

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER, 2010

Prepared By:

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

**Monthly Operations Report
For
Combined Sewer System
Month: July 2010**

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DISTRICT OF COLUMBIA
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*Monthly Operations Report for Combined Sewer System
Month: July 2010*

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (WASA or Authority) 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 Authority'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**

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				<i>Good</i>	<i>Needs Work</i>		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	7-30-10	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	7-30-10	*			
5	Poplar Point Pumping Station	004	7-15-10	*			
6	Chicago Street and Railroad Ave, SE	005	7-30-10	*			
7	W Street and Railroad Ave, SE	005	7-30-10	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A	*			
9	13 th Street and Ridge Place, SE	007	7-14-10	*			
11	"O" Street Pumping Station	011(a)	7-15-10	*			
12	Storm Pump Discharge at Main Pumping Station	011	7-15-10	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	7-7-10	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	7-7-10	*			
15	South Capitol and E Streets	010	7-15-10	*			
15a	Half and L Streets, SE	010	7-15-10	*			
15b	South Capitol and I Streets	010	7-28-10	*			
15c	South Capitol and I Streets	010	7-28-10	*			
16	North of Main Sewage Pumping Station	012	7-15-10	*			
17	4 th and N Streets, SE, Both Extended	013	7-30-10	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	7-26-10	*			
18	6 th and M Streets, SE	014	7-7-10	*			
19	9 th and M Streets, SE	015	7-6-10	*			
19a	9 th and M Streets, SE	015	7-6-10	*			
20	12 th and M Streets, SE	016	7-19-10	*			
20a	12 th and M Streets, SE	016	7-19-10	*			
21	14 th and M Streets, SE	017	7-30-10	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	7-15-10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22b	Barney Circle and Pennsylvania Ave, SE	018	7-15-10	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	7-15-10	*			
22d	Kentucky Ave and Potomac Street, SE	018	7-26-10	*			
22e	14 th Street and Kentucky Ave, SE	018	7-26-10	*			
23	Independence Ave, 21 st Street, SE, Extended	019	7-27-10	*			
24a	East Capitol St, west of RFK stadium	019	7-27-10	*			
28	21 st and Constitution Ave, NW	020	7-30-10	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	7-30-10	*			
30	17 th and D Streets, NW	020	7-19-10	*			
31	15 th Street and Pennsylvania Ave, NW	020	7-19-10	*			
33	10 th and F Streets, NW	020	7-19-10	*			
34	23 rd Street, north of Constitution Ave, NW	020	7-29-10	*			
34a	23 rd Street near C Street, NW	020	7-30-10	*			
35	Northeast of Roosevelt Bridge, NW (1)	021	7-29-10	*			
36	27 th and I Streets, NW	022	7-30-10	*			
36a	New Hampshire Ave and Eye Street, NW	022	7-29-10	*			
36b	19 th and L Streets, NW	022, 034	7-14-10	*			
36d	17 th and L Streets, NW	022, 034	7-14-10	*			
36g	18 th and M Streets, NW	022, 034	7-14-10	*			
36h	18 th and M Streets, NW	022, 034	7-14-10	*			
37	27 th and Eye Streets, NW	022	7-30-10	*			
38	29 th and K Streets, NW	024	7-6-10	*			
38a	30 th Street, south of K Street, NW	024	7-6-10	*			
39a	30 th and K Streets, NW	024	7-6-10	*			
39b	30 th and K Streets, NW	024	7-6-10	*			
41b	31 st and K Streets, NW	025	7-6-10	*			
41c	31 st and K Streets, NW	025	7-6-10	*			
42	Wisconsin Ave and K Street, NW	026	7-27-10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
43	Potomac and Water Streets, NW	027	7-27-10	*			
43a	Potomac and Water Streets, NW	027	7-27-10	*			
44	Water Street, west of Potomac St, NW	027	7-27-10	*			
45	36 th and M Streets, NW (1)	028	7-7-10	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	7-7-10	*			
47	38 th Street and Reservoir Road, NW	029	7-7-10	*			
47a	37 th and T Streets, NW	029	7-7-10	*			
47b	37 th and T Streets, NW	029	7-7-10	*			
47c	38 th and W Streets, NW	029	7-7-10	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	7-20-10	*			
50	26 and M Streets, NW	032	7-20-10	*			
51	N Street Extended, west of 25 th Street, NW	033	7-20-10	*			
52	22 nd Street between M and N Streets, NW	034	7-29-10	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	7-29-10	*			
53	22 nd and M Streets, NW	022, 034	7-29-10	*			
53a	22 nd and M Streets, NW	022, 034	7-29-10	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	7-19-10	*			
53c	L and 22 nd Streets, NW	022	7-19-10	*			
54	23 rd and O Streets, NW	034	7-26-10	*			
55	22 nd Street, south of Q Street, NW	035	7-26-10	*			
55a	22 nd Street, south of Q Street, NW	035	7-26-10	*			
56	23 rd and Massachusetts Ave, NW	036	7-26-10	*			
57	23 rd Street, south of Q Street, NW	036	7-26-10	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	7-8-10	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	7-8-10	*			
60	Connecticut Ave, east of Rock Creek, NW	039	7-8-10	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	7-8-10	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	7-21-10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
63	Harvard Street and Rock Creek Parkway, NW	042	7-21-10	*			
64	Adams Mill Road, south of Irving Street, NW	043	7-21-10	*			
65	Kenyon Street and Adams Mill Road, NW	044	7-21-10	*			
65a	Kenyon Street and Adams Mill Road, NW	044	7-21-10	*			
66	Adams Mill Road and Lamont Street, NW	045	7-21-10	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	7-21-10	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	7-21-10	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	7-21-10	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	7-21-10	*			
70i	5 th and Quackenbos Streets, NW	049	7-19-10	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	7-6-10	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	7-26-10	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	7-26-10	*			
73	O Street Extended and Rock Creek Parkway, NW	052	7-26-10	*			
74	Q Street, west of Rock Creek, NW	053	7-26-10	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	7-30-10	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	7-30-10	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	7-30-10	*			
78	28th Street Extended, west of Rock Creek, NW	057	7-30-10	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	7-6-10	*			
84	26 th and P Streets, NW	060	7-26-10	*			
84a	26 th and P Streets, NW	060	7-26-10	*			

Notes:

1. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.

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 - 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	7-30-10	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	7-8-10	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	7-8-10	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	7-8-10	*		*		*		*		
009	O St. Sewage Pumping Station, SE	7-29-10	*		*		*		*		
010	O St. Sewage Pumping Station, SE	7-29-10	*			*			*		
011	Main Sewage Pumping Station, SE	7-29-10	*			*			*		
011(a)	Main Sewage Pumping Station, SE	7-29-10	*		*		*		*		
012	Main Sewage Pumping Station, SE	7-29-10	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	7-15-10	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	7-15-10	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	7-15-10	*			*			*		
016	12th and O Streets, SE	7-15-10	*		*		*		*		
017	M and Water Street, SE	7-15-10	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	7-15-10	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	7-27-10	*			*			*		
020	Rock Creek Parkway and Independence, NW	7-22-10	*		*		*		*		
021	Rock Creek Parkway and C St., NW	7-22-10	*			*			*		

