QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER, 2011

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 2011

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

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENACE

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

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/29/11	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/29/11	*			
5	Poplar Point Pumping Station	004	07/29/11	*			
6	Chicago Street and Railroad Ave, SE	005	07/08/11	*			
7	W Street and Railroad Ave, SE	005	07/08/11	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A[3]				
9	13th Street and Ridge Place, SE	007	07/08/11	*			
11	"O" Street Pumping Station	011(a)	07/28/11	*			
12	Storm Pump Discharge at Main Pumping Station	011	07/28/11	*			
13	2nd Street, 300 ft. north of N Place, SE	009	07/06/11	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	07/28/11	*			
15	South Capitol and E Streets	010	07/28/11	*			
15a	Half and L Streets, SE	010	07/06/11	*			
15b	South Capitol and I Streets	010	07/06/11	*			
15c	South Capitol and I Streets	010	07/06/11	*			
16	North of Main Sewage Pumping Station	012	07/28/11	*			
17	4th and N Streets, SE, Both Extended	013	07/28/11	*			
17a	K Street between 6th Street and 7th Street, SE	013	07/11/11	*			
18	6th and M Streets, SE	014	07/07/11	*			
19	9th and M Streets, SE	015	07/28/11	*			
19a	9th and M Streets, SE	015	07/05/11	*			
20	12th and M Streets, SE	016	07/11/11	*			
20a	12th and M Streets, SE	016	07/11/11	*			
21	14th and M Streets, SE	017	07/11/11	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	07/18/11	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	07/18/11	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	07/18/11	*			
22d	Kentucky Ave and Potomac Street, SE	018	07/11/11	*			
22e	14th Street and Kentucky Ave, SE	018	07/11/11	*			
23	Independence Ave, 21st Street, SE, Extended	019	07/11/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
24a	East Capitol St, west of RFK stadium	019	07/18/11	*			
28	21st and Constitution Ave, NW	020	07/25/11	*			
29	22nd Street, between Constitution Ave and C St, NW	020	07/25/11	*			
30	17th and D Streets, NW	020	07/11/11	*			
31	15th Street and Pennsylvania Ave, NW	020	07/11/11	*			
33	10th and F Streets, NW	020	07/11/11	*			
34	23rd Street, north of Constitution Ave, NW	020	07/25/11	*			
34a	23rd Street near C Street, NW	020	07/25/11	*			
35	Northeast of Roosevelt Bridge, NW	021	07/25/11	*			
36	27th and I Streets, NW	022	07/05/11	*			
36a	New Hampshire Ave and Eye Street, NW	022	07/05/11	*			
36b	19th and L Streets, NW	022, 034	07/08/11	*			
36d	17th and L Streets, NW	022, 034	07/08/11	*			
36g	18th and M Streets, NW	022, 034	07/08/11	*			
36h	18th and M Streets, NW	022, 034	07/08/11	*			
37	27th and Eye Streets, NW	022	07/05/11	*			
38	29th and K Streets, NW	024	07/06/11	*			
38a	30th Street, south of K Street, NW	024	07/06/11	*			
39a	30th and K Streets, NW	024	07/06/11	*			
39b	30th and K Streets, NW	024	07/06/11	*			
41b	31st and K Streets, NW	025	07/06/11	*			
41c	31st and K Streets, NW	025	07/06/11	*			
42	Wisconsin Ave and K Street, NW	026	07/06/11	*			
43	Potomac and Water Streets, NW	027	07/06/11	*			
43a	Potomac and Water Streets, NW	027	07/18/11	*			
44	Water Street, west of Potomac St, NW	027	07/18/11	*			
45	36th and M Streets, NW	028	07/18/11	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	07/07/11	*			
47	38th Street and Reservoir Road, NW	029	07/07/11	*			
47a	37th and T Streets, NW	029	07/07/11	*			
47b	37th and T Streets, NW	029	07/07/11	*			
47c	38th and W Streets, NW	029	07/07/11	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A[3]				
50	26 and M Streets, NW	032	07/18/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
51	N Street Extended, west of 25th Street, NW	033	07/18/11	*			
52	22nd Street between M and N Streets, NW	034	07/29/11	*			
52a	N Street between 22nd and 23rd Streets, NW	034	07/29/11	*			
53	22nd and M Streets, NW	022, 034	07/25/11	*			
53a	22nd and M Streets, NW	022, 034	07/25/11	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	07/18/11	*			
53c	L and 22nd Streets, NW	022	07/18/11	*			
54	23rd and O Streets, NW	034	07/12/11	*			
55	22nd Street, south of Q Street, NW	035	07/12/11	*			
55a	22nd Street, south of Q Street, NW	035	07/12/11	*			
56	23rd and Massachusetts Ave, NW	036	07/12/11	*			
57	23rd Street, south of Q Street, NW	036	07/12/11	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A[3]				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	07/12/11	*			
60	Connecticut Ave, east of Rock Creek, NW	039	07/11/11	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	07/11/11	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	07/13/11	*			
63	Harvard Street and Rock Creek Parkway, NW	042	07/13/11	*			
64	Adams Mill Road, south of Irving Street, NW	043	07/13/11	*			
65	Kenyon Street and Adams Mill Road, NW	044	07/13/11	*			
65a	Kenyon Street and Adams Mill Road, NW	044	07/13/11	*			
66	Adams Mill Road and Lamont Street, NW	045	07/13/11	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	07/13/11	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	07/13/11	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	07/13/11	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	07/13/11	*			
70i	5th and Quackenbos Streets, NW	049	07/08/11	*			
71	28th Street, west of Rock Creek Parkway, NW	050	07/06/11	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	07/06/11	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	07/12/11	*			
73	O Street Extended and Rock Creek Parkway, NW	052	07/12/11	*			
74	Q Street, west of Rock Creek, NW	053	N/A[3]				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	07/25/11	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	07/25/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
77a	Normanstone Dr and Normanstone Lane, NW	056	07/06/11	*			
78	28th Street Extended, west of Rock Creek, NW	057	07/25/11	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	N/A[3]				
84	26th and P Streets, NW	060	07/12/11	*			
84a	26th and P Streets, NW	060	07/12/11	*			

