13	*			
65	Kenyon Street and Adams Mill Road, NW	044	10/15/13	*			
65a	Kenyon Street and Adams Mill Road, NW	044	10/15/13	*			
66	Adams Mill Road and Lamont Street, NW	045	10/15/13	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	10/15/13	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	10/15/13	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	10/15/13	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	10/15/13	*			
70i	5 th and Quackenbos Streets, NW	049	10/01/13	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	10/01/13	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	10/07/13	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	10/07/13	*			
73	O Street Extended and Rock Creek Parkway, NW	052	10/07/13	*			
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	10/16/13	*			

<i>Structure Number</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
77 ¹	Normanstone Dr Extended, west of Rock Creek, NW	056	N/A				
77a ¹	Normanstone Dr and Normanstone Lane, NW	056	N/A				
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	10/07/13	*			
84a	26 th and P Streets, NW	060	10/07/13	*			

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

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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	10/02/13	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	10/17/13	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	10/17/13	*		*		*		*		
009	O St. Sewage Pumping Station, SE	10/01/13	*		*		*		*		
010	O St. Sewage Pumping Station, SE	10/01/13	*			*			*		
011	Main Sewage Pumping Station, SE	10/01/13	*			*			*		
011(a)	Main Sewage Pumping Station, SE	10/01/13	*		*		*		*		
012	Main Sewage Pumping Station, SE	10/01/13	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	N/A									Under construction
014	Navy Yard, aligned with 6 th St., SE	10/01/13	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	10/01/13	*			*			*		
016	12th and O Streets, SE	10/01/13	*		*		*		*		
017	M and Water Street, SE	10/01/13	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	10/02/13	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	10/30/13	*			*			*		
020	Rock Creek Parkway and Independence, NW	10/22/13	*		*		*		*		
021	Rock Creek Parkway and C St., NW	10/22/13	*			*			*		
022	Rock Creek Parkway and G St., NW	10/21/13	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	10/21/13	*		*			*	*		
025	South of 31st and K Streets, NW	10/21/13	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	10/21/13	*		*		*		*		
027	33 rd and Water Sts., NW	10/21/13	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	10/21/13	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	10/21/13	*		*		*		*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	10/02/13	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	10/02/13	*		*		*		*		

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	
034	Just west of St. Francis Jr. High and north of N St., NW	10/08/13	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	10/08/13	*		*		*		*		
036	22nd Street, South of Q Street NW.	10/08/13	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	10/02/13	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	10/02/13	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	10/02/13	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	10/18/13	*		*		*		*		
042	Harvard St. and Beach Dr NW.	10/18/13	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	10/18/13	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	10/18/13	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	10/18/13	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	10/01/13	*		*		*		*		
047	Piney Branch Parkway and Ingleside Terrace	10/15/13	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	10/15/13	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	10/15/13	*		*		*		*		
050	Rock Creek Parkway and L St., NW	10/15/13	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	10/01/13	*		*		*		*		
052 ¹	Between P & Penna. Ave Bridges, aligned with O Street, NW.	N/A									
053	Q St. Bridge and Rock Creek Parkway, NW.	10/16/13	*		*		*		*		
054	Massachusetts Ave & Rock Creek Parkway, NW.	10/16/13	*		*		*		*		
056 ¹	Normanstone Dr. and Rock Creek Parkway, NW.	N/A									
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	10/15/13	*		*		*		*		

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>Schedule to Restore to Service¹</i>
Main	31	4	10	#1 Sanitary Pump	October 1-31	Pump being rehabbed	March 2014
Eastside	18	2	4	#2 Sanitary Pump	October 1-31	Pump being rehabbed	December 2013
Poplar Point	18	2	3	#1 Screen	October 1-31	Screen being rehabbed	March 2014
Potomac	31	4	5	#1 Sanitary Pump	October 1-4	Pump being rehabbed	Restored October 4, 2013

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>Comments</i>
Main	10/22	Group A	Add oil, grease bearings and replace packing if needed.
O St	10/22	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	10/22	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	10/22	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	10/22	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	10/22	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	10/22	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	10/22	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

1. 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)¹</i>
Main	1,580.80	50.99	N/A	N/A	N/A
O St	150.80	4.86	10/19/2013	16.80	Normal
			10/29/2013	300.70	Normal
			10/30/2013	174.30	Normal
Eastside	364.19	11.75	N/A	N/A	N/A
Poplar Point	634.05	20.45	N/A	N/A	N/A
Potomac	3,755.20	121.14	N/A	N/A	N/A
Rock Creek	416.67	13.44	N/A	N/A	N/A
Upper Anacostia	154.58	4.99	N/A	N/A	N/A
Earle Place	0.15	0.00	N/A	N/A	N/A

Notes:

1. 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>
10/17	1, 2 & 3	1, 2 & 3	None	N/A	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>Comments</i>
10/17	Group A	

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 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)¹</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
10/7/2013	5.5	34.6	34.6	0.0	160.0
10/7/2013	4	2.4	2.4	0.0	40.0
10/10/2013	7.5	47.4	13.0	34.3	48.0
10/10/2013	8	4.1	4.1	0.0	12.0
10/11/2013	8.5	18.2	18.2	0.0	20.0
10/11/2013	7.5	31.7	31.7	0.0	160.0
10/11/2013	8	42.9	2.3	40.5	80.0

Note:

1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.

