

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER 2008

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



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

**Monthly Operations Report
For
Combined Sewer System
Month: July 2008**

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: July 2008*

Table of Contents

- 1. INTRODUCTION**
- 2. OPERATION AND MAINTENANCE**
 - 2.1 Regulators
 - 2.2 Outfalls, Tide Gates and CSO Signs
 - 2.3 Pumping Stations
 - 2.4 Northeast Boundary Swirl Facility
 - 2.5 Inflatable Dams
- 3. DRY WEATHER OVERFLOWS**
- 4. SOLIDS AND FLOATABLES CONTROL**
 - 4.1 Catch Basin Cleaning
 - 4.2 BMP Demonstration Projects
 - 4.3 Skimmer Boat Programs
 - 4.4 CSS Litter Control
- 5. MONITORING**
 - 5.1 Visual Survey of Main & O
 - 5.2 Rainfall Data

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	07/15/08	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/15/08	*			
5	Poplar Point Pumping Station	004	07/03/08	*			
6	Chicago Street and Railroad Ave, SE	005	07/24/08	*			
7	W Street and Railroad Ave, SE	005	07/09/08	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	07/09/08	*			
9	13 th Street and Ridge Place, SE	007	07/02/08	*			
11	"O" Street Pumping Station	011(a)	07/24/08	*			
12	Storm Pump Discharge at Main Pumping Station	011	07/24/08	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	07/09/08	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	07/24/08	*			
15	South Capitol and E Streets	010	07/30/08	*			
15a	Half and L Streets, SE	010	07/30/08	*			
15b	South Capitol and I Streets	010	07/15/08	*			
15c	South Capitol and I Streets	010	07/15/08	*			
16	North of Main Sewage Pumping Station	012	07/24/08	*			
17	4 th and N Streets, SE, Both Extended	013	07/09/08	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	07/01/08	*			
18	6 th and M Streets, SE	014	07/01/08	*			
19	9 th and M Streets, SE	015	07/01/08	*			
19a	9 th and M Streets, SE	015	07/01/08	*			
20	12 th and M Streets, SE	016	07/01/08	*			
20a	12 th and M Streets, SE	016	07/01/08	*			
21	14 th and M Streets, SE	017	07/08/08	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	07/08/08	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22b	Barney Circle and Pennsylvania Ave, SE	018	07/08/08	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	07/08/08	*			
22d	Kentucky Ave and Potomac Street, SE	018	07/08/08	*			
22e	14 th Street and Kentucky Ave, SE	018	07/08/08	*			
23	Independence Ave, 21 st Street, SE, Extended	019	07/11/08	*			
24a	East Capitol St, west of RFK stadium	019	07/11/08	*			
28	21 st and Constitution Ave, NW	020	07/14/08	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	07/14/08	*			
30	17 th and D Streets, NW	020	07/08/08	*			
31	15 th Street and Pennsylvania Ave, NW	020	07/08/08	*			
33	10 th and F Streets, NW	020	07/08/08	*			
34	23 rd Street, north of Constitution Ave, NW	020	07/30/08	*		construction	
34a	23 rd Street near C Street, NW	020	07/14/08	*			
35	Northeast of Roosevelt Bridge, NW	021	07/30/08	*			
36	27 th and I Streets, NW	022	07/14/08	*			
36a	New Hampshire Ave and Eye Street, NW	022	07/14/08	*			
36b	19 th and L Streets, NW	022, 034	07/02/08	*			
36d	17 th and L Streets, NW	022, 034	07/02/08	*			
36g	18 th and M Streets, NW	022, 034	07/02/08	*			
36h	18 th and M Streets, NW	022, 034	07/02/08	*			
37	27 th and Eye Streets, NW	022	07/14/08	*			
38	29 th and K Streets, NW	024	07/07/08	*			
38a	30 th Street, south of K Street, NW	024	07/07/08	*			
39a	30 th and K Streets, NW	024	07/07/08	*			
39b	30 th and K Streets, NW	024	07/07/08	*			
41b	31 st and K Streets, NW	025	07/07/08	*			
41c	31 st and K Streets, NW	025	07/07/08	*			
42	Wisconsin Ave and K Street, NW	026	07/11/08	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
43	Potomac and Water Streets, NW	027	07/11/08	*			
43a	Potomac and Water Streets, NW	027	07/11/08	*			
44	Water Street, west of Potomac St, NW	027	07/11/08	*			
45	36 th and M Streets, NW	028	07/11/08	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	07/07/08	*			
47	38 th Street and Reservoir Road, NW	029	07/07/08	*			
47a	37 th and T Streets, NW	029	07/07/08	*			
47b	37 th and T Streets, NW	029	07/07/08	*			
47c	38 th and W Streets, NW	029	07/07/08	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	07/14/08	*			
50	26 and M Streets, NW	032	07/14/08	*			
51	N Street Extended, west of 25 th Street, NW	033	07/14/08	*			
52	22 nd Street between M and N Streets, NW	034	07/30/08	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	07/30/08	*			
53	22 nd and M Streets, NW	022, 034	07/16/08	*			
53a	22 nd and M Streets, NW	022, 034	07/16/08	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	07/16/08	*			
53c	L and 22 nd Streets, NW	022	07/16/08	*			
54	23 rd and O Streets, NW	034	07/16/08	*			
55	22 nd Street, south of Q Street, NW	035	07/16/08	*			
55a	22 nd Street, south of Q Street, NW	035	07/16/08	*			
56	23 rd and Massachusetts Ave, NW	036	07/16/08	*			
57	23 rd Street, south of Q Street, NW	036	07/16/08	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	07/11/08	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	07/11/08	*			
60	Connecticut Ave, east of Rock Creek, NW	039	07/11/08	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	07/11/08	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	07/28/08	*			

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	07/28/08	*			
64	Adams Mill Road, south of Irving Street, NW	043	07/28/08	*			
65	Kenyon Street and Adams Mill Road, NW	044	07/28/08	*			
65a	Kenyon Street and Adams Mill Road, NW	044	07/28/08	*			
66	Adams Mill Road and Lamont Street, NW	045	07/28/08	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	07/28/08	*			
68	Ingleside Terrace, Extended and Piney Branch Parkway, NW	047	07/28/08	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	07/28/08	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	07/28/08	*			
70i	5 th and Quackenbos Streets, NW	049	07/02/08	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	07/15/08	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	07/16/08	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	07/16/08	*			
73	O Street Extended and Rock Creek Parkway, NW	052	07/16/08	*			
74	Q Street, west of Rock Creek, NW	053	07/16/08	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	07/15/08	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	07/15/08	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	07/15/08	*			
78	28th Street Extended, west of Rock Creek, NW	057	07/15/08	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	07/08/08	*			
84	26 th and P Streets, NW	060	07/16/08	*			
84a	26 th and P Streets, NW	060	07/16/08	*			