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 longer functions as a combined sewer overflow regulator structure.

2.2 Outfalls, Tide Gates and CSO Signs

The following table summarizes inspections, maintenance and work performed on outfall structures, tide gates and CSO signs in the collection system.

Table 2 - 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	07/14/11	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	07/14/11	*			*			*		
006	Good Hope Road and Welsh Memorial Bridge	07/14/11	*		*		*		*		
007	Between 11th St. and Anacostia Bridges, SE	07/14/11	*		*		*		*		
009	O St. Sewage Pumping Station, SE	07/14/11	*		*		*		*		
010	O St. Sewage Pumping Station, SE	07/14/11	*			*			*		
011	Main Sewage Pumping Station, SE	07/14/11	*			*			*		
011(a)	Main Sewage Pumping Station, SE	07/14/11	*		*		*		*		
012	Main Sewage Pumping Station, SE	07/14/11	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	07/14/11	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	07/14/11	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	07/27/11	*			*			*		
016	12th and O Streets, SE	07/27/11	*		*		*		*		
017	M and Water Street, SE	07/27/11	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	07/27/11	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	07/18/11	*			*			*		
020	Rock Creek Parkway and Independence, NW	07/19/11	*		*		*		*		
021	Rock Creek Parkway and C St., NW	07/19/11	*			*			*		
022	Rock Creek Parkway and G St., NW	07/19/11	*		*		*		*		
024	South of 30th and K Streets, NW	07/19/11	*			*			*		
025	South of 31st and K Streets, NW	07/19/11	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	07/19/11	*		*		*		*		
027	33rd and Water Sts., NW	07/19/11	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	07/19/11	*			*			*		

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	
029	Adjacent to C&O Canal, aligned with 38th St. NW	07/19/11	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	07/19/11	*			*			*		
032	26th and M Street, NW.	07/18/11	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	07/18/11	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	07/12/11	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	07/12/11	*		*		*		*		
036	22nd Street, South of Q Street NW.	07/12/11	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	07/12/11	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	07/11/11	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	07/11/11	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	07/14/11	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	07/14/11	*		*		*		*		
042	Harvard St. and Beach Dr NW.	07/14/11	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	07/14/11	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	07/14/11	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	07/14/11	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	07/13/11	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	07/13/11	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	07/13/11	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	07/13/11	*		*		*		*		
050	Rock Creek Parkway and L St., NW	07/13/11	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	07/08/11	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	07/27/11	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	07/08/11	*		*		*		*		

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	
054	Massachusetts Avenue and Rock Creek Parkway, NW.	07/25/11	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	07/25/11	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	07/25/11	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	07/25/11	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	07/29/11	*		*		*		*		

Notes:

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

Table 2-3
Pumping Stations – Inspections and Equipment in Service

Pumping Station	*No. of Inspections*	*No. Screens*	*No. Pumps*	*Screens or Pumps Out of Service*	*Dates*	*Reason*	*Schedule to Restore to Service*
Main	31	4	10	#1 Sanitary Pump	July 1-31	Pump being rehabbed.	August 2011
Eastside	31	2	4	#2 Screen #1 Screen	July 1-8 July 14-31	Screen being rehabbed Screen being rehabbed	 August 2011
Poplar Point	31	2	3	#1 & #2 Screens	July 22-31	Screens being rehabbed	August 2011
Potomac	31	4	5	Screen #3	July 20-31	Screen being rehabbed	August 2011

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

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed*[1]	*Comments*
Main	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
O St	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	7/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	7/25/2011	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