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	
022	Rock Creek Parkway and G St., NW	7-22-10	*		*		*		*		
024	South of 30 th and K Streets, NW	7-22-10	*		*			*	*		DC Water installed a new tide gate under a capitol project in June 2010.
025	South of 31st and K Streets, NW	7-22-10	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	7-22-10	*		*		*		*		
027	33 rd and Water Sts., NW	7-22-10	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	7-22-10	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	7-22-10	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	7-20-10	*			*			*		
032	26th and M Street, NW.	7-20-10	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	7-20-10	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	7-26-10	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	7-26-10	*		*		*		*		
036	22nd Street, South of Q Street NW.	7-13-10	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	7-8-10	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	7-8-10	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	7-8-10	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	7-8-10	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	7-8-10	*		*		*		*		
042	Harvard St. and Beach Dr NW.	7-8-10	*		*		*		*		

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	
043	Upstream of Harvard St. and Beach Dr NW.	7-8-10	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	7-8-10	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	7-8-10	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	7-22-10	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	7-22-10	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	7-22-10	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	7-22-10	*		*		*		*		
050	Rock Creek Parkway and L St., NW	7-6-10	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	7-22-10	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	7-22-10	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	7-13-10	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	7-30-10	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	7-30-10	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	7-30-10	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	7-6-10	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	7-13-10	*		*		*		*		

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 Service</i>
Main	31	4	10	N/A		N/A	
Eastside	31	2	4	N/A		N/A	
Poplar Point	31	2 ¹	3	# 1, 2 and 3 Sanitary Pumps	July 1-31 2010	Pumps need major overhaul. By pass pumping in operation	10/31/10
Potomac	31	4	5	N/A		N/A	

Notes:

1. The schedule to restore to service is impacted by the type and age of equipment. In some cases, the condition of equipment and the lack of availability of replacement parts necessitate complete replacement of the unit or element or custom fabrication of needed parts to return the units to service. For these and other reasons, projects are underway for the rehabilitation of the pumping stations.

**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	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
O St	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	07/27/10	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	07/27/10	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 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)</i>
Main	2,225.00	71.77	N/A	N/A	N/A
O St ¹	153.80	4.96	7/17 7/25	10.10 36.50	Normal Normal
Eastside	511.50	16.50	N/A	N/A	N/A
Poplar Point	595.20	19.20	N/A	N/A	N/A
Potomac	4,010.10	129.36	N/A	N/A	N/A
Rock Creek	167.50	5.40	N/A	N/A	N/A
Upper Anacostia	70.80	2.28	N/A	N/A	N/A
Earle Place	0.19	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># Screens</i>	<i># Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
07/28/2010	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>
07/28/2010	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 Duration¹ (Hours)</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume² (mg)</i>	<i>Approx. Screenings Volume³ # of bins (cu ft)</i>
7/10/2010	8	13.10	13.10	0	0.75(60)
7/14/2010	7	8.48	8.48	0	0.70(56)
7/14/2010	4	5.31	5.31	0	0.56(44.8)
7/14/2010	6	1.47	1.47	0	0.16(12.8)

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/Dechl or System Used?</i>	<i>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>Enterococcus Test Results</i>		<i>Fecal Coliform 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>	<i>Site</i>	<i>Count Per 100ml</i>
N/A	Yes	5	2	Mix Chamber	N/A	Mix Chamber	N/A	Mix Chamber	N/A
N/A	Yes	5	2	Anacostia River	N/A	Anacostia River	N/A	Anacostia River	N/A
N/A	Yes	5	2	Mix Chamber	N/A	Mix Chamber	N/A	Mix Chamber	N/A
N/A	Yes	5	2	Anacostia River	N/A	Anacostia River	N/A	Anacostia River	N/A
N/A	Yes	5	2	Mix Chamber	N/A	Mix Chamber	N/A	Mix Chamber	N/A
N/A	Yes	5	2	Anacostia River	N/A	Anacostia River	N/A	Anacostia River	N/A

Notes:

1. Mix Chr.: Mixing Chamber
2. 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>
		N/A					

2.5 Inflatable Dams

WASA 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	07/29/10	No	N/A	N/A	N/A
14 - West	07/29/10	No	N/A	N/A	N/A
15	07/29/10	No	N/A	N/A	N/A
15A	07/29/10	No	N/A	N/A	N/A
16 - East	07/29/10	No	N/A	N/A	N/A
16 - West	07/29/10	No	N/A	N/A	N/A
24 – North	07/29/10	No	N/A	N/A	N/A
24 - Middle	07/29/10	No	N/A	N/A	N/A
24 - South	07/29/10	No	N/A	N/A	N/A
34	07/29/10	No	N/A	N/A	N/A
35	07/29/10	No	N/A	N/A	N/A
52	07/29/10	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 (hrs)</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W)	<i>None</i>	<i>N/A</i>
24	<i>None</i>	<i>N/A</i>
34	<i>None</i>	<i>N/A</i>
35	<i>None</i>	<i>N/A</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow (hrs)</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(E & W)	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 overflow during July 2010.

Sanitary sewer overflow (SSOs) during July 2010 is summarized below:

**Table 3-1
Dry Weather Overflows**

Location	21 inches sanitary sewer that crosses Foundry Branch north of Massachusetts Ave @ Macomb St., NW
Cause	DDOE, National Park Services, Metropolitan Washington Council of Government and DC Water personnel met on July 29, 2010 to investigate a reported sanitary sewer leak.
Date/ Time Discovered	July 30, 2010 @ 9:43 am.
Action Taken	On July 30, 2010, DC Water returned with contractor, Anchor Construction to conduct a more thorough investigation. Anchor was able to dam and flume the flow in the stream away from the sewer and install a pump for temporary by-pass. They disturbed the bottom of the pipe and the concrete encasement then observed seepage from the pipe. The flow was then pumped into downstream manhole. Anchor used quick setting concrete mix to seal and encase the lower portion of the pipe as a short measure to repair the leak.
Date/Time Discharge Ceased	July 30, 2010 @ 11:00 am
Estimated Volume (mg)	100 gallons of sanitary sewage.
Did Overflow Reach Receiving water?	Yes, Foundry Branch, a tributary on Rock Creek River
Action taken to prevent reoccurrence	DC Water is currently evaluating the internal condition of the entire pipe and will develop a comprehensive plan to address sewer crossings in Foundry Branch.

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

Ward	Total CBs	CBs in CSS	CBs in Anacostia CSS	Anacostia CSS Inspections		Cleaning					
				Total CBs Inspected Once this Year	Total 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	2325	2146	26	16	2351	2162
2	4,714	4,112	2,316	2278	1987	3147	2735	1520	1310	4649	4045
3	3,555	461	-	0	0	4962	509	142	74	5104	583
4	2,782	1,985	159	159	68	1477	838	33	5	1510	843
5	2,167	1,035	1,035	1035	773	3302	1637	317	169	3619	1808
6	1,783	1,594	1,594	676	523	227	189	686	487	913	676
7	2,313	-	-	0	0	451	0	116	0	567	0
8	1,278	116	116	32	0	155	32	0	0	155	32
WASA Subtotal	20,183	10,871	5,954	4,914	4,085	16,046	8,086	2,822	2,061	18,868	10,149
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	4,914	4,085			2,822	2,061	18,868	10,149
% Cleaned/Inspected to Date				82%	69%					93%	93%

4.2 BMP Demonstration Projects

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

- Netting system at CSO 018 to Anacostia River
- Bar Rack at CSO 040 and 041 to Rock Creek

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

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (CY)</i>
Netting System CSO 018	7/29/10	Good	Minor Maintenance	Nets Emptied	375 lbs.
Bar Rack CSO 040	7/8/10	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	7/8/10	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in September 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 WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

**Table 4-3
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>	0
<i>Reason not Operating</i>	n/a
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	None
<i>Dates</i>	n/a
<i>Reason</i>	n/a
<i>Plan to Restore to Service</i>	n/a
<i>Volume Material Collected</i>	80 tons.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

Status: no activities this month.