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>
10/10	Yes	5	2	Mix Chamber	0.1	Mix Chamber	No Sample
				Anacostia River ¹	0.0	Anacostia River ¹	<10
10/11	Yes	5	2	Mix Chamber	0.2	Mix Chamber	<10
				Anacostia River ¹	0.0	Anacostia River ¹	<10

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 (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>
10/10/13	53.0	0.03	0.06	4.57	4.66	0.94	44.4
10/11/13	39.0	0.00	1.10	3.70	4.80	0.39	13.8

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	10/29	No	N/A	N/A	N/A
14 - West	10/29	No	N/A	N/A	N/A
15	10/29	No	N/A	N/A	N/A
15A	10/29	No	N/A	N/A	N/A
16 - East	10/29	No	N/A	N/A	N/A
16 - West	10/29	No	N/A	N/A	N/A
24 - North	10/29	No	N/A	N/A	N/A
24 - Middle	10/29	No	N/A	N/A	N/A
24 - South	10/29	No	N/A	N/A	N/A
34	10/31	No	N/A	N/A	N/A
35	10/31	No	N/A	N/A	N/A
52	10/31	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	10/7	67 mins
	10/10	1 hr, 44 mins
	10/11	7 hrs, 40 mins
	10/12	3 hrs, 6 mins
15A	10/7	3 hrs, 3 mins
	10/10	4 hrs, 9 mins
	10/11	7 hrs, 2 mins
	10/12	11 hrs, 24 mins
16 (E & W)	10/7	1 hr, 58 mins
	10/10	2 hrs, 12 mins
	10/11	4 hrs, 5 mins
	10/12	81 mins
24	10/7	30 mins
	10/10	50 mins
	10/11	71 mins
	10/12	6 mins
34	10/7	6 mins
	10/10	2 mins
	10/11	2 mins
35	10/7	49 mins
	10/10	52 mins
	10/11	63 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	Open

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during October 2013.

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	1,591	1,568	734	734	734	2314	1935	332	162	2646	2097
2	4,714	4,112	2,316	2316	1809	5526	3989	374	260	5900	4249
3	3,555	461	-	0	0	5535	767	387	205	5922	972
4	2,782	1,985	159	159	159	4602	2774	418	357	5020	3131
5	2,167	1,035	1,035	1035	1035	4539	2636	375	189	4914	2825
6	1,783	1,594	1,594	1594	938	2129	1497	707	460	2836	1957
7	2,313	-	-	0	0	2772	0	901	0	3673	0
8	1,278	116	116	116	116	829	390	41	26	870	416
WASA Subtotal	20,183	10,871	5,954	5,954	4,791	28,246	13,988	3,535	1,659	31,781	15,647
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954	5,954	4,791					31,781	15,647
% Cleaned/Inspected to Date				100%	80%					>100%	>100%

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	10/30/2013	Good	Replace nets	Replaced nets	400 pounds
Bar Rack CSO 040	10/02/2013	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	10/18/2013	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>	11
<i>Reason not Operating</i>	High winds, low tide, and PM/repair service.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	2 Skimmers
<i>Dates</i>	B28: 10/1 - 10/31 B29: 10/1 - 10/31 B32: 10/18 - 10/25
<i>Reason</i>	B28: Loading screen jammed. B29: Loading assembly catching. Loading screen damage. B32: Engine sputtering.
<i>Plan to Restore to Service</i>	B28: At Gates Marina for repairs ETR 11/2013. B29: Weld flights on repaired loading screen ETR 11/2013. B32: Returned to operations on 10/28.
<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: Claude Price

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)	CP	10/24/13	X			
Bar Racks at Main Storm Pumps (CSO 011)	CP	10/24/13	X			

4.2 Rain Data

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

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
10/1/2013	0	0	0	0
10/2/2013	0	0	0	0
10/3/2013	0	0	0	0
10/4/2013	0	0	0	0
10/5/2013	0	0	0	0
10/6/2013	0	0	0	0
10/7/2013	0.97	0.96	0.94	0.96
10/8/2013	0	0	0	0
10/9/2013	0.09	0.07	0.1	0.13
10/10/2013	1.68	1.93	1.35	1.62
10/11/2013	2.56	2.19	2.42	2.59
10/12/2013	0.24	0.21	0.57	0.36
10/13/2013	0.01	0.01	0.02	0.01
10/14/2013	0	0	0	0
10/15/2013	0	0	0	0
10/16/2013	0	0	0	0
10/17/2013	0	0.01	0	0
10/18/2013	0.01	0	0	0
10/19/2013	0	0	0	0
10/20/2013	0	0	0	0
10/21/2013	0	0	0	0
10/22/2013	0	0	0	0
10/23/2013	0.03	0.01	0.06	0.02
10/24/2013	0	0	0	0
10/25/2013	0	0	0	0
10/26/2013	0	0	0	0
10/27/2013	0	0	0	0
10/28/2013	0	0	0	0
10/29/2013	0	0	0	0
10/30/2013	0.04	0.04	0.03	0.03
10/31/2013	0	0	0	0.01
TOTAL	5.63	5.43	5.49	5.73