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	07/15/08	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	07/10/08	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	07/10/08	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	07/10/08	*		*		*		*		
009	O St. Sewage Pumping Station, SE/	07/29/08	*		*		*		*		
010	O St. Sewage Pumping Station, SE/	07/29/08	*			*			*		
011	Main Sewage Pumping Station, SE	07/29/08	*			*			*		
011(a)	Main Sewage Pumping Station, SE	07/29/08	*		*		*		*		
012	Main Sewage Pumping Station, SE	07/29/08	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	07/29/08	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	07/22/08	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	07/22/08	*			*			*		
016	12th and O Streets, SE	07/08/08	*		*		*		*		
017	M and Water Street, SE	07/08/08	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	07/08/08	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	07/10/08	*			*			*		
020	Rock Creek Parkway and Independence, NW	07/29/08	*		*		*		*		
021	Rock Creek Parkway and C St., NW	07/29/08	*			*			*		
022	Rock Creek Parkway and G St., NW	07/17/08	*		*		*		*		

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	
024	South of 30 th and K Streets, NW	07/17/08	*		*				*	*	WASA has developed a capitol project to design and construct a replacement gate for improved performance.
025	South of 31st and K Streets, NW	07/17/08	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	07/17/08	*		*		*		*		
027	33 rd and Water Sts., NW	07/17/08	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	07/17/08	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	07/17/08	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	07/14/08	*			*			*		
032	26th and M Street, NW.	07/14/08	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	07/14/08	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	07/16/08	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	07/16/08	*		*		*		*		
036	22nd Street, South of Q Street NW.	07/29/08	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	07/11/08	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	07/11/08	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	07/11/08	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	07/11/08	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	07/28/08	*		*		*		*		
042	Harvard St. and Beach Dr NW.	07/03/08	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	07/03/08	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	07/03/08	*		*		*		*		

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	
045	North of Beach Dr. and Walbridge Pl, NW.	07/03/08	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	07/03/08	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	07/28/08	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	07/28/08	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	07/28/08	*		*		*		*		
050	Rock Creek Parkway and L St., NW	07/28/08	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	07/15/08	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	07/17/08	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	07/17/08	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	07/29/08	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	07/15/08	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	07/15/08	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	07/08/08	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	07/29/08	*		*		*		*		

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	12	Screen #4	7/01/08-7/31/08	Rake Assembly	10/31/08
				Pump #1	7/01/08-7/31/08	Pump Vibration –Damaged Impeller and shaft	10/31/08
Eastside	31	2	4	None			
Poplar Point	31	2 ¹	3	Pump #2	7/20/08-7/31/08	Seals/Bearing	7/31/08
Potomac	31	4	5	Pump #3	7/01/08-7/31/08	Reconstruction	8/31/08

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	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
O St	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	7/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	7/24/08	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	2,465.00	79.52	N/A	N/A	N/A
O St ¹	181.90	5.87	7/13/08 7/14/08 7/23/08	14.7 21.4 56.3	Normal Normal Normal
Eastside	453.70	14.64	N/A	N/A	N/A
Poplar Point	599.40	19.34	N/A	N/A	N/A
Potomac	3,830.70	123.57	N/A	N/A	N/A
Rock Creek	136.80	4.41	N/A	N/A	N/A
Upper Anacostia	64.70	2.09	N/A	N/A	N/A
Earle Place	0.92	0.03	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>
7/21/08	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>
7/21/08	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>
7/6/2008	3	8.79	2.258	6.532	0.4(32)
7/9/2008	2.5	1.26	1.26	0	0.15(12)
7/13/2008	1	2.64	2.64	0	0.3(24)
7/14/2008	2.5	2.92	2.92	0	0.1(8)
7/23/2008	3	9.06	9.06	0	1.6(128)
7/24/2008 ⁴	6	0	0	0	0.0(0)
7/27/2008 ⁴	4	0	0	0	0.75(60)

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/Dechlor 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>
7/06/08	Yes	5	2	Mix Chamber	0.3	Mix Chamber	51,000	Mix Chamber	410,000
7/06/08	Yes	5	2	Anacostia River	0	Anacostia River	5,700	Anacostia River	290,000

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>
7/06/08	128	0.00	0.00	2.95	2.95	0.58	15.9

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	7/23/08	No	N/A	N/A	N/A
14 - West	7/23/08	No	N/A	N/A	N/A
15	7/23/08	No	N/A	N/A	N/A
15A	7/23/08	No	N/A	N/A	N/A
16 - East	7/23/08	No	N/A	N/A	N/A
16 - West	7/23/08	No	N/A	N/A	N/A
24 - North	7/23/08	No	N/A	N/A	N/A
24 - Middle	7/23/08	No	N/A	N/A	N/A
24 - South	7/23/08	No	N/A	N/A	N/A
34	7/23/08	No	N/A	N/A	N/A
35	7/23/08	No	N/A	N/A	N/A
52	7/23/08	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)	None	N/A
15	7/06/08 7/23/08 7/27/08	2hrs 30mins 1hr 0mins 17mins
15A	7/06/08 7/13/08 7/14/08 7/23/08	1hr 42mins 1hr41mins 28mins 2hrs 0mins
16 (E & W)	7/27/08	38 mins
24	7/23/08	2mins
34	7/13/08 7/23/08 7/27/08	22mins 1hr 0mins 24mins
35	7/06/08 7/13/08 7/14/08 7/23/08 7/27/08	1hr 46mins 1hr45mins 1hr38mins 1hr 35mins 35mins
52	None	N/A
<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

Dry weather overflows (DWOs), are summarized below:

**Table 3-1
DRY WEATHER DISCHARGES**

There was no dry weather overflow during July 2008.