5. MONITORING

5.1 Visual Wet Weather Surveys at Main & O

WASA performs visual surveys of the CSO overflows at Main and O Street Pumping Station to characterize the quantity and nature of floatable discharged. Results are as follows:

**Table 5-1
CSO 010, 011, 011, 012 Visual Wet Weather Survey Summaries
SOLIDS AND FLOATABLES VISUAL SURVEY FORM**

		Date:						Inspector's Initials:					
CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009													
010				NONE									
011													
011a													
012													

Note: L= Low, M= Moderate, H= High

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Monthly Rain Totals

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
7/1/2010	0	0	0	0
7/2/2010	0	0	0	0
7/3/2010	0	0	0	0
7/4/2010	0	0	0	0
7/5/2010	0	0	0	0
7/6/2010	0	0	0	0
7/7/2010	0	0	0	0
7/8/2010	0	0	0	0
7/9/2010	0.06	0.06	0.06	0.06
7/10/2010	1.13	1.13	1.13	1.13
7/11/2010	0	0	0	0
7/12/2010	0.14	0.14	0.14	0.14
7/13/2010	0	0	0	0
7/14/2010	0.52	0.52	0.14	0.52
7/15/2010	0	0	0	0
7/16/2010	0	0	0	0
7/17/2010	0.02	0.02	0.02	0.02
7/18/2010	0.05	0.05	0.05	0.05
7/19/2010	0.03	0.03	0.03	0.03
7/20/2010	0	0	0	0
7/21/2010	0	0	0	0
7/22/2010	0	0	0	0
7/23/2010	0	0	0	0
7/24/2010	0	0	0	0
7/25/2010	0.01	0.01	0.01	0.01
7/26/2010	0	0	0	0
7/27/2010	0	0	0	0
7/28/2010	0	0	0	0
7/29/2010	0.08	0.08	0.08	0.08
7/30/2010	0	0	0	0
7/31/2010	0	0	0	0
TOTALS	2.04	2.04	1.66	2.04



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

**Monthly Operations Report
For
Combined Sewer System
Month: August 2010**

Prepared By:
D.C. 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 2010

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (WASA or Authority) 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 Authority'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**

<i>Struct No.</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		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/27/10	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/27/10	*			
5	Poplar Point Pumping Station	004	08/03/10	*			
6	Chicago Street and Railroad Ave, SE	005	08/16/10	*			
7	W Street and Railroad Ave, SE	005	08/16/10	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	08/26/10	*			
9	13 th Street and Ridge Place, SE	007	08/26/10	*			
11	"O" Street Pumping Station	011(a)	08/03/10	*			
12	Storm Pump Discharge at Main Pumping Station	011	08/03/10	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	08/03/10	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	08/26/10	*			
15	South Capitol and E Streets	010	08/26/10	*			
15a	Half and L Streets, SE	010	08/26/10	*			
15b	South Capitol and I Streets	010	08/17/10	*			
15c	South Capitol and I Streets	010	08/17/10	*			
16	North of Main Sewage Pumping Station	012	08/26/10	*			
17	4 th and N Streets, SE, Both Extended	013	08/10/10	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	08/20/10	*			
18	6 th and M Streets, SE	014	08/20/10	*			
19	9 th and M Streets, SE	015	08/10/10	*			
19a	9 th and M Streets, SE	015	08/10/10	*			
20	12 th and M Streets, SE	016	08/10/10	*			
20a	12 th and M Streets, SE	016	08/10/10	*			
21	14 th and M Streets, SE	017	08/11/10	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	08/30/10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22b	Barney Circle and Pennsylvania Ave, SE	018	08/30/10	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	08/23/10	*			
22d	Kentucky Ave and Potomac Street, SE	018	08/23/10	*			
22e	14 th Street and Kentucky Ave, SE	018	08/30/10	*			
23	Independence Ave, 21 st Street, SE, Extended	019	08/30/10	*			
24a	East Capitol St, west of RFK stadium	019	08/31/10	*			
28	21 st and Constitution Ave, NW	020	08/31/10	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	08/16/10	*			
30	17 th and D Streets, NW	020	08/16/10	*			
31	15 th Street and Pennsylvania Ave, NW	020	08/16/10	*			
33	10 th and F Streets, NW	020	08/31/10	*			
34	23 rd Street, north of Constitution Ave, NW	020	08/16/10	*			
34a	23 rd Street near C Street, NW	020	08/31/10	*			
35	Northeast of Roosevelt Bridge, NW	021	08/31/10	*			
36	27 th and I Streets, NW	022	08/23/10	*			
36a	New Hampshire Ave and Eye Street, NW	022	08/23/10	*			
36b	19 th and L Streets, NW	022, 034	08/23/10	*			
36d	17 th and L Streets, NW	022, 034	08/20/10	*			
36g	18 th and M Streets, NW	022, 034	08/20/10	*			
36h	18 th and M Streets, NW	022, 034	08/20/10	*			
37	27 th and Eye Streets, NW	022	08/27/10	*			
38	29 th and K Streets, NW	024	08/10/10	*			
38a	30 th Street, south of K Street, NW	024	08/10/10	*			
39a	30 th and K Streets, NW	024	08/10/10	*			
39b	30 th and K Streets, NW	024	08/10/10	*			
41b	31 st and K Streets, NW	025	08/23/10	*			
41c	31 st and K Streets, NW	025	08/23/10	*			
42	Wisconsin Ave and K Street, NW	026	08/23/10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
43	Potomac and Water Streets, NW	027	08/23/10	*			
43a	Potomac and Water Streets, NW	027	08/19/10	*			
44	Water Street, west of Potomac St, NW	027	08/19/10	*			
45	36 th and M Streets, NW	028	08/19/10	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	08/19/10	*			
47	38 th Street and Reservoir Road, NW	029	08/19/10	*			
47a	37 th and T Streets, NW	029	08/19/10	*			
47b	37 th and T Streets, NW	029	08/23/10	*			
47c	38 th and W Streets, NW	029	08/23/10	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	08/23/10	*			
50	26 and M Streets, NW	032	08/05/10	*			
51	N Street Extended, west of 25 th Street, NW	033	08/05/10	*			
52	22 nd Street between M and N Streets, NW	034	08/31/10	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	08/31/10	*			
53	22 nd and M Streets, NW	022, 034	08/31/10	*			
53a	22 nd and M Streets, NW	022, 034	08/23/10	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	08/23/10	*			
53c	L and 22 nd Streets, NW	022	08/25/10	*			
54	23 rd and O Streets, NW	034	08/25/10	*			
55	22 nd Street, south of Q Street, NW	035	08/25/10	*			
55a	22 nd Street, south of Q Street, NW	035	08/25/10	*			
56	23 rd and Massachusetts Ave, NW	036	08/25/10	*			
57	23 rd Street, south of Q Street, NW	036	08/30/10	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	08/30/10	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	08/10/10	*			
60	Connecticut Ave, east of Rock Creek, NW	039	08/10/10	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	08/10/10	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	08/24/10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
63	Harvard Street and Rock Creek Parkway, NW	042	08/24/10	*			
64	Adams Mill Road, south of Irving Street, NW	043	08/24/10	*			
65	Kenyon Street and Adams Mill Road, NW	044	08/24/10	*			
65a	Kenyon Street and Adams Mill Road, NW	044	08/24/10	*			
66	Adams Mill Road and Lamont Street, NW	045	08/24/10	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	08/24/10	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	08/24/10	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	08/24/10	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	08/24/10	*			
70i	5 th and Quackenbos Streets, NW	049	08/24/10	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	08/20/10	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	08/24/10	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	08/25/10	*			
73	O Street Extended and Rock Creek Parkway, NW	052	08/24/10	*			
74	Q Street, west of Rock Creek, NW	053	08/24/10	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	08/24/10	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	08/30/10	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	08/30/10	*			
78	28th Street Extended, west of Rock Creek, NW	057	08/17/10	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	08/20/10	*			
84	26 th and P Streets, NW	060	08/25/10	*			
84a	26 th and P Streets, NW	060	08/25/10	*			