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

**Monthly Operations Report
For
Combined Sewer System
Month: November 2013**

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: November 2013

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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 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	11/29/13	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	11/29/13	*			
5	Poplar Point Pumping Station	004	11/15/13	*			
6	Chicago Street and Railroad Ave, SE	005	11/15/13	*			
7	W Street and Railroad Ave, SE	005	11/15/13	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE	007	11/29/13	*			
11	"O" Street Pumping Station	011(a)	11/14/13	*			
12	Storm Pump Discharge at Main Pumping Station	011	11/14/13	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	11/14/13	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	11/14/13	*			
15	South Capitol and E Streets	010	11/14/13	*			
15a	Half and L Streets, SE	010	11/14/13	*			
15b	South Capitol and I Streets	010	11/15/13	*			
15c	South Capitol and I Streets	010	11/15/13	*			
16	North of Main Sewage Pumping Station	012	11/14/13	*			
17	4 th and N Streets, SE, Both Extended	013	N/A				Construction for Clean Rivers Project
17a	K Street between 6 th Street and 7 th Street, SE	013	11/12/13	*			
18	6 th and M Streets, SE	014	11/04/13	*			
19	9 th and M Streets, SE	015	11/08/13	*			
19a	9 th and M Streets, SE	015	11/08/13	*			
20	12 th and M Streets, SE	016	N/A				Construction for Clean Rivers Project
20a	12 th and M Streets, SE	016	11/04/13	*			
21	14 th and M Streets, SE	017	N/A				Construction for Clean Rivers Project
22a	Barney Circle and Pennsylvania Ave, SE	018	11/04/13	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	11/04/13	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	11/04/13	*			
22d	Kentucky Ave and Potomac Street, SE	018	11/04/13	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22e	14 th Street and Kentucky Ave, SE	018	11/13/13	*			
23	Independence Ave, 21 st Street, SE, Extended	019	11/13/13	*			
24a	East Capitol St, west of RFK stadium	019	11/13/13	*			
28	21 st and Constitution Ave, NW	020	11/04/13	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	11/04/13	*			
30	17 th and D Streets, NW	020	11/04/13	*			
31	15 th Street and Pennsylvania Ave, NW	020	11/04/13	*			
33	10 th and F Streets, NW	020	11/04/13	*			
34	23 rd Street, north of Constitution Ave, NW	020	11/20/13	*			
34a	23 rd Street near C Street, NW	020	11/04/13	*			
35	Northeast of Roosevelt Bridge, NW	021	11/20/13	*			
36	27 th and I Streets, NW	022	11/18/13	*			
36a	New Hampshire Ave and Eye Street, NW	022	11/18/13	*			
36b	19 th and L Streets, NW	022, 034	11/18/13	*			
36d	17 th and L Streets, NW	022, 034	11/19/13	*			
36g	18 th and M Streets, NW	022, 034	11/19/13	*			
36h	18 th and M Streets, NW	022, 034	11/19/13	*			
37	27 th and Eye Streets, NW	022	11/19/13	*			
38	29 th and K Streets, NW	024	11/18/13	*			
38a	30 th Street, south of K Street, NW	024	11/18/13	*			
39a	30 th and K Streets, NW	024	11/18/13	*			
39b	30 th and K Streets, NW	024	11/18/13	*			
41b	31 st and K Streets, NW	025	11/25/13	*			
41c	31 st and K Streets, NW	025	11/25/13	*			
42	Wisconsin Ave and K Street, NW	026	11/25/13	*			
43	Potomac and Water Streets, NW	027	11/25/13	*			
43a	Potomac and Water Streets, NW	027	11/25/13	*			
44	Water Street, west of Potomac St, NW	027	11/25/13	*			
45	36 th and M Streets, NW	028	11/25/13	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	11/05/13	*			
47	38 th Street and Reservoir Road, NW	029	11/05/13	*			
47a	37 th and T Streets, NW	029	11/05/13	*			
47b	37 th and T Streets, NW	029	11/05/13	*			
47c	38 th and W Streets, NW	029	11/05/13	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
50	26 and M Streets, NW	032	11/19/13	*			
51	N Street Extended, west of 25 th Street, NW	033	11/19/13	*			
52	22 nd Street between M and N Streets, NW	034	11/15/13	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	11/15/13	*			
53	22 nd and M Streets, NW	022, 034	11/15/13	*			
53a	22 nd and M Streets, NW	022, 034	11/15/13	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	11/19/13	*			
53c	L and 22 nd Streets, NW	022	11/19/13	*			
54	23 rd and O Streets, NW	034	11/15/13	*			
55	22 nd Street, south of Q Street, NW	035	11/15/13	*			
55a	22 nd Street, south of Q Street, NW	035	11/15/13	*			
56	23 rd and Massachusetts Ave, NW	036	11/15/13	*			
57	23 rd Street, south of Q Street, NW	036	11/15/13	*			
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	11/12/13	*			
60	Connecticut Ave, east of Rock Creek, NW	039	11/12/13	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	11/12/13	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	11/13/13	*			
63	Harvard Street and Rock Creek Parkway, NW	042	11/13/13	*			
64	Adams Mill Road, south of Irving Street, NW	043	11/13/13	*			
65	Kenyon Street and Adams Mill Road, NW	044	11/13/13	*			
65a	Kenyon Street and Adams Mill Road, NW	044	11/13/13	*			
66	Adams Mill Road and Lamont Street, NW	045	11/13/13	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	11/13/13	*			
68	Ingleside Terrace, Extended and Piney Branch Parkway, NW	047	11/13/13	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	11/13/13	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	11/13/13	*			
70i	5 th and Quackenbos Streets, NW	049	11/05/13	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	11/05/13	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	11/15/13	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	11/15/13	*			
73	O Street Extended and Rock Creek Parkway, NW	052	11/15/13	*			
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	11/25/13	*			

<i>Structure Number</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
77 ¹	Normanstone Dr Extended, west of Rock Creek, NW	056	N/A				
77a ¹	Normanstone Dr and Normanstone Lane, NW	056	N/A				
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	11/15/13	*			
84a	26 th and P Streets, NW	060	11/15/13	*			