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	923	900	999	812	1922	1712
2	4,714	4,112	2,316	2,316	2,316	4971	4339	58	36	5029	4375
3	3,555	461	-	0	0	1975	189	281	131	2256	320
4	2,782	1,985	159	159	159	453	361	93	46	546	407
5	2,167	1,035	1,035	918	772	1652	877	79	41	1731	918
6	1,783	1,594	1,594	1594	1,594	2306	1993	310	245	2616	2238
7	2,313	-	-	0	0	3134	0	163	0	3297	0
8	1,278	116	116	116	116	1067	108	685	470	1752	578
WASA Subtotal	20,183	10,871	5,954	5,837	5,691	16,481	8,767	2,668	1,781	19,149	10,548
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	5,837	5,691			2,668	1,781	19,149	10,548
% Cleaned/Inspected to Date				98%	95%					95%	97%

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	7/01/08 and 7/28/08.	Good	Minor Maintenance	Nets emptied.	280 lbs.
Bar Rack CSO 040	7/11/08	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	7/28/08	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>	2
<i>Reason not Operating</i>	Low tide.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	One, B-29
<i>Dates</i>	6/19/08 to present.
<i>Reason</i>	Waiting on parts for the new wing and screens being installed on B-29.
<i>Plan to Restore to Service</i>	As soon as possible.
<i>Volume Material Collected</i>	60 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)

Date	Monthly Rain Totals			
	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
7/1/2008	0.02	0	0	0
7/2/2008	0	0	0	0
7/3/2008	0	0	0	0
7/4/2008	0.16	0.12	0.05	0.06
7/5/2008	0.05	0.04	0.07	0.06
7/6/2008	0.6	0.54	0.01	0.06
7/7/2008	0	0	0	0
7/8/2008	0	0	0	0
7/9/2008	0	0.14	0.01	0
7/10/2008	0.03	0	0	0
7/11/2008	0	0	0	0
7/12/2008	0	0	0	0
7/13/2008	0.48	1.03	0.63	0.69
7/14/2008	0.68	0.69	0.72	0.68
7/15/2008	0	0	0	0
7/16/2008	0	0	0	0
7/17/2008	0	0	0.07	0.18
7/18/2008	0	0	0	0
7/19/2008	0	0	0	0
7/20/2008	0.03	0.01	0.01	0
7/21/2008	0.01	0	0	0
7/22/2008	0	0.01	0.01	0.08
7/23/2008	1.67	1.08	1.08	1.19
7/24/2008	0.03	0.04	0.04	0.04
7/25/2008	0	0	0	0
7/26/2008	0	0	0	0
7/27/2008	0.46	0.34	0.34	0.43
7/28/2008	0	0	0	0
7/29/2008	0	0	0	0.01
7/30/2008	0	0	0	0
7/31/2008	0	0	0	0
TOTALS	4.22	4.04	3.04	3.48



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

**Monthly Operations Report
For
Combined Sewer System
Month: August 2008**

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 2008

Table of Contents

- 6. INTRODUCTION**
- 7. OPERATION AND MAINTENANCE**
 - 7.1 Regulators
 - 7.2 Outfalls, Tide Gates and CSO Signs
 - 7.3 Pumping Stations
 - 7.4 Northeast Boundary Swirl Facility
 - 7.5 Inflatable Dams
- 8. DRY WEATHER OVERFLOWS**
- 9. SOLIDS AND FLOATABLES CONTROL**
 - 9.1 Catch Basin Cleaning
 - 9.2 BMP Demonstration Projects
 - 9.3 Skimmer Boat Programs
 - 9.4 CSS Litter Control
- 10. MONITORING**
 - 10.1 Visual Survey of Main & O
 - 10.2 Rainfall Data

6. 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.

7. OPERATION AND MAINTENANCE

7.1 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	08/22/08	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/28/08	*			
5	Poplar Point Pumping Station	004	08/14/08	*			
6	Chicago Street and Railroad Ave, SE	005	08/04/08	*			
7	W Street and Railroad Ave, SE	005	08/04/08	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	08/04/08	*			
9	13 th Street and Ridge Place, SE	007	08/04/08	*			
11	"O" Street Pumping Station	011(a)	08/14/08	*			
12	Storm Pump Discharge at Main Pumping Station	011	08/14/08	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	08/01/08	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	08/14/08	*			
15	South Capitol and E Streets	010	08/14/08	*			
15a	Half and L Streets, SE	010	08/14/08	*			
15b	South Capitol and I Streets	010	08/06/08	*			
15c	South Capitol and I Streets	010	08/06/08	*			
16	North of Main Sewage Pumping Station	012	08/14/08	*			
17	4 th and N Streets, SE, Both Extended	013	08/07/08	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	08/27/08	*			
18	6 th and M Streets, SE	014	08/27/08	*			
19	9 th and M Streets, SE	015	08/01/08	*			
19a	9 th and M Streets, SE	015	08/01/08	*			
20	12 th and M Streets, SE	016	08/01/08	*			
20a	12 th and M Streets, SE	016	08/01/08	*			
21	14 th and M Streets, SE	017	08/06/08	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	08/06/08	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22b	Barney Circle and Pennsylvania Ave, SE	018	08/06/08	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	08/06/08	*			
22d	Kentucky Ave and Potomac Street, SE	018	08/08/08	*			
22e	14 th Street and Kentucky Ave, SE	018	08/08/08	*			
23	Independence Ave, 21 st Street, SE, Extended	019	08/04/08	*			
24a	East Capitol St, west of RFK stadium	019	08/04/08	*			
28	21 st and Constitution Ave, NW	020	08/18/08	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	08/18/08	*			
30	17 th and D Streets, NW	020	08/05/08	*			
31	15 th Street and Pennsylvania Ave, NW	020	08/05/08	*			
33	10 th and F Streets, NW	020	08/05/08	*			
34	23 rd Street, north of Constitution Ave, NW	020	08/14/08	*		construction	
34a	23 rd Street near C Street, NW	020	08/18/08	*			
35	Northeast of Roosevelt Bridge, NW	021	08/07/08	*			
36	27 th and I Streets, NW	022	08/07/08	*			
36a	New Hampshire Ave and Eye Street, NW	022	08/07/08	*			
36b	19 th and L Streets, NW	022, 034	08/12/08	*			
36d	17 th and L Streets, NW	022, 034	08/12/08	*			
36g	18 th and M Streets, NW	022, 034	08/12/08	*			
36h	18 th and M Streets, NW	022, 034	08/12/08	*			
37	27 th and Eye Streets, NW	022	08/07/08	*			
38	29 th and K Streets, NW	024	08/05/08	*			
38a	30 th Street, south of K Street, NW	024	08/05/08	*			
39a	30 th and K Streets, NW	024	08/05/08	*			
39b	30 th and K Streets, NW	024	08/05/08	*			
41b	31 st and K Streets, NW	025	08/05/08	*			
41c	31 st and K Streets, NW	025	08/05/08	*			
42	Wisconsin Ave and K Street, NW	026	08/08/08	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
43	Potomac and Water Streets, NW	027	08/08/08	*			
43a	Potomac and Water Streets, NW	027	08/08/08	*			
44	Water Street, west of Potomac St, NW	027	08/08/08	*			
45	36 th and M Streets, NW	028	08/11/08	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	08/08/08	*			
47	38 th Street and Reservoir Road, NW	029	08/08/08	*			
47a	37 th and T Streets, NW	029	08/08/08	*			
47b	37 th and T Streets, NW	029	08/08/08	*			
47c	38 th and W Streets, NW	029	08/08/08	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	08/12/08	*			
50	26 and M Streets, NW	032	08/12/08	*			
51	N Street Extended, west of 25 th Street, NW	033	08/12/08	*			
52	22 nd Street between M and N Streets, NW	034	08/14/08	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	08/18/08	*			
53	22 nd and M Streets, NW	022, 034	08/18/08	*			
53a	22 nd and M Streets, NW	022, 034	08/19/08	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	08/19/08	*			
53c	L and 22 nd Streets, NW	022	08/22/08	*			
54	23 rd and O Streets, NW	034	08/18/08	*			
55	22 nd Street, south of Q Street, NW	035	08/18/08	*			
55a	22 nd Street, south of Q Street, NW	035	08/12/08	*			
56	23 rd and Massachusetts Ave, NW	036	08/12/08	*			
57	23 rd Street, south of Q Street, NW	036	08/12/08	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	08/18/08	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	08/18/08	*			
60	Connecticut Ave, east of Rock Creek, NW	039	08/18/08	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	08/18/08	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	08/27/08	*			