Notes:

1. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
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 - 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	08/27/10	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	08/12/10	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	08/12/10	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	08/12/10	*		*		*		*		
009	O St. Sewage Pumping Station, SE/	08/31/10	*		*		*		*		
010	O St. Sewage Pumping Station, SE/	08/31/10	*			*			*		
011	Main Sewage Pumping Station, SE	08/31/10	*			*			*		
011(a)	Main Sewage Pumping Station, SE	08/31/10	*		*		*		*		
012	Main Sewage Pumping Station, SE	08/12/10	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	08/10/10	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	08/12/10	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	08/12/10	*			*			*		
016	12th and O Streets, SE	08/12/10	*		*		*		*		
017	M and Water Street, SE	08/12/10	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	08/12/10	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	08/31/10	*			*			*		
020	Rock Creek Parkway and Independence, NW	08/31/10	*		*		*		*		
021	Rock Creek Parkway and C St., NW	08/31/10	*			*			*		
022	Rock Creek Parkway and G St., NW	08/31/10	*		*		*		*		
024	South of 30 th and K Streets, NW	08/31/10	*		*			*	*		

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	
025	South of 31st and K Streets, NW	08/31/10	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	08/31/10	*		*		*		*		
027	33 rd and Water Sts., NW	08/31/10	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	08/23/10	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	08/23/10	*		*			*	*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	08/23/10	*			*			*		
032	26th and M Street, NW.	08/23/10	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	08/23/10	*		*			*	*		
034	Just west of St. Francis Jr. High and north of N St., NW	08/25/10	*		*			*	*		
035	P St. Bridge and Rock Creek Parkway	08/25/10	*		*			*	*		
036	22nd Street, South of Q Street NW.	08/24/10	*		*			*	*		
037	Waterside Dr. and Rock Creek Parkway	08/30/10	*		*			*	*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	08/30/10	*		*			*	*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	08/10/10	*		*			*	*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	08/10/10	*		*			*	*		
041	Beach Dr. and Ontario Pl., NW	08/30/10	*		*			*	*		
042	Harvard St. and Beach Dr NW.	08/30/10	*		*			*	*		
043	Upstream of Harvard St. and Beach Dr NW.	08/30/10	*		*			*	*		
044	Kenyon Street and Beach Dr., NW.	08/30/10	*		*			*	*		
045	North of Beach Dr. and Walbridge Pl, NW.	08/30/10	*		*			*	*		
046	Piney Branch Parkway and Park Road, NW.	08/30/10	*			*			*		

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	
047	Piney Branch Parkway and Ingleside Terrace	08/30/10	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	08/12/10	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	08/24/10	*		*		*		*		
050	Rock Creek Parkway and L St., NW	08/12/10	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	08/24/10	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	08/31/10	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	08/324/10	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	08/30/10	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	08/30/10	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	08/20/10	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	08/20/10	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	08/24/10	*		*		*		*		

Notes:

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 Service</i>
Main	31	4	10	None			
Eastside	31	2	4	None			
Poplar Point	31	2 ¹	3	Pump 1, 2 & 3		Pumps need major overhaul. By pass pumping in operation	10/31/10
Potomac	31	4	5	None			

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	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
O St	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	8/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	8/25/10	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)</i>
Main	1,670.50	53.89	N/A	N/A	N/A
O St ¹	144.90	4.83	8/05/2010 8/12/2010 8/13/2010	32.30 60.90 25.60	Normal Normal Normal
Eastside	554.75	17.90	N/A	N/A	N/A
Poplar Point	595.20	19.20	N/A	N/A	N/A
Potomac	3,666.10	118.26	N/A	N/A	N/A
Rock Creek	170.00	5.48	N/A	N/A	N/A
Upper Anacostia	102.30	3.30	N/A	N/A	N/A
Earle Place	0.24	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># Screens</i>	<i># Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
8/26/10	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>
8/26/10	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 Duration¹ (Hours)</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume² (mg)</i>	<i>Approx. Screenings Volume³ # of bins (cu ft)</i>
8/4/2010	4	8.21	8.21	0	1.75(140)
8/5/2010	7	14.61	14.61	0	0.30(24)

Notes:

1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
2. Calculated as follows: Total Influent Volume – Total Foul Sewer Volume.
3. One Bin = 80 ft³
4. Event occurred before the operator arrived at the station. On arrival, operator found the station flooding and he quickly hit the emergency deflation button. As a result, no sample was taken.

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/Dechl or System Used?</i>	<i>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>Enterococcus Test Results</i>		<i>Fecal Coliform 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>	<i>Site</i>	<i>Count Per 100ml</i>
NONE									

Notes:

1. Mix Chr.: Mixing Chamber
2. 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>
NONE						

2.5 Inflatable Dams

WASA 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	8/26/10	No	N/A	N/A	N/A
14 - West	8/26/10	No	N/A	N/A	N/A
15	8/26/10	No	N/A	N/A	N/A
15A	8/26/10	No	N/A	N/A	N/A
16 - East	8/26/10	No	N/A	N/A	N/A
16 - West	8/26/10	No	N/A	N/A	N/A
24 - North	8/26/10	No	N/A	N/A	N/A
24 - Middle	8/26/10	No	N/A	N/A	N/A
24 - South	8/13/10	Yes	8/13-8/31/2010	Due flooding	9/29/10
34	8/26/10	No	N/A	N/A	N/A
35	8/26/10	No	N/A	N/A	N/A
52	8/26/10	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 (hrs)</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W)	<i>None</i>	<i>N/A</i>
24	<i>None</i>	<i>N/A</i>
34	<i>None</i>	<i>N/A</i>
35	<i>None</i>	<i>N/A</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow (hrs)</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(E & W)	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 were no dry weather overflows during August 2010.

Sanitary Sewer Overflows (SSOs) during August 2010, are summarized below:

**Table 3-1
DRY WEATHER DISCHARGES**

Location	Eastside Interceptor at Hickey Run, National Arboretum
Cause	On August 19, 2010 at approximately 12:30 pm, the District of Columbia Water and Sewer Authority (DC Water) received an e-mail from staff at the National Arboretum located in the Northeast section of Washington DC regarding leakage of sanitary sewer from the 51-inch sewer that is currently being rehabilitated into Hickey Run. The overflow most likely occurred during high flow from the storm of August 18, 2010. It appeared that during the storm, the high flow in the line knocked out the support on the steel plates covering the sides of the open half pipe in the insertion pit used to accommodate entry for the downstream restoration section of Hobas pipe in the sewer.
Date/ Time Discovered	August 19, 2010 @ approximately 12:30 pm.
Action Taken	On August 19, 2010 at 1:45 pm representatives from the District’s Department of the Environment, the National Arboretum, and DC Water with their contractor, Anchor Construction met at the site to investigate the report. No on going discharge was observed, but there was evidence of earlier flow from the sewer into the creek.
Date/Time Discharge Ceased	August 19, 2010 @ 1: 45 pm
Estimated Volume (mg)	Undetermined.
Did Overflow Reach Receiving water?	Yes, Hickey Run.
Action taken to prevent reoccurrence	DC Water’s contractor, Anchor Construction was directed to immediately install the top section of the pipe in the insertion pit, seal the pipe seams with grout and secure the steel plates over the pipes.