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

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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	11/03/13	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	11/07/13	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	11/07/13	*		*		*		*		
009	O St. Sewage Pumping Station, SE	11/26/13	*		*		*		*		
010	O St. Sewage Pumping Station, SE	11/26/13	*			*			*		
011	Main Sewage Pumping Station, SE	11/26/13	*			*			*		
011(a)	Main Sewage Pumping Station, SE	11/26/13	*		*		*		*		
012	Main Sewage Pumping Station, SE	11/26/13	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	N/A									Under construction
014	Navy Yard, aligned with 6 th St., SE	11/14/13	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	11/14/13	*			*			*		
016	12th and O Streets, SE	11/26/13	*		*		*		*		
017	M and Water Street, SE	11/26/13	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	11/26/13	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	11/29/13	*			*			*		
020	Rock Creek Parkway and Independence, NW	11/07/13	*		*		*		*		
021	Rock Creek Parkway and C St., NW	11/07/13	*			*			*		
022	Rock Creek Parkway and G St., NW	11/07/13	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	11/07/13	*		*			*	*		
025	South of 31st and K Streets, NW	11/07/13	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	11/07/13	*		*		*		*		
027	33 rd and Water Sts., NW	11/07/13	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	11/07/13	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	11/07/13	*		*		*		*		
031 ¹	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	11/19/13	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	11/19/13	*		*		*		*		

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	
034	Just west of St. Francis Jr. High and north of N St., NW	11/15/13	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	11/15/13	*		*		*		*		
036	22nd Street, South of Q Street NW.	11/26/13	*		*		*		*		
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	11/12/13	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	11/12/13	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	11/12/13	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	11/25/13	*		*		*		*		
042	Harvard St. and Beach Dr NW.	11/25/13	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	11/25/13	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	11/25/13	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	11/25/13	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	11/13/13	*		*		*		*		
047	Piney Branch Parkway and Ingleside Terrace	11/13/13	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	11/13/13	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	11/13/13	*		*		*		*		
050	Rock Creek Parkway and L St., NW	11/05/13	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	11/26/13	*		*		*		*		
052 ¹	Between P & Penna. Ave Bridges, aligned with O Street, NW.	N/A									
053	Q St. Bridge and Rock Creek Parkway, NW.	11/25/13	*		*		*		*		
054	Massachusetts Ave & Rock Creek Parkway, NW.	11/25/13	*		*		*		*		
056 ¹	Normanstone Dr. and Rock Creek Parkway, NW.	N/A									
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	11/26/13	*		*		*		*		

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>Schedule to Restore to Service¹</i>
Main	30	4	10	#1 Sanitary Pump	November 1-30	Pump being rehabbed	March 2014
Eastside	18	2	4	#2 Sanitary Pump	November 1-30	Pump being rehabbed	December 2013
Poplar Point	18	2	3	#1 Screen	November 1-30	Screen being rehabbed	March 2014
Potomac	30	4	5	#3 Screen	November 2-30	Screen being rehabbed	March 2014

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>Comments</i>
Main	11/8	Group A	Add oil, grease bearings and replace packing if needed.
O St	11/8	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	11/8	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	11/8	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	11/8	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	11/8	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	11/8	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	11/8	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

1. 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)¹</i>
Main	1,491.70	49.72	N/A	N/A	N/A
O St	127.00	4.23	N/A	N/A	Normal
Eastside	281.00	9.37	N/A	N/A	N/A
Poplar Point	631.71	21.06	N/A	N/A	N/A
Potomac	3,297.00	109.90	N/A	N/A	N/A
Rock Creek	176.67	5.89	N/A	N/A	N/A
Upper Anacostia	152.71	5.09	N/A	N/A	N/A
Earle Place	0.14	0.005	N/A	N/A	N/A

Notes:

1. 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>
11/12	1, 2 & 3	1, 2 & 3	#3 Screen	Nov 15-30	Chain Link Loose	December 2013

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

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
11/12	Group A	

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)¹</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
11/1/2013	6	18.6	18.6	0.0	76.0
11/16/2013	5	17.7	17.7	0.0	52.0
11/18/2013	4.5	3.5	3.5	0.0	128.0
11/26/2013	4	17.6	2.2	15.5	160.0
11/27/2013	7.5	23.6	23.6	0.0	200.0

Note:

1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.

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>
11/26	No ²	N/A	N/A	Mix Chamber	0.0	Mix Chamber	33,000
				Anacostia River ¹	0.0	Anacostia River ¹	5,909

Notes:

1. River: River Outfall
2. Equipment Failure

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 (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>
11/26	28.0	0.05	0.46	2.87	3.38	0.47	26.3

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	11/14	No	N/A	N/A	N/A
14 - West	11/14	No	N/A	N/A	N/A
15	11/14	No	N/A	N/A	N/A
15A	11/14	No	N/A	N/A	N/A
16 - East	11/14	No	N/A	N/A	N/A
16 - West	11/14	No	N/A	N/A	N/A
24 - North	11/29	No	N/A	N/A	N/A
24 - Middle	11/29	No	N/A	N/A	N/A
24 - South	11/29	No	N/A	N/A	N/A
34	11/20	No	N/A	N/A	N/A
35	11/20	No	N/A	N/A	N/A
52	11/20	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	11/25 11/26	25 mins 3 hrs ,6 mins
15A	11/25 11/26	87 mins 2 hrs, 45 mins
16 (E & W)	11/25 11/26	6 mins 29 mins
24	11/25 11/26	16 mins 38 mins
34	None	N/A
35	11/25 11/26	46 mins 30 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	Open

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during November 2013.