	Sanitary Pumpage		*Storm Water/CSO Pumped To Anacostia River*		
Pumping Station	*Total Wastewater (mg)*	*Daily Average Wastewater (mg)*	*Date*	*Volume (mg)*	*Screenings Collected (units)*[1]
Main	1,598.46	51.56	N/A	N/A	N/A
O St	160.46	5.18	7/3/2011	7.98	N/A
Eastside	383.44	12.37	N/A	N/A	N/A
Poplar Point	663.75	21.41	N/A	N/A	N/A
Potomac	3,526.04	113.74	N/A	N/A	N/A
Rock Creek	169.47	5.47	N/A	N/A	N/A
Upper Anacostia	146.88	4.90	N/A	N/A	N/A
Earle Place	0.22	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

Date Inspected	*# of Screens*	*# of Swirls*	*Screens or Swirls Out of Service*	*Dates*	*Reason*	*Schedule to Restore to Service*
7/27/11	1, 2 & 3	1, 2 & 3	None	N/a	N/a	N/a

Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance

Date Performed	*Type of Preventive Maintenance Performed*[1]	*Comments*
7/27/11	Group A	

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

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

Date	*Approx. Storm Duration (hrs)*	*Total Influent Volume (mg)*	*Total Foul Sewer Volume (mg)*	*Total Effluent Volume[2] (mg)*	*Approx. Screenings Volume[1] (Cu. ft)*
7/3/2011	4.5	10.99	10.99	0.000	88.0
7/3/2011	5	8.40	8.40	0.000	116.0
7/8/2011	6	7.86	7.86	0.000	8.0
7/11/2011	4	4.26	4.26	0.000	196.0
7/13/2011	3.5	5.90	5.90	0.000	16.0
7/25/2011	4	7.14	7.14	0.000	20.0

Notes:
1. When the screening bin is full, the volume of collected screenings cannot be approximated.

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

	Chlor/ Dechlor System Used?	*Dosages*		*Residual Chlorine Test Results*		*E. Coli Test Results*	
Date		*NaOCl (mg/l)*	*$NaHSO_3$ (mg/l)*	*Location*	*Conc. (mg/l)*	*Site*	*Count Per 100ml*

Notes:
1. River: River Outfall

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

	Flow Composited Sample Results						
Date	*Total suspended solids (mg/L)*	*Nitrite (NO2-N) mg/L*	*Nitrate (NO3-N)) mg/L*	*Total Kjeldahl Nitrogen (mg/L as N)*	*Total Nitrogen (mg/L)*	*Total Phosphorus (mg/L)*	*Carbonaceous Biological Oxygen Demand (mg/L)*

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

Inflatable Dam Structure No	*Date Inspected*	*Was Dam Out of Service During the Month?*	*Dates out of Service*	*Reason*	*Schedule to Restore to Service*
14 - East	7/20/11	**No**	**N/A**	**N/A**	**N/A**
14 - West	7/20/11	**No**	**N/A**	**N/A**	**N/A**
15	7/20/11	**No**	**N/A**	**N/A**	**N/A**
15A	7/20/11	**No**	**N/A**	**N/A**	**N/A**
16 - East	7/20/11	**No**	**N/A**	**N/A**	**N/A**
16 - West	7/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - North	7/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - Middle	7/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - South	7/20/11	**No**	**N/A**	**N/A**	**N/A**
34	7/20/11	**No**	**N/A**	**N/A**	**N/A**
35	7/20/11	**No**	**N/A**	**N/A**	**N/A**
52	7/20/11	**No**	**N/A**	**N/A**	**N/A**

Table 2-12
Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*
14 (E & W)	*None*	*N/A*
15	*7/3*	*4 min*
	7/13	*6 min*
15A	*7/3*	*46 min*
	7/13	*14 min*
	7/27	*76 sec*
16 (E & W)	*7/3*	*28 min*
	7/13	*12 min*
24	*7/3*	*15 min*
	7/8	*8 min*
	7/11	*2 min*
	7/13	*2 min*
	7/25	*2 min*
34	*7/3*	*13min*
	7/13	*7 min*
35	*7/3*	*32 min*
	7/8	*5 min*
	7/11	*7 min*
	7/13	*4 min*
	7/16	*64 sec*
52	*None*	*N/A*
Structures on Outfall Sewers	*Overflow Dates*	*Estimated Duration of Overflow*
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
Outfall Sewer Control Gates	*Operational Status*	*Position*
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during July 2011.

3.1 Sanitary Sewer Overflows

Location	Broad Branch Road near Audubon Terrace, NW
Cause	On July 7, 2011 at 1:45 pm, staff of the District of Columbia Water and Sewer Authority (DC Water) met with representative from the National Park Service to investigate a report concerning a possible sewer leak into Rock Creek in Washington, DC. The DC Water crew confirmed by dye testing that flow from an 18 inch sanitary sewer on Broad Branch Road is seeping into Rock Creek. Our investigations found that there were seepages from open joints in the 18-inch sewer at three separate location on Broad Branch Road between Breach Drive and Brandywine Road, NW. The cause possible was vibration on the pipe from nearby construction activity to install a temporary bridge over Soapstone Creek that feed into Rock Creek.
Date/ Time Discovered	July 7, 2011 at 1:45 pm
Action Taken	On July 8, 2011, DC Water authorized Anchor Construction Inc., to by-pass the flow in the pipe and replace all sections of defective terra cotta pipe with PVC and to seal the connecting joints with bands and concrete collars. On July 12, 2011 at 6:00 pm, Anchor Construction completed the repair work and a dye test performed the following morning confirmed that seepage from the sanitary sewer to the creek had stopped.
Date/Time Discharge Ceased	On July 12, 2011 at 6:00 pm
Estimated Volume	Approximately 5500 gallons of sanitary sewage.
Did Overflow Reach Receiving water?	Rock Creek
Action taken to prevent reoccurrence	We plan to rehabilitate the entire 18-inch sewer along Broad Branch Road, NW using a trenchless cured in placed piping product.