Location	4301 Nannie Helen Burroughs Avenue., NE
Cause	On August 20, 2010 at 4:07 pm, the District of Columbia Water and Sewer Authority (DC Water) received a call regarding an overflowing sewer manhole in the parking lot of McDonald's restaurant at 4301 Nannie Helen Burroughs Avenue., NE.
Date/ Time Discovered	August 20, 2010 at 4:07 pm
Action Taken	At 5:00 pm a Sewer Services maintenance crew was dispatched to investigate the complaint. The crew found an 8-inches sanitary sewer that serves the restaurant and other commercial establishments in the shopping area of 4300 Nannie Helen Burroughs Avenue., NE., blocked with grease. The 8-inches line was a private sewer that is not maintained by DC Water. However with DC Water's assistance, the line was finally cleared on August 24, 2010 at approximately 1:00 pm. And flushed with a degreasing agent.
Date/Time Discharge Ceased	August 24, 2010 at approximately 1:00 pm
Estimated Volume (mg)	5,100 gallons of sanitary sewage.
Did Overflow Reach Receiving water?	Yes, Watts Branch creek.
Action taken to prevent reoccurrence	DC Water notified McDonald's management staff regarding improved grease handling best practices. The restaurant management promised to monitor the grease output to determine whether the frequency of pickup should be increased. District of Columbia Department of Regulatory Affairs (DCRA) was notified for further monitoring.

Location	Eastside Interceptor at Hickey Run, National Arboretum
Cause	On August 24, 2010 staff from the District's Department of the Environment (DDOE) informed the District of Columbia Water and Sewer Authority (DC Water) that because of the levels of fecal coli form detected in the water sample taken August 20, 2010 downstream of Hickey Lane near Beachwood Road in the Arboretum, sanitary sewer is leaking from the 51-inches sewer that is currently being rehabilitated.
Date/ Time Discovered	August 20, 2010 @ approximately 12:30 pm.
Action Taken	On August 25, 2010 representatives from the District's Department of the Environment, the National Arboretum, and DC Water met on site to investigate the leak. No ongoing leak was observed, but there was an evidence of eroded path through the underbrush that showed evidence of earlier seepage from the pipe to the creek. It was then agreed in the short term, that DC Water will construct a containment sump to capture any possible seepage of waste from the pipe before it enters the stream. The containment sump was constructed on August 31, 2010.
Date/Time Discharge Ceased	August 31, 2010 @ 1: 45 pm
Estimated Volume (mg)	Approximately 100 gallons of sanitary sewage.
Did Overflow Reach Receiving water?	Yes, Hickey Run.
Action taken to prevent reoccurrence	DC Water's will continue working to obtain the necessary permits and approvals to finish the rehabilitation on that portion of the 51-inches sewer with Hobas pipe installation.

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

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	2351	2162	137	107	2488	2269
2	4,714	4,112	2,316	2,316	2,316	4649	4045	340	288	4989	4333
3	3,555	461	-	0	0	5104	583	78	13	5182	596
4	2,782	1,985	159	159	114	1510	843	885	531	2395	1374
5	2,167	1,035	1,035	1,035	805	3619	1808	61	32	3680	1840
6	1,783	1,594	1,594	1,288	1,023	913	676	1044	612	1957	1288
7	2,313	-	-	0	0	567	0	578	0	1145	0
8	1,278	116	116	60	31	155	32	49	28	204	60
WASA Subtotal	20,183	10,871	5,954	5,592	5,023	18,868	10,149	3,172	1,611	22,040	11,760
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	5,592	5,023			3,172	1,611	22,040	11,760
% Cleaned/Inspected to Date				94%	84%					>100%	>100%

4.2 BMP Demonstration Projects

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

- Netting system at CSO 018 to Anacostia River
- Bar Rack at CSO 040 and 041 to Rock Creek

Table 4-2
BMP Demonstration Projects – Report

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (CY)</i>
Netting System CSO 018	8/11/10	Good	Minor Maintenance	Nets emptied.	300 lbs.
Bar Rack CSO 040	8/10/10	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	8/30/10	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in September 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 WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	22
<i>Days not Operating</i>	6
<i>Reason not Operating</i>	Unscheduled maintenance.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	One, B-29.
<i>Dates</i>	8/24/10 to present.
<i>Reason</i>	B-29 was removed from the water for comprehensive inspection.
<i>Plan to Restore to Service</i>	B-28 is back in service. B-29 as soon as possible.
<i>Volume Material Collected</i>	80 tons
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

Status: no activities this month.

5. MONITORING

5.1 Visual Wet Weather Surveys at Main & O

WASA performs visual surveys of the CSO overflows at Main and O Street Pumping Station to characterize the quantity and nature of floatable discharged. Results are as follows:

**Table 5-1
CSO 010, 011, 011, 012 Visual Wet Weather Survey Summaries
SOLIDS AND FLOATABLES VISUAL SURVEY FORM**

CSO	Time of Observation	Date:		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009													
011													
011a							NONE						
012													

Note: L= Low, M= Moderate, H= High

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Monthly Rain Totals

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
8/1/2010	0.01	0.02	0	0.02
8/2/2010	0.08	0	0	0
8/3/2010	0	0	0	0
8/4/2010	0.28	0.06	0	0.06
8/5/2010	0.2	0.3	0.02	0.3
8/6/2010	0	0	0	0
8/7/2010	0	0	0	0
8/8/2010	0	0	0	0
8/9/2010	0	0	0	0
8/10/2010	0	0	0	0
8/11/2010	0	0	0	0
8/12/2010	1.08	0.3	0.14	0.3
8/13/2010	0.3	0.01	0.01	0.01
8/14/2010	0	0	0	0
8/15/2010	0.18	0.01	0.01	0.01
8/16/2010	0	0	0	0
8/17/2010	0	0	0	0
8/18/2010	1.75	0.25	0.01	0.25
8/19/2010	0	0	0	0
8/20/2010	0	0	0	0
8/21/2010	0	0	0.01	0
8/22/2010	0.03	0	0	0
8/23/2010	0	0	0	0
8/24/2010	0	0	0	0
8/25/2010	0	0	0.01	0
8/26/2010	0	0	0	0
8/27/2010	0	0	0	0
8/28/2010	0	0	0	0
8/29/2010	0	0	0	0
8/30/2010	0	0	0	0
8/31/2010	0	0	0	0
TOTALS	3.91	0.95	0.21	0.95



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

**Monthly Operations Report
For
Combined Sewer System
Month: September 2010**

Prepared By:
D.C. 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 2010*

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1. INTRODUCTION

The District of Columbia Water and Sewer Authority (WASA or Authority) 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 Authority'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**