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	1,591	1,568	734	734	734	2646	2097	78	34	2724	2131
2	4,714	4,112	2,316	2316	2127	5900	4249	345	318	6245	4567
3	3,555	461	-	0	0	5922	972	134	0	6056	972
4	2,782	1,985	159	159	159	5020	3131	51	25	5071	3156
5	2,167	1,035	1,035	1035	1035	4914	2825	87	48	5001	2873
6	1,783	1,594	1,594	1594	1256	2836	1957	1565	314	4401	2271
7	2,313	-	-	0	0	3673	0	96	0	3769	0
8	1,278	116	116	116	116	870	416	57	24	927	440
WASA Subtotal	20,183	10,871	5,954	5,954	5,427	31,781	15,647	2,413	763	34,194	16,410
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954	5,954	5,427						
% Cleaned/Inspected to Date				100%	91%					>100%	>100%

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	11/27/2013	Good	Replace nets	Replaced nets	500 pounds
Bar Rack CSO 040	11/12/2013	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	11/12/2013	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>	19
<i>Days not Operating</i>	11
<i>Reason not Operating</i>	High winds, low tide, and PM/repair service.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	2 Skimmers
<i>Dates</i>	B28: 11/1 - 11/30 B29: 11/1 - 11/30
<i>Reason</i>	B28: Hydraulic oil leaks. Throttle cable broken. B29: Hydraulic oil leaks.
<i>Plan to Restore to Service</i>	B28: Test early December, if satisfactory return to service. B29: Repair hydraulic leak in port prop pod. ETR unknown.
<i>Volume Material Collected</i>	10 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: Claude Price

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)	CP	11/15	X			
Bar Racks at Main Storm Pumps (CSO 011)	CP	11/15	X			

4.2 Rain Data

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

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
11/1/2013	0.18	0.17	0.14	0.18
11/2/2013	0	0	0	0
11/3/2013	0	0	0	0
11/4/2013	0	0	0	0
11/5/2013	0	0	0	0
11/6/2013	0	0	0	0
11/7/2013	0.01	0	0	0.01
11/8/2013	0	0	0	0
11/9/2013	0	0	0	0
11/10/2013	0	0	0	0
11/11/2013	0	0	0	0
11/12/2013	0	0	0	0
11/13/2013	0	0	0	0
11/14/2013	0	0	0	0
11/15/2013	0.01	0.05	0.08	0.06
11/16/2013	0.35	0.32	0.33	0.33
11/17/2013	0	0	0	0
11/18/2013	0.15	0.19	0.17	0.25
11/19/2013	0	0	0	0
11/20/2013	0	0	0	0
11/21/2013	0	0	0	0
11/22/2013	0	0	0	0
11/23/2013	0	0	0	0
11/24/2013	0	0	0	0
11/25/2013	0	0	0	0
11/26/2013	1.31	1.50	1.34	1.59
11/27/2013	0.83	0.66	0.7	0.63
11/28/2013	0	0	0	0
11/29/2013	0	0	0	0
11/30/2013	0	0	0	0
TOTAL	2.84	2.89	2.76	3.05