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

			Inspections			*Cleaning*					
						CBs Cleaned Thru Last Month		*CB's Cleaned this Month*		*Total CBs Cleaned This Year to Date*	
Ward	*Total CBs*	*CBs in CSS*	*CBs in Anacostia CSS*	*Total Anacostia CBs Inspected Once this Year*	*Total Anacostia CBs Inspected Twice this Year*	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	734	1859	1831	347	267	2206	2098
2	4,714	4,112	2,316	1306	510	1725	1518	594	303	2319	1821
3	3,555	461	-	0	0	4471	1086	801	254	5272	1340
4	2,782	1,985	159	159	159	3807	2323	48	48	3855	2371
5	2,167	1,035	1,035	1035	1035	2564	1540	277	113	2841	1653
6	1,783	1,594	1,594	544	290	360	187	116	103	476	290
7	2,313	-	-	0	0	746	0	240	0	986	0
8	1,278	116	116	116	25	360	133	73	8	433	141
WASA Subtotal	**20,183**	**10,871**	**5,954**	**3,894**	**2,753**	**15,892**	**8,618**	**2,496**	**1096**	**18,388**	**9,714**
DDOT (via VMS) Subtotal											
Grand Total	**20,183**	**10,871**	**5,954**	**3,894**	**2,753**					**18,388**	**9,714**
% Cleaned/Inspected to Date				**65%**	**46%**					**91%**	**89%**

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

Facility	*Date Inspected*	*Condition*	*Work Needed*	*Work performed*	*Material Removed (CY)*
Netting System CSO 018	7/7/11	Good	None	Nets replaced	200 lbs.
Bar Rack CSO 040	7/14/11	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	7/14/11	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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	20
Days not Operating	5
Reason not Operating	High winds and low tide.
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One
Dates	B-28: 7/6/11. B-29: 7/1 thru 7/31/11.
Reason	B-28: defective front screen. B-29: defective hydraulic hoses
Plan to Restore to Service	B: 28 - 7/7/11. B-29: ASAP
Volume Material Collected	40 tons
Nature of Material	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 Condition Report Bar Racks at Main and O Street Storm Pumps

DC Water performs visual surveys of the bar racks at Main and O Street Pumping Stations to characterize the quantity and nature of floatable discharge. The physical condition of the bar racks and any maintenance requirements are also noted.

Table 5.1
Bar Racks at Main & O Street Pumping Stations

Inspector: _____Claude Price____
Date Inspected: ___7/21/11__

Pumping Station	Inspector	Date Inspected	Condition		Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	CP	7/21	X			
Bar Racks at Main Storm Pumps (CSO 011)	CP	7/21	X			

5.2 Rain Data

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

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
7/1/2011	0	0	0	0
7/2/2011	0	0	0	0
7/3/2011	0.03	0.29	0.73	0.7
7/4/2011	0	0.02	0	0.01
7/5/2011	0	0.03	0	0.02
7/6/2011	0.01	0	0.04	0.01
7/7/2011	0	0	0	0
7/8/2011	0.3	0	0.69	0.01
7/9/2011	0	0	0	0
7/10/2011	0	0	0	0
7/11/2011	0.02	0.36	0	0
7/12/2011	0	1.06	0	0
7/13/2011	0	0.21	0.49	0.16
7/14/2011	0	0	0	0.12
7/15/2011	0	0	0	0.02
7/16/2011	0	0	0	0.01
7/17/2011	0	0	0	0
7/18/2011	0	0	0.2	0.13
7/19/2011	0	0	0	0
7/20/2011	0	0	0	0
7/21/2011	0	0	0	0
7/22/2011	0	0	0	0
7/23/2011	0	0	0	0
7/24/2011	0	0	0	0
7/25/2011	0.15	0.41	0.22	0.04
7/26/2011	0	0	0	0.01
7/27/2011	0	0		0
7/28/2011	0	0		0
7/29/2011	0	0		0
7/30/2011	0	0		0
7/31/2011	0	0		0
TOTAL	0.51	2.38	2.37	1.24