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				<i>Good</i>	<i>Needs Work</i>		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/09/10	*			
5	Poplar Point Pumping Station	004	09/11/10	*			
6	Chicago Street and Railroad Ave, SE	005	09/03/10	*			
7	W Street and Railroad Ave, SE	005	09/03/10	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	09/03/10	*			
9	13 th Street and Ridge Place, SE	007	09/02/10	*			
11	"O" Street Pumping Station	011(a)	09/11/10	*			
12	Storm Pump Discharge at Main Pumping Station	011	09/11/10	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	09/02/10	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	09/11/10	*			
15	South Capitol and E Streets	010	09/11/10	*			
15a	Half and L Streets, SE	010	09/11/10	*			
15b	South Capitol and I Streets	010	09/10/10	*			
15c	South Capitol and I Streets	010	09/10/10	*			
16	North of Main Sewage Pumping Station	012	09/11/10	*			
17	4 th and N Streets, SE, Both Extended	013	09/05/10	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	09/10/10	*			
18	6 th and M Streets, SE	014	09/02/10	*			
19	9 th and M Streets, SE	015	09/02/10	*			
19a	9 th and M Streets, SE	015	09/02/10	*			
20	12 th and M Streets, SE	016	09/05/10	*			
20a	12 th and M Streets, SE	016	09/05/10	*			
21	14 th and M Streets, SE	017	09/03/10	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	09/05/10	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	09/05/10	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				<i>Good</i>	<i>Needs Work</i>		
22c	Barney Circle and Pennsylvania Ave, SE	018	09/05/10	*			
22d	Kentucky Ave and Potomac Street, SE	018	09/05/10	*			
22e	14 th Street and Kentucky Ave, SE	018	09/05/10	*			
23	Independence Ave, 21 st Street, SE, Extended	019	09/03/10	*			
24a	East Capitol St, west of RFK stadium	019	09/29/10	*			
28	21 st and Constitution Ave, NW	020	09/16/10	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	09/16/10	*			
30	17 th and D Streets, NW	020	09/12/10	*			
31	15 th Street and Pennsylvania Ave, NW	020	09/12/10	*			
33	10 th and F Streets, NW	020	09/12/10	*			
34	23 rd Street, north of Constitution Ave, NW	020	09/16/10	*			
34a	23 rd Street near C Street, NW	020	09/16/10	*			
35	Northeast of Roosevelt Bridge, NW	021	09/16/10	*			
36	27 th and I Streets, NW	022	09/12/10	*			
36a	New Hampshire Ave and Eye Street, NW	022	09/12/10	*			
36b	19 th and L Streets, NW	022, 034	09/03/10	*			
36d	17 th and L Streets, NW	022, 034	09/03/10	*			
36g	18 th and M Streets, NW	022, 034	09/03/10	*			
36h	18 th and M Streets, NW	022, 034	09/03/10	*			
37	27 th and Eye Streets, NW	022	09/12/10	*			
38	29 th and K Streets, NW	024	09/02/10	*			
38a	30 th Street, south of K Street, NW	024	09/02/10	*			
39a	30 th and K Streets, NW	024	09/02/10	*			
39b	30 th and K Streets, NW	024	09/02/10	*			
41b	31 st and K Streets, NW	025	09/02/10	*			
41c	31 st and K Streets, NW	025	09/02/10	*			
42	Wisconsin Ave and K Street, NW	026	09/05/10	*			
43	Potomac and Water Streets, NW	027	09/05/10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
43a	Potomac and Water Streets, NW	027	09/05/10	*			
44	Water Street, west of Potomac St, NW	027	09/05/10	*			
45	36 th and M Streets, NW	028	09/05/10	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	09/17/10	*			
47	38 th Street and Reservoir Road, NW	029	09/17/10	*			
47a	37 th and T Streets, NW	029	09/17/10	*			
47b	37 th and T Streets, NW	029	09/17/10	*			
47c	38 th and W Streets, NW	029	09/17/10	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	09/22/10	*			
50	26 and M Streets, NW	032	09/22/10	*			
51	N Street Extended, west of 25 th Street, NW	033	09/22/10	*			
52	22 nd Street between M and N Streets, NW	034	09/16/10	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	09/16/10	*			
53	22 nd and M Streets, NW	022, 034	09/16/10	*			
53a	22 nd and M Streets, NW	022, 034	09/16/10	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	09/30/10	*			
53c	L and 22 nd Streets, NW	022	09/30/10	*			
54	23 rd and O Streets, NW	034	09/22/10	*			
55	22 nd Street, south of Q Street, NW	035	09/22/10	*			
55a	22 nd Street, south of Q Street, NW	035	09/22/10	*			
56	23 rd and Massachusetts Ave, NW	036	09/22/10	*			
57	23 rd Street, south of Q Street, NW	036	09/22/10	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	09/02/10	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	09/02/10	*			
60	Connecticut Ave, east of Rock Creek, NW	039	09/10/10	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	09/10/10	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	09/19/10	*			
63	Harvard Street and Rock Creek Parkway, NW	042	09/19/10	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
64	Adams Mill Road, south of Irving Street, NW	043	09/19/10	*			
65	Kenyon Street and Adams Mill Road, NW	044	09/19/10	*			
65a	Kenyon Street and Adams Mill Road, NW	044	09/19/10	*			
66	Adams Mill Road and Lamont Street, NW	045	09/19/10	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	09/19/10	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	09/19/10	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	09/19/10	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	09/19/10	*			
70i	5 th and Quackenbos Streets, NW	049	09/05/10	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	09/02/10	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	09/22/10	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	09/22/10	*			
73	O Street Extended and Rock Creek Parkway, NW	052	09/22/10	*			
74	Q Street, west of Rock Creek, NW	053	09/22/10	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	09/29/10	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	09/29/10	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	09/29/10	*			
78	28th Street Extended, west of Rock Creek, NW	057	09/29/10	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	09/30/10	*			
84	26 th and P Streets, NW	060	09/22/10	*			
84a	26 th and P Streets, NW	060	09/22/10	*			

Notes:

1. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
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.
3. Structure No. 4 has been modified as part of the Blue Plains influent sewer Rehabilitation Project. It is no longer a regular structure discharging to a cso and has been deleted from this table.

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 - 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	09/09/10	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	09/04/10	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	09/04/10	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	09/04/10	*		*		*		*		
009	O St. Sewage Pumping Station, SE	09/02/10	*		*		*		*		
010	O St. Sewage Pumping Station, SE	09/30/10	*			*			*		
011	Main Sewage Pumping Station, SE	09/30/10	*			*			*		
011(a)	Main Sewage Pumping Station, SE	09/30/10	*		*		*		*		
012	Main Sewage Pumping Station, SE	09/30/10	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	09/05/10	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	09/18/10	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	09/18/10	*			*			*		
016	12th and O Streets, SE	09/04/10	*		*		*		*		
017	M and Water Street, SE	09/04/10	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	09/04/10	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	09/29/10	*			*			*		
020	Rock Creek Parkway and Independence, NW	09/18/10	*		*		*		*		
021	Rock Creek Parkway and C St., NW	09/18/10	*			*			*		
022	Rock Creek Parkway and G St., NW	09/18/10	*		*		*		*		
024	South of 30 th and K Streets, NW	09/18/10	*		*		*		*		
025	South of 31st and K Streets, NW	09/18/10	*		*		*		*		

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	
026	Wisconsin Avenue and Water Street, NW	09/18/10	*		*		*		*		
027	33 rd and Water Sts., NW	09/18/10	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	09/18/10	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	09/18/10	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	09/22/10	*			*			*		
032	26th and M Street, NW.	09/22/10	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	09/22/10	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	09/22/10	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	09/22/10	*		*		*		*		
036	22nd Street, South of Q Street NW.	09/29/10	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	09/02/10	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	09/02/10	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	09/10/10	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	09/10/10	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	09/04/10	*		*		*		*		
042	Harvard St. and Beach Dr NW.	09/04/10	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	09/04/10	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	09/04/10	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	09/04/10	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	09/19/10	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	09/19/10	*		*		*		*		