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	08/27/08	*			
64	Adams Mill Road, south of Irving Street, NW	043	08/27/08	*			
65	Kenyon Street and Adams Mill Road, NW	044	08/27/08	*			
65a	Kenyon Street and Adams Mill Road, NW	044	08/27/08	*			
66	Adams Mill Road and Lamont Street, NW	045	08/27/08	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	08/27/08	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	08/27/08	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	08/27/08	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	08/27/08	*			
70i	5 th and Quackenbos Streets, NW	049	08/05/08	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	08/08/08	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	08/22/08	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	08/22/08	*			
73	O Street Extended and Rock Creek Parkway, NW	052	08/22/08	*			
74	Q Street, west of Rock Creek, NW	053	08/27/08	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	08/27/08	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	08/27/08	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	08/08/08	*			
78	28th Street Extended, west of Rock Creek, NW	057	08/22/08	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	08/07/08	*			
84	26 th and P Streets, NW	060	08/22/08	*			
84a	26 th and P Streets, NW	060	08/22/08	*			

Notes:

3. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
4. 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.

7.2 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	08/22/08	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	08/28/08	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	08/28/08	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	08/28/08	*		*		*		*		
009	O St. Sewage Pumping Station, SE	08/28/08	*		*		*		*		
010	O St. Sewage Pumping Station, SE	08/26/08	*			*			*		
011	Main Sewage Pumping Station, SE	08/26/08	*			*			*		
011(a)	Main Sewage Pumping Station, SE	08/26/08	*		*		*		*		
012	Main Sewage Pumping Station, SE	08/26/08	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	08/26/08	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	08/07/08	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	08/07/08	*			*			*		
016	12th and O Streets, SE	08/07/08	*		*		*		*		
017	M and Water Street, SE	08/28/08	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	08/28/08	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	08/19/08	*			*			*		
020	Rock Creek Parkway and Independence, NW	08/28/08	*		*		*		*		
021	Rock Creek Parkway and C St., NW	08/28/08	*			*			*		
022	Rock Creek Parkway and G St., NW	08/28/08	*		*		*		*		

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	
024	South of 30 th and K Streets, NW	08/28/08	*		*			*	*		WASA has developed a capitol project to design and construct a replacement gate for improved performance.
025	South of 31st and K Streets, NW	08/28/08	*		*		*	*			
026	Wisconsin Avenue and Water Street, NW	08/28/08	*		*		*	*			
027	33 rd and Water Sts., NW	08/28/08	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	08/28/08	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	08/28/08	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	08/12/08	*			*			*		
032	26th and M Street, NW.	08/12/08	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	08/12/08	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	08/22/08	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	08/22/08	*		*		*		*		
036	22nd Street, South of Q Street NW.	08/22/08	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	08/18/08	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	08/18/08	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	08/18/08	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	08/18/08	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	08/28/08	*		*		*		*		
042	Harvard St. and Beach Dr NW.	08/28/08	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	08/28/08	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	08/28/08	*		*		*		*		

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	
045	North of Beach Dr. and Walbridge Pl, NW.	08/28/08	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	08/27/08	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	08/27/08	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	08/27/08	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	08/27/08	*		*		*		*		
050	Rock Creek Parkway and L St., NW	08/27/08	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	08/07/08	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	08/08/08	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	08/27/08	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	08/08/08	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	08/08/08	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	08/08/08	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	08/07/08	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	08/22/08	*		*		*		*		

Notes:

2.4 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	12	Screen #4	8/01/08-8/31/08	Rake Assembly	10/31/08
				Pump #1	8/01/08-8/31/08	Pump Vibration –Damaged Impeller and shaft	10/31/08
Eastside	31	2	4	None			
Poplar Point	31	2 ¹	3	None			
Potomac	31	4	5	Pump #3	8/01/08-8/31/08	Reconstruction	8/31/08

Notes:

2. 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	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
O St	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	8/22/08	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

2. 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	2,690.60	86.79	N/A	N/A	N/A
O St ¹	182.40	5.88	N/A	N/A	N/A
Eastside	394.30	12.72	N/A	N/A	N/A
Poplar Point	477.10	15.39	N/A	N/A	N/A
Potomac	3,684.80	118.86	N/A	N/A	N/A
Rock Creek	135.00	4.35	N/A	N/A	N/A
Upper Anacostia	59310	1.91	N/A	N/A	N/A
Earle Place	.21	.001	N/A	N/A	N/A

Notes:

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

2-4 Northeast Boundary Swirl Facility

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

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

<i>Date Inspected</i>	<i># 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>
8/25/08	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>
8/23/08	Group A	

Notes:

2. 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>
8/7/2008	2.5	2.32	2.32	0	0.25(20)
8/28/2008	4	4.95	2.724	2.226	1.50y(120)

Note

Chlorination/Dechlorination Systems.

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

Taking a grab sample and immediately testing it with a portable analyzing kit obtain test results for residual chlorine. Samples for fecal coliform and enterococcus are taken from the designated sample point, treated with sodium bisulfate to remove any residual chlorine, and conveyed to the Blue Plains Wastewater Treatment Plant Laboratory for testing.