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

Monthly Operations Report
For
Combined Sewer System
Month: August 2011

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 2011

Table of Contents

1. INTRODUCTION

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

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

2. OPERATION AND MAINTENACE

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

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/09/11	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/09/11	*			
5	Poplar Point Pumping Station	004	08/18/11	*			
6	Chicago Street and Railroad Ave, SE	005	08/01/11	*			
7	W Street and Railroad Ave, SE	005	08/01/11	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A[3]				
9	13th Street and Ridge Place, SE	007	08/01/11	*			
11	"O" Street Pumping Station	011(a)	08/18/11	*			
12	Storm Pump Discharge at Main Pumping Station	011	08/18/11	*			
13	2nd Street, 300 ft. north of N Place, SE	009	08/18/11	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	08/18/11	*			
15	South Capitol and E Streets	010	08/18/11	*			
15a	Half and L Streets, SE	010	08/18/11	*			
15b	South Capitol and I Streets	010	08/16/11	*			
15c	South Capitol and I Streets	010	08/16/11	*			
16	North of Main Sewage Pumping Station	012	08/16/11	*			
17	4th and N Streets, SE, Both Extended	013	08/22/11	*			
17a	K Street between 6th Street and 7th Street, SE	013	08/22/11	*			
18	6th and M Streets, SE	014	08/19/11	*			
19	9th and M Streets, SE	015	08/22/11	*			
19a	9th and M Streets, SE	015	08/22/11	*			
20	12th and M Streets, SE	016	08/22/11	*			
20a	12th and M Streets, SE	016	08/22/11	*			
21	14th and M Streets, SE	017	08/16/11	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	08/09/11	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	08/09/11	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	08/09/11	*			
22d	Kentucky Ave and Potomac Street, SE	018	08/09/11	*			
22e	14th Street and Kentucky Ave, SE	018	08/09/11	*			
23	Independence Ave, 21st Street, SE, Extended	019	08/09/11	*			
24a	East Capitol St, west of RFK stadium	019	08/09/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
28	21st and Constitution Ave, NW	020	08/08/11	*			
29	22nd Street, between Constitution Ave and C St, NW	020	08/08/11	*			
30	17th and D Streets, NW	020	08/08/11	*			
31	15th Street and Pennsylvania Ave, NW	020	08/08/11	*			
33	10th and F Streets, NW	020	08/08/11	*			
34	23rd Street, north of Constitution Ave, NW	020	08/25/11	*			
34a	23rd Street near C Street, NW	020	08/08/11	*			
35	Northeast of Roosevelt Bridge, NW	021	08/25/11	*			
36	27th and I Streets, NW	022	08/19/11	*			
36a	New Hampshire Ave and Eye Street, NW	022	08/19/11	*			
36b	19th and L Streets, NW	022, 034	08/26/11	*			
36d	17th and L Streets, NW	022, 034	08/26/11	*			
36g	18th and M Streets, NW	022, 034	08/26/11	*			
36h	18th and M Streets, NW	022, 034	08/26/11	*			
37	27th and Eye Streets, NW	022	08/19/11	*			
38	29th and K Streets, NW	024	08/01/11	*			
38a	30th Street, south of K Street, NW	024	08/01/11	*			
39a	30th and K Streets, NW	024	08/01/11	*			
39b	30th and K Streets, NW	024	08/01/11	*			
41b	31st and K Streets, NW	025	08/01/11	*			
41c	31st and K Streets, NW	025	08/01/11	*			
42	Wisconsin Ave and K Street, NW	026	08/19/11	*			
43	Potomac and Water Streets, NW	027	08/19/11	*			
43a	Potomac and Water Streets, NW	027	08/19/11	*			
44	Water Street, west of Potomac St, NW	027	08/19/11	*			
45	36th and M Streets, NW	028	08/05/11	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	08/05/11	*			
47	38th Street and Reservoir Road, NW	029	08/05/11	*			
47a	37th and T Streets, NW	029	08/05/11	*			
47b	37th and T Streets, NW	029	08/05/11	*			
47c	38th and W Streets, NW	029	08/05/11	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A[3]				
50	26 and M Streets, NW	032	08/05/11	*			
51	N Street Extended, west of 25th Street, NW	033	08/05/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
52	22nd Street between M and N Streets, NW	034	08/25/11	*			
52a	N Street between 22nd and 23rd Streets, NW	034	08/25/11	*			
53	22nd and M Streets, NW	022, 034	08/09/11	*			
53a	22nd and M Streets, NW	022, 034	08/09/11	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	08/05/11	*			
53c	L and 22nd Streets, NW	022	08/05/11	*			
54	23rd and O Streets, NW	034	08/16/11	*			
55	22nd Street, south of Q Street, NW	035	08/16/11	*			
55a	22nd Street, south of Q Street, NW	035	08/16/11	*			
56	23rd and Massachusetts Ave, NW	036	08/16/11	*			
57	23rd Street, south of Q Street, NW	036	08/16/11	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A[3]				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	08/10/11	*			
60	Connecticut Ave, east of Rock Creek, NW	039	08/10/11	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	08/10/11	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	08/10/11	*			
63	Harvard Street and Rock Creek Parkway, NW	042	08/10/11	*			
64	Adams Mill Road, south of Irving Street, NW	043	08/10/11	*			
65	Kenyon Street and Adams Mill Road, NW	044	08/10/11	*			
65a	Kenyon Street and Adams Mill Road, NW	044	08/10/11	*			
66	Adams Mill Road and Lamont Street, NW	045	08/10/11	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	08/10/11	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	08/10/11	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	08/10/11	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	08/10/11	*			
70i	5th and Quackenbos Streets, NW	049	08/01/11	*			
71	28th Street, west of Rock Creek Parkway, NW	050	08/01/11	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	08/16/11	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	08/16/11	*			
73	O Street Extended and Rock Creek Parkway, NW	052	08/16/11	*			
74	Q Street, west of Rock Creek, NW	053	N/A[3]				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	08/26/11	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	08/26/11	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	08/05/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
78	28th Street Extended, west of Rock Creek, NW	057	08/26/11	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	N/A[3]				
84	26th and P Streets, NW	060	08/16/11	*			
84a	26th and P Streets, NW	060	08/16/11	*			