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	
048	South of Piney Branch Parkway and 17 th St.	09/19/10	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	09/19/10	*		*		*		*		
050	Rock Creek Parkway and L St., NW	09/02/10	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	09/04/10	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	09/04/10	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	09/29/10	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	09/29/10	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	09/29/10	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	09/29/10	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	09/04/10	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	09/29/10	*		*		*		*		

Notes:

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 Service</i>
Main	31	4	10	None			
Eastside	31	2	4	None			
Poplar Point	31	2 ¹	3	Pump 1, 2 & 3		Pumps need major overhaul. By pass pumping in progress	10/31/10
Potomac	31	4	5	Pump # 5	9/4/10	Mechanical seal replacement	11/30/10

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	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
O St	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	9/24/10	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	9/24/10	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)</i>
Main	1,505.70	51.92	N/A	N/A	N/A
O St ¹	168.80	5.82	9/12 9/30	14.70 402.40	Normal Normal
Eastside	439.24	14.64	N/A	N/A	N/A
Poplar Point	576.00	19.20	N/A	N/A	N/A
Potomac	3,380.50	112.68	N/A	N/A	N/A
Rock Creek	144.73	4.82	N/A	N/A	N/A
Upper Anacostia	105.10	3.50	N/A	N/A	N/A
Earle Place	0.36	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># Screens</i>	<i># Swirls</i>	<i>Screens or Swirls Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
09/23/10	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>
09/23/10	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 Duration¹ (Hours)</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume² (mg)</i>	<i>Approx. Screenings Volume³ # of bins (cu ft)</i>
9/30/2010	16	14.42	3.80	10.625	1.0(80)
9/30/2010	4	1.53	1.53	0	0.55(44)

Notes:

1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
2. Calculated as follows: Total Influent Volume – Total Foul Sewer Volume.
3. One Bin = 80 ft³

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, E. Coli 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 E. Coli 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/Dechl or 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>
9/30	Yes	5	2	Mix Chamber	0.1	Mix Chamber	2,000
9/30	Yes	5	2	Anacostia River	0.0	Anacostia River	0
9/30	Yes	5	2	Mix Chamber	0.1	Mix Chamber	0
9/30	Yes	5	2	Anacostia River	0.0	Anacostia River	52,000

Notes:

1. Mix Chr.: Mixing Chamber
2. River: River Outfall

Table 2-10
 Northeast Boundary Swirl Facility – Effluent Sampling Results
 September 2010

<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>
9/30/10	69.0	0.00	0.83	5.50	6.33	0.84	13.4
9/30 – 10/01/10	39.0	0.00	0.58	1.76	2.34	0.32	13.6

Notes:

Effluent samples taken every two hours and flow composited for a maximum of 24 hours per storm.

2.5 Inflatable Dams

WASA 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	9/26/10	No	N/A	N/A	N/A
14 - West	9/26/10	No	N/A	N/A	N/A
15	9/26/10	No	N/A	N/A	N/A
15A	9/26/10	No	N/A	N/A	N/A
16 - East	9/26/10	No	N/A	N/A	N/A
16 - West	9/26/10	No	N/A	N/A	N/A
24 - North	9/26/10	No	N/A	N/A	N/A
24 - Middle	9/01/10	Yes	9/1-9/29/2010	Equipment failure due to flooding	9/29/2010
24 - South	9/26/10	No	N/A	N/A	N/A
34	9/26/10	No	N/A	N/A	N/A
35	9/26/10	No	N/A	N/A	N/A
52	9/26/10	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 (hrs)</i>
14 (E & W)	<i>None</i>	<i>N/A</i>
15	<i>None</i>	<i>N/A</i>
15A	<i>None</i>	<i>N/A</i>
16 (E & W)	<i>None</i>	<i>N/A</i>
24	<i>None</i>	<i>N/A</i>
34	<i>None</i>	<i>N/A</i>
35	<i>None</i>	<i>N/A</i>
52	<i>None</i>	<i>N/A</i>
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow (hrs)</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(E & W)	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

Note:

3. DRY WEATHER OVERFLOWS

There was no dry weather overflow during September 2010.

Sanitary Sewer Overflows (SSOs) during September 2010 are summarized below:

Sanitary Sewer Overflow

Location	Broad Branch Road at 27 th Street, NW
Cause	Flow from an 18 inch sanitary sewer seeping into the storm sewer outfall at 27 Street and Broad Branch Rd., NW.
Date/ Time Discovered	September 24, 2010 @ approximately 10:30 AM.
Action Taken	On September 24, 2010 at approximately 10:30 am, a sewer maintenance crew from the district of Columbia Water and Sewer Authority (DC Water) was dispatched to investigate a report from the District's Department of the Environment (DDOE) regarding a possible sewer leak into Rock Creek in Washington, DC. The leak was confirmed; Dc Water immediately directed contractor Anchor Construction to mobilize a crew in order to perform a point repair and replace any defective pipe in the 18 inch sanitary sewer. On September 25 at 9:00 AM, Anchor Construction successfully diverted the flow from the 18 inch sewer into a nearby 27 inch sanitary sewer along Broad Branch Road, NW. The 18 inch pipe was examined with CCTV and an open joint that were the apparent source of the leak was identified. The contractor replaced fifteen feet of terra cotta pipe with PVC on the 18 inch sewer and completed the repair at 5:00 PM on September 25, 2010. On September 27, 2010 DC Water and DDOE staff reexamined the pipe with dye test and discovered additional joint leaks. The contractor was redirected to replace all sections of the defective pipe.
Date/Time Discharge Ceased	September 28, 2010 @ 9:00 AM.
Estimated Volume (mg)	12,000 gallons
Did Overflow Reach Receiving water?	Yes, Rock Creek.
Action taken to prevent reoccurrence	DC Water's contractor, Anchor Construction replaced all sections of defective pipe in the 18 inch sewer to ensure no further leakage the sanitary sewer. The measures taken effectively stopped any further sanitary sewer overflow from the 18 inch sewer pipe into Rock Creek.

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

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	2488	2269	51	46	2539	2315
2	4,714	4,112	2,316	2,316	2,316	4989	4333	455	336	5444	4669
3	3,555	461	-	0	0	5182	596	128	0	5310	596
4	2,782	1,985	159	159	159	2395	1374	31	0	2426	1374
5	2,167	1,035	1,035	1,035	1,035	3680	1840	280	224	3960	2064
6	1,783	1,594	1,594	1,357	1,023	1957	1288	174	69	2131	1357
7	2,313	-	-	0	0	1145	0	2176	0	3321	0
8	1,278	116	116	63	31	204	60	28	3	232	63
WASA Subtotal	20,183	10,871	5,954	5,664	5,298	22,040	11,760	3,323	678	25,363	12,438
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	5,664	5,298			3,323	678	25,363	12,438
% Cleaned/Inspected to Date				95%	89%					> 100%	> 100%

4.2 BMP Demonstration Projects

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

- Netting system at CSO 018 to Anacostia River
- Bar Rack at CSO 040 and 041 to Rock Creek

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

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (CY)</i>
Netting System CSO 018	9/3/10.	Good	Minor Maintenance	Nets changed.	L – 200lbs R – 230 lbs.
Bar Rack CSO 040	9/10/10	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	9/03/10	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in September 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 WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	21
<i>Days not Operating</i>	5
<i>Reason not Operating</i>	Strong winds and maintenance on boat.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	One, B-28
<i>Dates</i>	8/19/10 to present.
<i>Reason</i>	Rebuilding hydraulic pump and preventive maintenance service.
<i>Plan to Restore to Service</i>	As soon as possible.
<i>Volume Material Collected</i>	50 ton.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

Status: no activities this month.