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

**Monthly Operations Report
For
Combined Sewer System
Month: December 2013**

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: December 2013

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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 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	12/30/13	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	12/30/13	*			
5	Poplar Point Pumping Station	004	12/02/13	*			
6	Chicago Street and Railroad Ave, SE	005	12/02/13	*			
7	W Street and Railroad Ave, SE	005	12/02/13	*			
8 ¹	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 th Street and Ridge Place, SE	007	12/02/13	*			
11	"O" Street Pumping Station	011(a)	12/03/13	*			
12	Storm Pump Discharge at Main Pumping Station	011	12/02/13	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	12/31/13	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	12/19/13	*			
15	South Capitol and E Streets	010	12/16/13	*			
15a	Half and L Streets, SE	010	12/16/13	*			
15b	South Capitol and I Streets	010	12/09/13	*			
15c	South Capitol and I Streets	010	12/26/13	*			
16	North of Main Sewage Pumping Station	012	12/26/13	*			
17	4 th and N Streets, SE, Both Extended	013	N/A				Construction for Clean Rivers Project
17a	K Street between 6 th Street and 7 th Street, SE	013	12/16/13	*			
18	6 th and M Streets, SE	014	12/03/13	*			
19	9 th and M Streets, SE	015	12/31/13	*			
19a	9 th and M Streets, SE	015	12/31/13	*			
20	12 th and M Streets, SE	016	N/A				Construction for Clean Rivers Project
20a	12 th and M Streets, SE	016	12/31/13	*			
21	14 th and M Streets, SE	017	N/A				Construction for Clean Rivers Project
22a	Barney Circle and Pennsylvania Ave, SE	018	12/09/13	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	12/09/13	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	12/09/13	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22d	Kentucky Ave and Potomac Street, SE	018	12/09/13	*			
22e	14 th Street and Kentucky Ave, SE	018	12/16/13	*			
23	Independence Ave, 21 st Street, SE, Extended	019	12/06/13	*			
24a	East Capitol St, west of RFK stadium	019	12/16/13	*			
28	21 st and Constitution Ave, NW	020	12/16/13	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	12/06/13	*			
30	17 th and D Streets, NW	020	12/06/13	*			
31	15 th Street and Pennsylvania Ave, NW	020	12/06/13	*			
33	10 th and F Streets, NW	020	12/06/13	*			
34	23 rd Street, north of Constitution Ave, NW	020	12/19/13	*			
34a	23 rd Street near C Street, NW	020	12/06/13	*			
35	Northeast of Roosevelt Bridge, NW	021	12/19/13	*			
36	27 th and I Streets, NW	022	12/16/13	*			
36a	New Hampshire Ave and Eye Street, NW	022	12/16/13	*			
36b	19 th and L Streets, NW	022, 034	12/02/13	*			
36d	17 th and L Streets, NW	022, 034	12/02/13	*			
36g	18 th and M Streets, NW	022, 034	12/02/13	*			
36h	18 th and M Streets, NW	022, 034	12/02/13	*			
37	27 th and Eye Streets, NW	022	12/16/13	*			
38	29 th and K Streets, NW	024	12/02/13	*			
38a	30 th Street, south of K Street, NW	024	12/02/13	*			
39a	30 th and K Streets, NW	024	12/02/13	*			
39b	30 th and K Streets, NW	024	12/02/13	*			
41b	31 st and K Streets, NW	025	12/17/13	*			
41c	31 st and K Streets, NW	025	12/17/13	*			
42	Wisconsin Ave and K Street, NW	026	12/09/13	*			
43	Potomac and Water Streets, NW	027	12/09/13	*			
43a	Potomac and Water Streets, NW	027	12/09/13	*			
44	Water Street, west of Potomac St, NW	027	12/09/13	*			
45	36 th and M Streets, NW	028	12/03/13	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	12/03/13	*			
47	38 th Street and Reservoir Road, NW	029	12/03/13	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
47a	37 th and T Streets, NW	029	12/03/13	*			
47b	37 th and T Streets, NW	029	12/03/13	*			
47c	38 th and W Streets, NW	029	12/03/13	*			
49 ^l	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	12/03/13	*			
51	N Street Extended, west of 25 th Street, NW	033	12/03/13	*			
52	22 nd Street between M and N Streets, NW	034	12/26/13	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	12/30/13	*			
53	22 nd and M Streets, NW	022, 034	12/30/13	*			
53a	22 nd and M Streets, NW	022, 034	12/30/13	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	12/03/13	*			
53c	L and 22 nd Streets, NW	022	12/03/13	*			
54	23 rd and O Streets, NW	034	12/18/13	*			
55	22 nd Street, south of Q Street, NW	035	12/18/13	*			
55a	22 nd Street, south of Q Street, NW	035	12/18/13	*			
56	23 rd and Massachusetts Ave, NW	036	12/18/13	*			
57	23 rd Street, south of Q Street, NW	036	12/18/13	*			
58 ^l	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	12/16/13	*			
60	Connecticut Ave, east of Rock Creek, NW	039	12/16/13	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	12/16/13	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	12/04/13	*			
63	Harvard Street and Rock Creek Parkway, NW	042	12/04/13	*			
64	Adams Mill Road, south of Irving Street, NW	043	12/04/13	*			
65	Kenyon Street and Adams Mill Road, NW	044	12/04/13	*			
65a	Kenyon Street and Adams Mill Road, NW	044	12/04/13	*			
66	Adams Mill Road and Lamont Street, NW	045	12/04/13	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	12/04/13	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	12/04/13	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	12/04/13	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	12/04/13	*			
70i	5 th and Quackenbos Streets, NW	049	12/02/13	*			

Structure Number	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
71	28 th Street, west of Rock Creek Parkway, NW	050	12/02/13	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	12/18/13	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	12/18/13	*			
73	O Street Extended and Rock Creek Parkway, NW	052	12/18/13	*			
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	12/19/13	*			
77 ¹	Normanstone Dr Extended, west of Rock Creek, NW	056	N/A				
77a ¹	Normanstone Dr and Normanstone Lane, NW	056	N/A				
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	12/18/13	*			
84a	26 th and P Streets, NW	060	12/18/13	*			

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
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	12/03/13	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	12/05/13	*		*		*		*		
006 ¹	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 th St. and Anacostia Bridges, SE	12/05/13	*		*		*		*		
009	O St. Sewage Pumping Station, SE	12/17/13	*		*		*		*		
010	O St. Sewage Pumping Station, SE	12/17/13	*			*			*		
011	Main Sewage Pumping Station, SE	12/17/13	*			*			*		
011(a)	Main Sewage Pumping Station, SE	12/17/13	*		*		*		*		
012	Main Sewage Pumping Station, SE	12/17/13	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	N/A									Under construction
014	Navy Yard, aligned with 6 th St., SE	12/31/13	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	12/31/13	*			*			*		
016	12th and O Streets, SE	12/19/13	*		*		*		*		
017	M and Water Street, SE	12/19/13	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	12/19/13	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	12/03/13	*			*			*		
020	Rock Creek Parkway and Independence, NW	12/05/13	*		*		*		*		
021	Rock Creek Parkway and C St., NW	12/05/13	*			*			*		
022	Rock Creek Parkway and G St., NW	12/05/13	*		*		*		*		
024	South of 30 th and K Streets, NW ¹	12/05/13	*		*			*	*		
025	South of 31st and K Streets, NW	12/05/13	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	12/05/13	*		*		*		*		
027	33 rd and Water Sts., NW	12/05/13	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	12/05/13	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	12/05/13	*		*		*		*		
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
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
032	26th and M Street, NW.	12/03/13	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	12/03/13	*		*			*		*	
034	Just west of St. Francis Jr. High and north of N St., NW	12/18/13	*		*			*		*	
035	P St. Bridge and Rock Creek Parkway	12/18/13	*		*			*		*	
036	22nd Street, South of Q Street NW.	12/19/13	*		*			*		*	
037 ¹	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	12/16/13	*		*			*		*	
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	12/16/13	*		*			*		*	
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	12/19/13	*		*			*		*	
041	Beach Dr. and Ontario Pl., NW	12/19/13	*		*			*		*	
042	Harvard St. and Beach Dr NW.	12/19/13	*		*			*		*	
043	Upstream of Harvard St. and Beach Dr NW.	12/19/13	*		*			*		*	
044	Kenyon Street and Beach Dr., NW.	12/19/13	*		*			*		*	
045	North of Beach Dr. and Walbridge Pl, NW.	12/04/13	*		*			*		*	
046	Piney Branch Parkway and Park Road, NW.	12/04/13	*		*			*		*	
047	Piney Branch Parkway and Ingleside Terrace	12/04/13	*		*			*		*	
048	South of Piney Branch Parkway and 17 th St.	12/04/13	*		*			*		*	
049	North of Piney Branch Parkway and 17 th St.	12/02/13	*		*			*		*	
050	Rock Creek Parkway and L St., NW	12/31/13	*		*			*		*	
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	12/31/13	*		*			*		*	
052 ¹	Between P & Penna. Ave Bridges, aligned with O Street, NW.	N/A									
053	Q St. Bridge and Rock Creek Parkway, NW.	12/19/13	*		*			*		*	
054	Massachusetts Ave & Rock Creek Parkway, NW.	12/19/13	*		*			*		*	
056 ¹	Normanstone Dr. and Rock Creek Parkway, NW.	N/A									
057 ¹	28th Street and Rock Creek Parkway, NW	N/A									
058 ¹	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	12/19/13	*		*			*		*	