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

<i>Date</i>	<i>Chlor/Dechlor System Used?</i>	<i>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>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>
8/28/08	Yes	5	2	Mix Chamber	0.1	Mix Chamber	150,000	Mix Chamber	220,000
8/28/08	Yes	5	2	Anacostia River	0.0	Anacostia River	450,000	Anacostia River	560,000

Notes:

- 3. Mix Chr.: Mixing Chamber
- 4. 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>
8/28/08	261	0.00	0.43	10.8	11.2	1.52	117

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	8/26/08	No	N/A	N/A	N/A
14 - West	8/26/08	No	N/A	N/A	N/A
15	8/26/08	No	N/A	N/A	N/A
15A	8/26/08	No	N/A	N/A	N/A
16 - East	8/26/08	No	N/A	N/A	N/A
16 - West	8/26/08	No	N/A	N/A	N/A
24 - North	8/26/08	No	N/A	N/A	N/A
24 - Middle	8/26/08	No	N/A	N/A	N/A
24 - South	8/26/08	No	N/A	N/A	N/A
34	8/26/08	No	N/A	N/A	N/A
35	8/26/08	No	N/A	N/A	N/A
52	8/26/08	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:

The SCADA system crashed due to hard drive failure for the month of August; therefore it was not possible to track the inflatable Dams activities through the SCADA during this period.

8. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

**Table 3-1
DRY WEATHER DISCHARGES**

There was no record or knowledge of dry weather discharges.

9. SOLIDS AND FLOATABLES CONTROL

9.1 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	1922	1712	63	49	1985	1761
2	4,714	4,112	2,316	2,316	2,316	5029	4375	163	114	5192	4489
3	3,555	461	-	0	0	2256	320	117	56	2373	376
4	2,782	1,985	159	159	159	546	407	1009	493	1555	900
5	2,167	1,035	1,035	1,035	1,035	1731	918	584	281	2315	1199
6	1,783	1,594	1,594	1,594	1,594	2616	2238	33	4	2649	2242
7	2,313	-	-	0	0	3297	0	98	0	3395	0
8	1,278	116	116	116	116	1752	578	99	53	1851	631
WASA Subtotal	20,183	10,871	5,954	5,954	5,954	19,149	10,548	2,166	1,050	21,315	11,598
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	5,954	5,954			2,166	1,050	21,315	11,598
% Cleaned/Inspected to Date				100%	100%					> 100%	> 100%

9.2 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	8/1/08 and 8/18/08	Good	Minor Maintenance	Nets emptied.	240 lbs.
Bar Rack CSO 040	8/18/08	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	8/28/08	Good	None	Routine Cleaning	(1)

Notes:

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

9.3 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>	3
<i>Reason not Operating</i>	Low tides and maintenance on boat.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	One, B-28
<i>Dates</i>	8/19/08 to present. (B-29 was back in service on 8/7/08).
<i>Reason</i>	Rebuilding hydraulic pump.
<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.

9.4 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.

10. MONITORING

10.1 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			Inspector's Initials:	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)

Date	Monthly Rain Totals			
	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
8/1/2008	0	0.1	0.1	0
8/2/2008	0.07	0.04	0.04	0.0023
8/3/2008	0	0	0	0
8/4/2008	0	0	0	0.0001
8/5/2008	0	0	0	0
8/6/2008	0	0	0	0
8/7/2008	0.04	0.05	0.04	0
8/8/2008	0	0	0	0
8/9/2008	0	0	0	0
8/10/2008	0	0	0	0
8/11/2008	0	0	0	0
8/12/2008	0	0	0	0
8/13/2008	0	0	0	0
8/14/2008	0.04	0.02	0.36	0.0366
8/15/2008	0	0	0	0.0134
8/16/2008	0	0	0	0
8/17/2008	0	0	0	0
8/18/2008	0	0	0	0
8/19/2008	0	0	0	0
8/20/2008	0	0	0	0
8/21/2008	0	0	0	0
8/22/2008	0	0	0	0
8/23/2008	0	0	0	0
8/24/2008	0	0	0	0
8/25/2008	0	0	0	0
8/26/2008	0	0	0	0
8/27/2008	0	0	0	0
8/28/2008	0.29	0.38	0.34	0.45
8/29/2008	0.23	0.4	0.1	0.39
8/30/2008	0	0	0	0
8/31/2008	0	0	0	0
TOTALS	0.67	0.99	0.98	0.89



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

**Monthly Operations Report
For
Combined Sewer System
Month: September 2008**

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 2008*

Table of Contents

- 11. INTRODUCTION**
- 12. OPERATION AND MAINTENANCE**
 - 12.1 Regulators
 - 12.2 Outfalls, Tide Gates and CSO Signs
 - 12.3 Pumping Stations
 - 12.4 Northeast Boundary Swirl Facility
 - 12.5 Inflatable Dams
- 13. DRY WEATHER OVERFLOWS**
- 14. SOLIDS AND FLOATABLES CONTROL**
 - 14.1 Catch Basin Cleaning
 - 14.2 BMP Demonstration Projects
 - 14.3 Skimmer Boat Programs
 - 14.4 CSS Litter Control
- 15. MONITORING**
 - 15.1 Visual Survey of Main & O
 - 15.2 Rainfall Data

11. 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.