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 longer functions as a combined sewer overflow regulator structure.

2.2 Outfalls, Tide Gates and CSO Signs

The following table summarizes inspections, maintenance and work performed on outfall structures, tide gates and CSO signs in the collection system.

Table 2 - 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	08/09/11	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	08/09/11	*			*			*		
006	Good Hope Road and Welsh Memorial Bridge	08/11/11	*		*		*		*		
007	Between 11th St. and Anacostia Bridges, SE	08/11/11	*		*		*		*		
009	O St. Sewage Pumping Station, SE	08/11/11	*		*		*		*		
010	O St. Sewage Pumping Station, SE	08/11/11	*			*			*		
011	Main Sewage Pumping Station, SE	08/11/11	*			*			*		
011(a)	Main Sewage Pumping Station, SE	08/11/11	*		*		*		*		
012	Main Sewage Pumping Station, SE	08/11/11	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	08/11/11	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	08/18/11	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	08/18/11	*			*			*		
016	12th and O Streets, SE	08/11/11	*		*		*		*		
017	M and Water Street, SE	08/04/11	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	08/04/11	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	08/18/11	*			*			*		
020	Rock Creek Parkway and Independence, NW	08/18/11	*		*		*		*		
021	Rock Creek Parkway and C St., NW	08/18/11	*			*			*		
022	Rock Creek Parkway and G St., NW	08/18/11	*		*		*		*		
024	South of 30th and K Streets, NW	08/18/11	*			*			*		
025	South of 31st and K Streets, NW	08/18/11	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	08/18/11	*		*		*		*		
027	33rd and Water Sts., NW	08/18/11	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	08/18/11	*			*			*		

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	
029	Adjacent to C&O Canal, aligned with 38th St. NW	08/18/11	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	08/18/11	*			*			*		
032	26th and M Street, NW.	08/18/11	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	08/18/11	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	08/18/11	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	08/18/11	*		*		*		*		
036	22nd Street, South of Q Street NW.	08/18/11	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	08/18/11	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	08/18/11	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	08/18/11	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	08/18/11	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	08/04/11	*		*		*		*		
042	Harvard St. and Beach Dr NW.	08/04/11	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	08/04/11	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	08/04/11	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	08/04/11	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	08/10/11	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	08/10/11	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	08/10/11	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	08/10/11	*		*		*		*		
050	Rock Creek Parkway and L St., NW	08/01/11	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	08/11/11	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	08/11/11	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	08/11/11	*		*		*		*		

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	
054	Massachusetts Avenue and Rock Creek Parkway, NW.	08/11/11	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	08/11/11	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	08/11/11	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	08/11/11	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	08/11/11	*		*		*		*		

Notes:

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

Table 2-3
Pumping Stations – Inspections and Equipment in Service

Pumping Station	*No. of Inspections*	*No. Screens*	*No. Pumps*	*Screens or Pumps Out of Service*	*Dates*	*Reason*	*Schedule to Restore to Service*
Main	31	4	10	#1 Sanitary Pump #2 Screen	August 1-31 August 21-31	Pump being rehabbed. Screen being rehabbed.	September 2011 September 2011
Eastside	31	2	4	#2 Screen	August 1-26	Screen being rehabbed.	
Poplar Point	31	2	3	#1 Screen #2 Screen	August 1-31 August 1-10	Screen being rehabbed. Screen being rehabbed.	September 2011
Potomac	31	4	5	#3 Screen	August 1-31	Screen being rehabbed.	September 2011

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

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed*[1]	*Comments*
Main	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
O St	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	8/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	8/25/2011	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