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>Schedule to Restore to Service¹</i>
Main	31	4	10	#1 Sanitary Pump	December 1-31	Pump being rehabbed	March 2014
Eastside	21	2	4	#2 Sanitary Pump	December 1-5	Pump being rehabbed	Restored December 5, 2013
Poplar Point	21	2	3	#1 Screen	December 1-31	Screen being rehabbed	March 2014
Potomac	31	4	5	#2 Sanitary Pump #3 Screen	December December 1-31	Pump being rehabbed Screen being rehabbed	March 2014 March 2014

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>Comments</i>
Main	12/10	Group A	Add oil, grease bearings and replace packing if needed.
O St	12/10	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	12/10	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	12/10	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	12/10	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	12/10	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	12/10	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	12/10	Group A	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)¹</i>
Main	2,201.20	71.01	N/A	N/A	N/A
O St	140.50	4.53	12/29/2013	42.40	Normal
Eastside	315.56	10.18	N/A	N/A	N/A
Poplar Point	643.32	20.75	N/A	N/A	N/A
Potomac	3,760.10	121.29	N/A	N/A	N/A
Rock Creek	605.00	19.52	N/A	N/A	N/A
Upper Anacostia	152.92	4.93	N/A	N/A	N/A
Earle Place	0.21	0.01	N/A	N/A	N/A

Notes:

1. 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>
12/11	1, 2 & 3	1, 2 & 3	#3 Screen	Dec 1-28	Chain Link Loose	Restored December 28, 2013

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

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
12/11	Group A	

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)¹</i>	<i>Approx. Screenings Volume (Cu. ft)</i>
12/6/2013	3	4.3	4.3	0.0	160.0
12/6/2013	4	1.1	1.1	0.0	8.0
12/9/2013	8	28.9	11.5	17.3	80.0
12/9/2013	8.5	6.6	6.6	0.0	80.0
12/23/2013	8.5	22.2	22.2	0.0	160.0
12/29/2013	6	34.2	34.2	0.0	108.0
12/29/2013	2	2.0	2.0	0.0	20.0

Note:

1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.

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>
12/9	Yes	5	2	Mix Chamber	0.1	Mix Chamber	41,000
				Anacostia River ¹	0.0	Anacostia River ¹	5,100

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 (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>
12/9/13	22.5	0.04	0.58	10.8	11.4	0.34	11.8

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	12/19	No	N/A	N/A	N/A
14 - West	12/19	No	N/A	N/A	N/A
15	12/26	No	N/A	N/A	N/A
15A	12/26	No	N/A	N/A	N/A
16 - East	12/19	No	N/A	N/A	N/A
16 - West	12/19	No	N/A	N/A	N/A
24 - North	12/19	No	N/A	N/A	N/A
24 - Middle	12/19	No	N/A	N/A	N/A
24 - South	12/19	No	N/A	N/A	N/A
34	12/19	No	N/A	N/A	N/A
35	12/19	No	N/A	N/A	N/A
52	12/26	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	12/6 12/9 12/23 12/29	3 mins 2 mins 3 mins 24 mins
15A	12/6 12/7 12/9 12/23 12/29	1 hour, 29 mins 4 hours, 59 mins 4 hours, 56 mins 39 mins 3 hours, 14 mins
16 (E & W)	12/29	51 mins
24	12/6 12/9 12/23 12/29	7 mins 13 mins 10 mins 36 mins
34	None	N/A
35	12/29	2 hours, 11 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	Open

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during December 2013.