12. OPERATION AND MAINTENANCE

12.1 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	09/09/08	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/09/08	*			
5	Poplar Point Pumping Station	004	09/11/08	*			
6	Chicago Street and Railroad Ave, SE	005	09/03/08	*			
7	W Street and Railroad Ave, SE	005	09/03/08	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	09/03/08	*			
9	13 th Street and Ridge Place, SE	007	09/02/08	*			
11	"O" Street Pumping Station	011(a)	09/11/08	*			
12	Storm Pump Discharge at Main Pumping Station	011	09/11/08	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	09/02/08	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	09/11/08	*			
15	South Capitol and E Streets	010	09/11/08	*			
15a	Half and L Streets, SE	010	09/11/08	*			
15b	South Capitol and I Streets	010	09/08/08	*			
15c	South Capitol and I Streets	010	09/08/08	*			
16	North of Main Sewage Pumping Station	012	09/11/08	*			
17	4 th and N Streets, SE, Both Extended	013	09/05/08	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	09/08/08	*			
18	6 th and M Streets, SE	014	09/02/08	*			
19	9 th and M Streets, SE	015	09/02/08	*			
19a	9 th and M Streets, SE	015	09/02/08	*			
20	12 th and M Streets, SE	016	09/05/08	*			
20a	12 th and M Streets, SE	016	09/05/08	*			
21	14 th and M Streets, SE	017	09/03/08	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	09/05/08	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
22b	Barney Circle and Pennsylvania Ave, SE	018	09/05/08	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	09/05/08	*			
22d	Kentucky Ave and Potomac Street, SE	018	09/05/08	*			
22e	14 th Street and Kentucky Ave, SE	018	09/05/08	*			
23	Independence Ave, 21 st Street, SE, Extended	019	09/03/08	*			
24a	East Capitol St, west of RFK stadium	019	09/29/08	*			
28	21 st and Constitution Ave, NW	020	09/16/08	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	09/16/08	*			
30	17 th and D Streets, NW	020	09/12/08	*			
31	15 th Street and Pennsylvania Ave, NW	020	09/12/08	*			
33	10 th and F Streets, NW	020	09/12/08	*			
34	23 rd Street, north of Constitution Ave, NW	020	09/16/08	*		construction	
34a	23 rd Street near C Street, NW	020	09/16/08	*			
35	Northeast of Roosevelt Bridge, NW	021	09/16/08	*			
36	27 th and I Streets, NW	022	09/12/08	*			
36a	New Hampshire Ave and Eye Street, NW	022	09/12/08	*			
36b	19 th and L Streets, NW	022, 034	09/03/08	*			
36d	17 th and L Streets, NW	022, 034	09/03/08	*			
36g	18 th and M Streets, NW	022, 034	09/03/08	*			
36h	18 th and M Streets, NW	022, 034	09/03/08	*			
37	27 th and Eye Streets, NW	022	09/12/08	*			
38	29 th and K Streets, NW	024	09/02/08	*			
38a	30 th Street, south of K Street, NW	024	09/02/08	*			
39a	30 th and K Streets, NW	024	09/02/08	*			
39b	30 th and K Streets, NW	024	09/02/08	*			
41b	31 st and K Streets, NW	025	09/02/08	*			
41c	31 st and K Streets, NW	025	09/02/08	*			
42	Wisconsin Ave and K Street, NW	026	09/05/08	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
43	Potomac and Water Streets, NW	027	09/05/08	*			
43a	Potomac and Water Streets, NW	027	09/05/08	*			
44	Water Street, west of Potomac St, NW	027	09/05/08	*			
45	36 th and M Streets, NW	028	09/05/08	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	09/17/08	*			
47	38 th Street and Reservoir Road, NW	029	09/17/08	*			
47a	37 th and T Streets, NW	029	09/17/08	*			
47b	37 th and T Streets, NW	029	09/17/08	*			
47c	38 th and W Streets, NW	029	09/17/08	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	09/22/08	*			
50	26 and M Streets, NW	032	09/22/08	*			
51	N Street Extended, west of 25 th Street, NW	033	09/22/08	*			
52	22 nd Street between M and N Streets, NW	034	09/16/08	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	09/16/08	*			
53	22 nd and M Streets, NW	022, 034	09/16/08	*			
53a	22 nd and M Streets, NW	022, 034	09/16/08	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	09/30/08	*			
53c	L and 22 nd Streets, NW	022	09/30/08	*			
54	23 rd and O Streets, NW	034	09/22/08	*			
55	22 nd Street, south of Q Street, NW	035	09/22/08	*			
55a	22 nd Street, south of Q Street, NW	035	09/22/08	*			
56	23 rd and Massachusetts Ave, NW	036	09/22/08	*			
57	23 rd Street, south of Q Street, NW	036	09/22/08	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	09/02/08	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	09/02/08	*			
60	Connecticut Ave, east of Rock Creek, NW	039	09/08/08	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	09/08/08	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	09/19/08	*			

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	09/19/08	*			
64	Adams Mill Road, south of Irving Street, NW	043	09/19/08	*			
65	Kenyon Street and Adams Mill Road, NW	044	09/19/08	*			
65a	Kenyon Street and Adams Mill Road, NW	044	09/19/08	*			
66	Adams Mill Road and Lamont Street, NW	045	09/19/08	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	09/19/08	*			
68	Ingleside Terrace, Extended and Piney Branch Parkway, NW	047	09/19/08	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	09/19/08	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	09/19/08	*			
70i	5 th and Quackenbos Streets, NW	049	09/05/08	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	09/02/08	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	09/22/08	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	09/22/08	*			
73	O Street Extended and Rock Creek Parkway, NW	052	09/22/08	*			
74	Q Street, west of Rock Creek, NW	053	09/22/08	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	09/29/08	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	09/29/08	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	09/29/08	*			
78	28th Street Extended, west of Rock Creek, NW	057	09/29/08	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	09/30/08	*			
84	26 th and P Streets, NW	060	09/22/08	*			
84a	26 th and P Streets, NW	060	09/22/08	*			

Notes:

5. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
6. 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.

12.2 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	09/09/08	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	09/04/08	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	09/04/08	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	09/04/08	*		*		*		*		
009	O St. Sewage Pumping Station, SE	09/02/08	*		*		*		*		
010	O St. Sewage Pumping Station, SE	09/30/08	*			*			*		
011	Main Sewage Pumping Station, SE	09/30/08	*			*			*		
011(a)	Main Sewage Pumping Station, SE	09/30/08	*		*		*		*		
012	Main Sewage Pumping Station, SE	09/30/08	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	09/05/08	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	09/18/08	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	09/18/08	*			*			*		
016	12th and O Streets, SE	09/04/08	*		*		*		*		
017	M and Water Street, SE	09/04/08	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	09/04/08	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	09/29/08	*			*			*		
020	Rock Creek Parkway and Independence, NW	09/18/08	*		*		*		*		
021	Rock Creek Parkway and C St., NW	09/18/08	*			*			*		
022	Rock Creek Parkway and G St., NW	09/18/08	*		*		*		*		

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	
024	South of 30 th and K Streets, NW	09/18/08	*		*				*	*	WASA has developed a capitol project to design and construct a replacement gate for improved performance.
025	South of 31st and K Streets, NW	09/18/08	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	09/18/08	*		*		*		*		
027	33 rd and Water Sts., NW	09/18/08	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	09/18/08	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	09/18/08	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	09/22/08	*			*			*		
032	26th and M Street, NW.	09/22/08	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	09/22/08	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	09/22/08	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	09/22/08	*		*		*		*		
036	22nd Street, South of Q Street NW.	09/29/08	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	09/02/08	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	09/02/08	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	09/08/08	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	09/08/08	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	09/04/08	*		*		*		*		
042	Harvard St. and Beach Dr NW.	09/04/08	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	09/04/08	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	09/04/08	*		*		*		*		