	Sanitary Pumpage		*Storm Water/CSO Pumped To Anacostia River*		
Pumping Station	*Total Wastewater (mg)*	*Daily Average Wastewater (mg)*	*Date*	*Volume (mg)*	*Screenings Collected (units)*[1]
Main	1,784.10	57.55	N/A	N/A	N/A
O St	171.20	5.52	8/15/11	16.40	Normal
			8/19/11	28.10	Normal
			8/27/11	157.90	Normal
			8/28/11	63.80	Normal
Eastside	451.69	14.57	N/A	N/A	N/A
Poplar Point	677.61	21.86	N/A	N/A	N/A
Potomac	3,693.50	119.15	N/A	N/A	N/A
Rock Creek	197.50	6.37	N/A	N/A	N/A
Upper Anacostia	158.96	5.13	N/A	N/A	N/A
Earle Place	0.48	0.02	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

Date Inspected	*# of Screens*	*# of Swirls*	*Screens or Swirls Out of Service*	*Dates*	*Reason*	*Schedule to Restore to Service*
8/27/11	1, 2 & 3	1, 2 & 3	None	N/a	N/a	N/a

Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance

Date Performed	*Type of Preventive Maintenance Performed*[1]	*Comments*
8/27/11	Group A	

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

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

Date	*Approx. Storm Duration (hrs)*	*Total Influent Volume (mg)*	*Total Foul Sewer Volume (mg)*	*Total Effluent Volume[2] (mg)*	*Approx. Screenings Volume[1] (Cu. ft)*
8/6/2011	6	3.0	3.0	0.0	108
8/13/2011	8	6.7	6.7	0.0	72
8/14/2011	6	10.0	10.0	0.0	168
8/19/2011	4	10.0	10.0	0.0	144
8/21/2011	6	6.9	6.9	0.0	0
8/25/2011	6.5	9.3	9.3	0.0	0
8/27/2011	9	83.7	8.3	75.5	120
8/28/2011	8	31.5	3.5	28.0	8
8/28/2011	5	4.6	4.6	0.0	12

Notes:
1. When the screening bin is full, the volume of collected screenings cannot be approximated.

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

		Dosages		*Residual Chlorine Test Results*		*E. Coli Test Results*	
Date	*Chlor/ Dechlor System Used?*	*NaOCl (mg/l)*	*$NaHSO_3$ (mg/l)*	*Location*	*Conc. (mg/l)*	*Site*	*Count Per 100ml*
8/27/2011	Yes	5	2	Mix Chamber	0.1	Mix Chamber	21,000
8/27/2011	Yes	5	2	Anacostia River[1]	0.0	Anacostia River	43,000
8/28/2010	Yes	5	2	Mix Chamber	0.1	Mix Chamber	< 10
8/28/2011	Yes	5	2	Anacostia River[1]	0.0	Anacostia River	57

Notes:
1. River: River Outfall

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

	Flow Composited Sample Results						
Date	*Total suspended solids (mg/L)*	*Nitrite (NO2-N) mg/L*	*Nitrate (NO3-N)) mg/L*	*Total Kjeldahl Nitrogen (mg/L as N)*	*Total Nitrogen (mg/L)*	*Total Phosphorus (mg/L)*	*Carbonaceous Biological Oxygen Demand (mg/L)*
8/27/11	45.0	0.00	0.16	3.51	3.67	2.06	11.7
8/28/11	27.0	0.00	1.02	0.84	1.86	0.19	2.9

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

Inflatable Dam Structure No	*Date Inspected*	*Was Dam Out of Service During the Month?*	*Dates out of Service*	*Reason*	*Schedule to Restore to Service*
14 - East	8/20/11	**No**	**N/A**	**N/A**	**N/A**
14 - West	8/20/11	**No**	**N/A**	**N/A**	**N/A**
15	8/20/11	**No**	**N/A**	**N/A**	**N/A**
15A	8/20/11	**No**	**N/A**	**N/A**	**N/A**
16 - East	8/20/11	**No**	**N/A**	**N/A**	**N/A**
16 - West	8/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - North	8/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - Middle	8/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - South	8/20/11	**No**	**N/A**	**N/A**	**N/A**
34	8/20/11	**No**	**N/A**	**N/A**	**N/A**
35	8/20/11	**No**	**N/A**	**N/A**	**N/A**
52	8/20/11	**No**	**N/A**	**N/A**	**N/A**

Table 2-12
Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*
14 (E & W)	*None*	*N/A*
15	*8/14*	*12 min*
	8/19	*132 min*
	8/20	*17 min*
	8/21	*80 min*
	8/22	*20 min*
	8/25	*3 min*
	8/27	*13 min*
	8/28	*14 min*
15A	*8/14*	*3 min*
	8/19	*51 min*
	8/21	*19 min*
	8/27	*2 min*
	8/28	*5 min*
16 (E & W)	*8/14*	*59 min*
	8/15	*2 min*
	8/19	*40 min*
	8/21	*27 min*
	8/27	*219 min*
	8/28	*31 min*
24	*8/6*	*2 min*
	8/13	*12 min*
	8/14	*7 min*
	8/15	*2 min*
	8/19	*9 min*
	8/21	*13 min*
	8/25	*2 min*
	8/27	*57 min*
	8/28	*41 min*
34	*8/8*	*19 sec*
	8/15	*1 min*
	8/19	*1 min*
	8/21	*9 sec*
	8/27	*58 min*
	8/28	*12 min*
35	*8/6*	*7 min*
	8/13	*13 min*
	8/14	*19 min*
	8/19	*19 min*
	8/21	*11 min*

	8/25 *8/27*	*43 min* *172 min*
52	*None*	*N/A*
Structures on Outfall Sewers	*Overflow Dates*	*Estimated Duration of Overflow*
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
Outfall Sewer Control Gates	*Operational Status*	*Position*
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during August 2011.