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	1,591	1,568	734	734	734	2724	2131	58	58	2782	2189
2	4,714	4,112	2,316	2316	2316	6245	4567	756	578	7001	5145
3	3,555	461	-	0	0	6056	972	126	92	6182	1064
4	2,782	1,985	159	159	159	5071	3156	126	126	5197	3282
5	2,167	1,035	1,035	1035	1035	5001	2873	165	139	5166	3012
6	1,783	1,594	1,594	1594	1594	4401	2271	386	345	4787	2616
7	2,313	-	-	0	0	3769	0	213	0	3982	0
8	1,278	116	116	116	116	927	440	392	35	1319	475
WASA Subtotal	20,183	10,871	5,954	5,954	5,954	34,194	16,410	2,222	1,373	36,416	17,783
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954	5,954	5,954					36,416	17,783
% Cleaned/Inspected to Date				100%	100%					>100%	>100%

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	12/30/13	Good	Replace nets	Replaced nets	200 pounds
Bar Rack CSO 040	12/19/13	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	12/19/13	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>	11
<i>Reason not Operating</i>	High winds, low tide, and PM/repair service.
<i># Skimmer in Fleet</i>	3 Skimmers
<i># Skimmers Out of Service</i>	1 Skimmer
<i>Dates</i>	B28: 12/1-12/5, 12/7-12/30 B29: 12/1-12/31 B32: 12/27-12/30
<i>Reason</i>	B28: not cleared by Fleet for operation. Won't start. B29: Leaking propulsion pod. B32: Leaking engine oil.
<i>Plan to Restore to Service</i>	B28: Returned to service on 30 December. B29: Prop pod at Gates Marina for repair. ETR mid January 2014. B32: Returned to service 30 December.
<i>Volume Material Collected</i>	10 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: Claude Price

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)	CP	12/12	X			
Bar Racks at Main Storm Pumps (CSO 011)	CP	12/12	X			

4.2 Rain Data

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

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
12/1/2013	0	0	0	0
12/2/2013	0	0	0	0
12/3/2013	0	0	0	0
12/4/2013	0	0	0	0
12/5/2013	0	0	0	0
12/6/2013	0.72	0.68	0.68	0.77
12/7/2013	0.19	0.17	0.17	0.16
12/8/2013	0.03	0.05	0.17	0.17
12/9/2013	1.06	0.94	1.08	0.95
12/10/2013	0.30	0.29	0.3	0.29
12/11/2013	0	0	0	0
12/12/2013	0	0	0	0
12/13/2013	0	0	0	0
12/14/2013	0.45	0.46	0.43	0.49
12/15/2013	0.01	0	0	0
12/16/2013	0	0	0	0
12/17/2013	0.01	0	0.02	0.01
12/18/2013	0	0	0	0
12/19/2013	0	0	0	0
12/20/2013	0	0	0	0
12/21/2013	0	0	0	0
12/22/2013	0.15	0.16	0.19	0.15
12/23/2013	0.72	0.59	0.66	0.63
12/24/2013	0	0	0	0
12/25/2013	0	0	0	0
12/26/2013	0	0	0	0.01
12/27/2013	0	0	0	0
12/28/2013	0	0	0	0
12/29/2013	1.15	1.15	1.06	1.24
12/30/2013	0	0	0	0
12/31/2013	0	0	0	0
TOTAL	4.79	4.49	4.76	4.87

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: October, November, and December 2013
SCENARIO: Y2013_Q4, produced January 6, 2014

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	12	4.91	90.25	7.52	23.00	0.50
006	Good Hope Road, West of Nichols Ave., SE	separated					
007	13 th Street and Ridge Place, SE	6	2.98	17.00	2.83	5.50	0.25
009	2nd Street, 300 feet North of N Place, SE	20	2.51	45.75	2.29	7.00	0.25
010	O Street Sewage Pumping Station, SE (pumped Overflow)	7	133.65	31.75	4.54	16.50	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)	5	8.10	7.50	1.50	2.50	0.50
013	4th and N Streets, SE	11	5.41	49.00	4.45	13.25	0.25
014	6th and M Streets, SE	6	8.57	40.00	6.67	20.50	0.25
015	9th and M Streets, SE	5	0.35	11.75	2.35	4.75	1.25
016	12th and M Streets, SE	5	2.36	14.75	2.95	5.75	2.00
017	14th and M Streets, SE	9	13.54	73.50	8.17	27.25	2.00
018	Barney Circle and Pennsylvania Ave, SE	5	5.95	30.25	6.05	9.25	3.50
019	Northeast Boundary - Swirl Effluent	11	283.70	83.00	7.55	40.25	0.25
019	Northeast Bound. - Swirl Bypass	4	21.93	3.75	0.94	1.75	0.50
	SUBTOTAL		493.96				
Potomac CSOs							
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North of Constitution Ave, NW (Easby Point)	5	9.33	20.50	4.10	6.00	2.75
021	Northeast of Roosevelt Bridge, NW	6	112.83	30.50	5.08	9.25	1.25
022	27th and K Streets, NW	10	1.18	29.25	2.93	10.00	0.25
024	30th and K Streets, NW	6	11.93	40.00	6.67	21.00	0.25
025	31st & K St NW	4	0.06	2.50	0.63	1.00	0.50
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	13	13.44	127.75	9.83	36.00	0.75
028	36th and M Streets, NW	13	1.65	36.75	2.83	9.25	0.25
029	Canal Road 1000 feet east of Rock Creek, NW	5	1.15	7.00	1.40	2.00	1.00
	SUBTOTAL		151.56				
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	5	0.139	18.00	3.60	5.75	2.50
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: October, November, and December 2013
SCENARIO: Y2013_Q4, produced January 6, 2014

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	0	0.00	0.00	0.00	0.00	0.00	
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	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	0.00	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 LamontStreet, NW	5	9.817	27.00	5.40	7.50	3.25	
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	5	1.51	25.50	5.10	12.25	1.75	
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		11.46					
	TOTAL		656.98					

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