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	
045	North of Beach Dr. and Walbridge Pl, NW.	09/04/08	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	09/19/08	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	09/19/08	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	09/19/08	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	09/19/08	*		*		*		*		
050	Rock Creek Parkway and L St., NW	09/02/08	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	09/04/08	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	09/04/08	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	09/29/08	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	09/29/08	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	09/29/08	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	09/29/08	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	09/04/08	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	09/29/08	*		*		*		*		

Notes:

2.5 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	12	Screen #4	9/01/08-9/31/08	Rake Assembly	10/31/08
				Pump #1	9/01/08-9/31/08	Pump Vibration –Damaged Impeller and shaft	10/31/08
Eastside	31	2	4	None			
Poplar Point	31	2 ¹	3	None			
Potomac	31	4	5	None			

Notes:

3. 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	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
O St	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	9/24/08	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

3. 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	2,171.20	72.37	N/A	N/A	N/A
O St ¹	200.50	6.68	9/6/08	119.30	Normal
Eastside	499.00	16.63	N/A	N/A	N/A
Poplar Point	517.10	17.24	N/A	N/A	N/A
Potomac	3,839.20	127.97	N/A	N/A	N/A
Rock Creek	143.40	4.78	N/A	N/A	N/A
Upper Anacostia	54.70	1.82	N/A	N/A	N/A
Earle Place	0.17	0.01	N/A	N/A	N/A

Notes:

3. 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>
09/23/08	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>
09/23/08	Group A	

Notes:

3. 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>
9/6/2008	6.5	12.0*	9.04*	2.96	3.0(240)
9/6/2008	4.5	3*	1.96*	1.04	0.25(20)
9/27/2008	8	11.02	1.61	9.42	0.1(8)
9/27/2008	4	0.88	0.88	0	0.20(16)

Notes:

5. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
6. Calculated as follows: Total Influent Volume – Total Foul Sewer Volume.
7. One Bin = 80 ft³
4. * Influent and fowl sewer meters were not reading accurately, reading was estimated. Meters were repaired September 8, 2008.

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 Syste m 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>
9/6/08	Yes	5	2	Mix Chamber	0.01	Mix Chamber	220,000	Mix Chamber	510,000
9/6/08	Yes	5	2	Anacostia River	0.00	Anacostia River	280,000	Anacostia River	540,000
9/27/08	Yes	5	2	Mix Chamber	0.0	Mix Chamber	56,000	Mix Chamber	360,000
9/27/08	Yes	5	2	Anacostia River	0.0	Anacostia River	230,000	Anacostia River	540,000

Notes:

- 5. Mix Chr.: Mixing Chamber
- 6. 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>
9/06/08	82.0	0.00	0.31	4.60	4.91	0.78	37.5
9/27/08	249	0.00	0.56	6.24	6.80	1.07	19.9

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	9/26/08	No	N/A	N/A	N/A
14 - West	9/26/08	No	N/A	N/A	N/A
15	9/26/08	No	N/A	N/A	N/A
15A	9/26/08	No	N/A	N/A	N/A
16 - East	9/26/08	No	N/A	N/A	N/A
16 - West	9/26/08	No	N/A	N/A	N/A
24 - North	9/26/08	No	N/A	N/A	N/A
24 - Middle	9/26/08	No	N/A	N/A	N/A
24 - South	9/26/08	No	N/A	N/A	N/A
34	9/26/08	No	N/A	N/A	N/A
35	9/26/08	No	N/A	N/A	N/A
52	9/26/08	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:

The SCADA system crashed due to hard drive failure for the month of August; therefore it was not possible to track the inflatable Dams activities through the SCADA during this period.

13. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

**Table 3-1
DRY WEATHER DISCHARGES**

There was no record or knowledge of dry weather discharges.

14. SOLIDS AND FLOATABLES CONTROL

14.1 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	1985	1761	197	148	2182	1909
2	4,714	4,112	2,316	2,316	2,316	5192	4489	423	317	5615	4806
3	3,555	461	-	0	0	2373	376	264	127	2637	503
4	2,782	1,985	159	159	159	1555	900	1020	727	2575	1627
5	2,167	1,035	1,035	1,035	1,035	2315	1199	271	175	2586	1374
6	1,783	1,594	1,594	1,594	1,594	2649	2242	316	181	2965	2423
7	2,313	-	-	0	0	3395	0	378	0	3773	0
8	1,278	116	116	116	116	1851	631	228	21	2079	652
WASA Subtotal	20,183	10,871	5,954	5,954	5,954	21,315	11,598	3,097	1,696	24,412	13,294
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	5,954	5,954			3,097	1,696	24,412	13,294
% Cleaned/Inspected to Date				100%	100%					> 100%	> 100%

14.2 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	9/01/08 and 9/22/08.	Good	Minor Maintenance	Nets emptied.	215 lbs.
Bar Rack CSO 040	9/08/08	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	9/04/08	Good	None	Routine Cleaning	(1)

Notes:

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

14.3 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>	2
<i>Reason not Operating</i>	Low tides and maintenance on boat.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	One, B-28
<i>Dates</i>	8/19/08 to present.
<i>Reason</i>	Hydraulic leak under boat. Rebuilding hydraulic pump.
<i>Plan to Restore to Service</i>	As soon as possible.
<i>Volume Material Collected</i>	30 ton.
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

14.4 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.

15. MONITORING

15.1 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: September 6, 2008

Inspector's Initials: VB

CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009	2:00 pm	x		x			x			x			
010	2:00 pm	y		y			x			y			
011	2:00 pm	x		x			x			x			
011a													
012													

Date: September 6, 2008

Inspector's Initials: DTW

CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009	3:00 pm	x		x			x			x			
	5:00 pm	x		x			x			x			
	6:00 pm	x		x			x			x			
	7:00 pm	X		x			x			x			
010	3:00 pm	y		y			y			y			
	5:00 pm	y		y			y			y			
	6:00 pm	y		y			y			y			
	7:00 pm	X		y			y			y			
011	3:00 pm	x		x			x			x			
	5:00 pm	y		y			y			y			
	6:00 pm	x		x			x			x			
	7:00 pm	X		x			x			x			
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)