5. MONITORING

5.1 Visual Wet Weather Surveys at Main & O

WASA performs visual surveys of the CSO overflows at Main and O Street Pumping Station to characterize the quantity and nature of floatable discharged. Results are as follows:

**Table 5-1
CSO 010, 011, 011, 012 Visual Wet Weather Survey Summaries
SOLIDS AND FLOATABLES VISUAL SURVEY FORM**

Date: 09/12/2010

Inspector's Initials: cw

CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009	9:00 am	x			x			x		x			
010	9:00 am	x			x			x		x			
011	9:00 am	x			x			x		x			
011a	9:00 am	x			x			x		x			
012	9:00 am	x			x			x		x			

Note: L= Low, M= Moderate, H= High

		Date:						Inspector's Initials:					
CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009	8:00 am	x			x		x			x			
	10:00 am	x			x		x			x			
	12:00 pm	x			x		x			x			
	2:00 pm	x		x			x			x			
010													
011													
011a													
012	8:00 am	x			x		x			x			
	10:00 am	x			x		x			x			
	12:00 pm	x			x		x			x			
	2:00 pm	x		x			x			x			

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Monthly Rain Totals Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
9/1/2010	0	0	0	0
9/2/2010	0	0	0	0
9/3/2010	0	0	0	0
9/4/2010	0	0	0	0
9/5/2010	0	0	0	0
9/6/2010	0	0	0	0
9/7/2010	0	0	0	0
9/8/2010	0	0	0	0
9/9/2010	0	0	0	0
9/10/2010	0	0	0	0
9/11/2010	0	0	0	0
9/12/2010	0.02	0.05	0.51	0.51
9/13/2010	0	0	0	0
9/14/2010	0	0	0	0
9/15/2010	0	0	0	0
9/16/2010	0.02	0.02	0.01	0.01
9/17/2010	0.01	0.01	0.02	0.02
9/18/2010	0	0	0	0
9/19/2010	0	0	0	0
9/20/2010	0	0	0	0
9/21/2010	0	0	0	0
9/22/2010	0	0	0	0
9/23/2010	0	0	0	0
9/24/2010	0	0	0	0
9/25/2010	0	0	0	0
9/26/2010	0.01	0.01	0	0
9/27/2010	0.1	0.1	0.15	0.16
9/28/2010	0	0	0.01	0.01
9/29/2010	0.22	0.22	0.19	0.19
9/30/2010	4.11	4.11	3.12	3.23
TOTALS	4.49	4.52	4.01	4.13

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: July, August, September 2010

SCENARIO: Q3Y2010, 10-18-2010

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	10	13.07	58.75	5.88	17.50	0.50
006	Good Hope Road, West of Nichols Ave.,SE	4	2.54	11.25	2.81	7.50	0.50
007	13 th Street and Ridge Place,SE	5	23.51	25.75	5.15	12.00	0.50
009	2nd Street, 300 feet North of N Place, SE	7	8.64	28.00	4.00	11.00	0.50
010	O Street SewagePumping Station, SE (pumped Overflow)	7	209.55	30.50	4.36	12.75	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	2	1.67	0.50	0.25	0.25	0.25
011a	South of Main SewagePumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	5	89.01	13.75	2.75	6.50	0.25
013	4th and N Streets, SE	5	7.73	28.50	5.70	13.00	0.25
014	6th and M Streets, SE	11	34.93	63.75	5.80	17.50	0.75
015	9th and M Streets, SE	5	6.70	18.75	3.75	9.00	0.50
016	12th and M Streets, SE	5	21.88	24.50	4.90	11.00	0.25
017	14th and M Streets, SE	8	29.53	51.50	6.44	17.75	1.00
018	Barney Circle andPennsylvania Ave, SE	15	22.36	95.00	6.33	23.25	0.50
019	Northeast Boundary - Swirl Effluent	7	304.92	51.00	7.29	16.75	1.50
019	Northeast Bound. - Swirl Bypass	4	217.02	9.25	2.31	4.75	0.75
	SUBTOTAL		993.05				
Potomac CSOs							
003	Bolling AFB	1	0.01	0.75	0.75	0.75	0.75
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	4	45.97	26.75	6.69	11.25	1.75
021	Northeast ofRoosevelt Bridge, NW	5	233.29	31.25	6.25	13.50	1.25
022	27th and K Streets, NW	10	63.86	47.00	4.70	20.25	0.25
024	30th and K Streets, NW	5	36.24	40.50	8.10	20.25	0.50
025	31st & K St NW	4	0.87	7.50	1.88	5.00	0.25
026	Wisconsin Avenue andK St., NW	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West ofStreet, NW	12	26.25	94.25	7.85	21.25	1.00
028	36th and M Streets, NW	9	3.51	39.25	4.36	14.25	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	4	10.88	19.50	4.88	10.50	1.00
	SUBTOTAL		420.89				
Rock Creek							
031	Pennsylvania Avenue, East Rock Creek, NW	4	0.13	13.75	3.44	8.25	0.75
032	26th and M Streets, NW	0	0.00	0.00	0.00	0.00	0.00
033	N Street extendedwest of 25th Street,NW	2	2.49	4.25	2.13	3.50	0.75
034	23rd and O Streets, SW	1	0.10	1.00	1.00	1.00	1.00
035	22nd Street south of Q Street, NW	1	0.45	0.25	0.25	0.25	0.25
036	22nd Street South of Q Street, NW	5	1.58	21.75	4.35	9.50	0.75
037	Northwest of Belmontand Rock Creek and Potomac Parkway	0	0.00	0.00	0.00	0.00	0.00
038	North of Belmont Road,east of Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	1	0.13	0.75	0.75	0.75	0.75
041	Ontario extended and Rock Creek Parkway	0	0.00	0.00	0.00	0.00	0.00
042	Harvard Street and RockCreek Parkway, NW	1	0.03	0.25	0.25	0.25	0.25

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: July, August, September 2010
SCENARIO: Q3Y2010, 10-18-2010

NPDES No.	Description	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
043	Adams Mill Road South of Irving Street, NW	3	1.71	3.25	1.08	2.00	0.50
044	Kenyon Street and Adams Mill Road, NW	1	0.01	0.25	0.25	0.25	0.25
045	Adams Mill Road and Lamont Street, NW	3	0.12	3.75	1.25	2.00	0.75
046	Park Road south of Piney Branch Parkway, NW	2	0.02	1.75	0.88	1.25	0.50
047	Ingleside Terrace extended and Piney Branch Parkway	2	0.05	1.50	0.75	1.00	0.50
048	Mt. Pleasant Street extended and Piney Branch Parkway	2	0.28	2.50	1.25	1.75	0.75
049	Piney Branch and Lamont Street, NW	5	45.06	29.50	5.90	12.50	1.50
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	4	7.85	28.50	7.13	14.25	0.75
058	Connecticut Avenue and Rock Creek Parkway, NW	2	3.26	16.00	8.00	10.75	5.25
060	P St and 26 th St, NW	0	0.0000	0.00	0.00	0.00	0.00
	SUBTOTAL		63.27				
	TOTAL		1,477.21				

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