Date	Monthly Rain Totals			
	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
9/1/2008	0	0	0	0
9/2/2008	0	0	0	0
9/3/2008	0	0	0	0
9/4/2008	0	0	0	0
9/5/2008	0.12	0.23	0.09	0.38
9/6/2008	1.3	3.09	2.75	3.41
9/7/2008	0	0	0	0
9/8/2008	0	0	0	0
9/9/2008	0.03	0.13	0.2	0.17
9/10/2008	0	0	0	0
9/11/2008	0	0	0	0
9/12/2008	0.03	0.01	0.02	0.07
9/13/2008	0	0	0	0
9/14/2008	0	0	0	0
9/15/2008	0.58	0	0	0
9/16/2008	0	0	0	0
9/17/2008	0	0	0	0
9/18/2008	0	0	0	0
9/19/2008	0	0	0	0
9/20/2008	0	0	0	0
9/21/2008	0	0	0	0
9/22/2008	0	0	0	0
9/23/2008	0	0	0	0
9/24/2008	0	0	0	0
9/25/2008	0.29	0.11	0.19	0.23
9/26/2008	0.5	0.34	0.01	0.62
9/27/2008	0.43	0.29	0.43	0.4
9/28/2008	0.1	0	0.07	0.32
9/29/2008	0	0	0.04	0
9/30/2008	0.27	0.26	0.02	0.42
TOTALS	3.65	4.46	3.82	6.02

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: July, August, September 2008

SCENARIO:
Q3Y2008, 10-13-
08

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	14	4.0	73.0	5.2	13.8	1.0
006	Good Hope Road, West of Nichols Ave., SE	3	0.2	5.5	1.8	4.3	0.5
007	13 th Street and Ridge Place, SE	5	6.3	12.5	2.5	6.8	0.5
009	2nd Street, 300 feet North of N Place, SE	12	3.0	37.8	3.1	9.5	0.3
010	O Street Sewage Pumping Station, SE (pumped Overflow)	4	72.7	12.8	3.2	7.0	0.3
011	South of Main Sewage Pumping Station, SE (pumped overflow)	2	1.7	0.5	0.3	0.3	0.3
011a	South of Main Sewage Pumping Station, SE (gravity overflow)	0	0.0	0.0	0.0	0.0	0.0
012	North of Main Sewage Pumping Station, SE (Tiber Creek)	2	25.6	7.0	3.5	5.0	2.0
013	4th and N Streets, SE	11	2.7	21.3	1.9	8.5	0.5
014	6th and M Streets, SE	12	14.5	41.0	3.4	11.5	0.5

015	9th and M Streets, SE	5	1.2	10.0	2.0	5.3	0.3
016	12th and M Streets, SE	3	5.6	11.0	3.7	5.5	2.5
017	14th and M Streets, SE	9	11.5	30.8	3.4	9.5	0.5
018	Barney Circle and Pennsylvania Ave, SE	18	9.5	144.5	8.0	34.8	0.3
019	Northeast Boundary - Swirl Effluent	7	138.9	43.5	6.2	13.8	0.3
019	Northeast Bound. - Swirl Bypass	3	95.0	8.8	2.9	7.0	0.5
	SUBTOTAL		392.3				
Potomac CSOs							
003	Bolling AFB	0	0.0	0.0	0.0	0.0	0.0
020	23rd Street, North of Constitution Ave, NW (Easby Point)	3	22.8	14.3	4.8	8.0	3.0
021	Northeast of Roosevelt Bridge, NW	6	123.8	18.0	3.0	7.5	0.5
022	27th and K Streets, NW	13	20.6	72.5	5.6	17.5	0.8
024	30th and K Streets, NW	19	10.8	123.0	6.5	34.5	0.3
025	31st & K St NW	16	0.3	53.0	3.3	12.3	0.3
026	Wisconsin Avenue and K St., NW	0	0.0	0.0	0.0	0.0	0.0
027	Water Street West of Street, NW	14	16.2	94.3	6.7	20.8	0.3
028	36th and M Streets, NW	11	1.8	31.5	2.9	9.3	0.3
029	Canal Road 1000 feet east of Rock Creek, NW	3	5.1	9.0	3.0	6.3	1.0
	SUBTOTAL		201.5				
Rock Creek							
031	Pennsylvania Avenue, East Rock Creek, NW	2	0.1	6.3	3.1	4.8	1.5
032	26th and M Streets, NW	0	0.0	0.0	0.0	0.0	0.0
033	N Street extended west of 25th Street, NW	1	0.2	1.5	1.5	1.5	1.5
034	23rd and O Streets, SW	0	0.0	0.0	0.0	0.0	0.0
035	22nd Street south of Q Street, NW	0	0.0	0.0	0.0	0.0	0.0

036	22nd Street South of Q Street, NW	3	0.6	11.5	3.8	6.8	2.0
037	Northwest of Belmont and Rock Creek and Potomac Parkway	0	0.0	0.0	0.0	0.0	0.0
038	North of Belmont Road, east of Kalorama Circle, NW	0	0.0	0.0	0.0	0.0	0.0
039	Connecticut Avenue east of Rock Creek, NW	0	0.0	0.0	0.0	0.0	0.0
040	Biltmore Street extended east of Rock Creek, NW	0	0.0	0.0	0.0	0.0	0.0
041	Ontario extended and Rock Creek Parkway	0	0.0	0.0	0.0	0.0	0.0
042	Harvard Street and Rock Creek Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
043	Adams Mill Road South of Irving Street, NW	2	0.2	1.3	0.6	1.0	0.3
044	Kenyon Street and Adams Mill Road, NW	0	0.0	0.0	0.0	0.0	0.0
045	Adams Mill Road and Lamont Street, NW	1	0.0	0.8	0.8	0.8	0.8
046	Park Road south of Piney Branch Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
047	Ingleside Terrace extended and Piney Branch Parkway	0	0.0	0.0	0.0	0.0	0.0
048	Mt. Pleasant Street extended and Piney Branch Parkway	0	0.0	0.0	0.0	0.0	0.0
049	Piney Branch and Lamont Street, NW	6	17.9	18.0	3.0	7.3	0.8
050	28th Street west of 16th Street, NW	0	0.0	0.0	0.0	0.0	0.0
051	Olive Street extended and Rock Creek Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
052	O Street extended and Rock Creek Parkway, NW	0	0.0	0.0	0.0	0.0	0.0

053	O Street west of Rock Creek Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
054	West Side of Rock Creek 300 ft. south of Mass. Ave, NW	0	0.0	0.0	0.0	0.0	0.0
056	Normanstone Drive extended west of Rock Creek, NW	0	0.0	0.0	0.0	0.0	0.0
057	28th Street extended west of Rock Creek, NW	3	2.6	9.8	3.3	7.0	0.8
058	Connecticut Avenue and Rock Creek Parkway, NW	1	0.1	1.3	1.3	1.3	1.3
060	P St and 26 th St, NW	0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL		21.7				
	TOTAL		615				

H:\1163\NPDES\Model Predictions\[Q3Y2008 Report 10-13-08.xls]Q3Y2008

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