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

			Inspections			*Cleaning*					
						CBs Cleaned Thru Last Month		*CB's Cleaned this Month*		*Total CBs Cleaned This Year to Date*	
Ward	*Total CBs*	*CBs in CSS*	*CBs in Anacostia CSS*	*Total Anacostia CBs Inspected Once this Year*	*Total Anacostia CBs Inspected Twice this Year*	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	734	2206	2098	96	70	2302	2168
2	4,714	4,112	2,316	1636	510	2319	1821	1562	1085	3881	2906
3	3,555	461	-	0	0	5272	1340	668	215	5940	1555
4	2,782	1,985	159	159	159	3855	2371	174	83	4029	2454
5	2,167	1,035	1,035	1035	1035	2841	1653	276	250	3117	1903
6	1,783	1,594	1,594	719	465	476	290	250	175	726	465
7	2,313	-	-	0	0	986	0	136	0	1122	0
8	1,278	116	116	116	116	433	141	171	72	604	213
WASA Subtotal	**20,183**	**10,871**	**5,954**	**4,399**	**3,019**	**18,388**	**9,714**	**3,333**	**1,950**	**21,721**	**11,664**
DDOT (via VMS) Subtotal											
Grand Total	**20,183**	**10,871**	**5,954**	**4,399**	**3,019**					**21,721**	**11,664**
% Cleaned/Inspected to Date				**74%**	**51%**					**>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

Facility	*Date Inspected*	*Condition*	*Work Needed*	*Work performed*	*Material Removed (CY)*
Netting System CSO 018	8/4/2011	Good	None	Nets replaced	210 lbs.
Bar Rack CSO 040	8/18/2011	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	8/4/2011	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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	23
Days not Operating	12
Reason not Operating	High winds (8), strong currents (1) and PM service (3).
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One
Dates	B-28: 8/19 – 8/25/2011. B-29: 8/1 thru 8/31/11.
Reason	B-28: missing wing bushing. B-29: defective hydraulic hoses
Plan to Restore to Service	B: 28 - repaired. B-29: ASAP
Volume Material Collected	40 tons
Nature of Material	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 Condition Report Bar Racks at Main and O Street Storm Pumps

DC Water performs visual surveys of the bar racks at Main and O Street Pumping Stations to characterize the quantity and nature of floatable discharge. The physical condition of the bar racks and any maintenance requirements are also noted.

Table 5.1
Bar Racks at Main & O Street Pumping Stations

Inspector: Claude Price
Date Inspected: 8/30/11

Pumping Station	Inspector	Date Inspected	Condition		Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	CP	8/30	X			
Bar Racks at Main Storm Pumps (CSO 011)	CP	8/30	X			

5.2 Rain Data

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

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
8/1/2011	0	0	0	0
8/2/2011	0.01	0	0	0
8/3/2011	0.04	0.14	0.3	0.01
8/4/2011	0.01	0	0.01	0
8/5/2011	0	0	0	0
8/6/2011	0.1	0.28	0.04	0
8/7/2011	0.01	0	0.42	0
8/8/2011	0	0	0	0
8/9/2011	0	0	0	0
8/10/2011	0	0	0	0
8/11/2011	0	0	0	0
8/12/2011	0	0	0	0
8/13/2011	0	0.51	0.52	0
8/14/2011	0.6	0.8	0.84	0.09
8/15/2011	0.02	0	0.07	0.18
8/16/2011	0	0	0	0.13
8/17/2011	0	0	0	0.01
8/18/2011	0.01	0.04	0.01	0
8/19/2011	0.06	0.69	1.07	0.03
8/20/2011	0	0	0	0.43
8/21/2011	0.45	0.32	0.35	0.03
8/22/2011	0	0	0	0.04
8/23/2011	0	0	0	0.01
8/24/2011	0	0	0	0
8/25/2011	0.29	0.44	0.22	0
8/26/2011	0	0	0	0.06
8/27/2011	1.75	2.88	3.15	0.35
8/28/2011	0.92	1.08	0.84	0.64
8/29/2011	0.05	0	0	0.04
8/30/2011	0.01	0	0	0.01
8/31/2011	0	0	0	0.01
TOTAL	4.33	7.18	7.84	2.07

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

Monthly Operations Report
For
Combined Sewer System
Month: September 2011

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 2011

Table of Contents

1. INTRODUCTION

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

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

2. OPERATION AND MAINTENACE

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

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/30/11	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/30/11	*			
5	Poplar Point Pumping Station	004	09/22/11	*			
6	Chicago Street and Railroad Ave, SE	005	09/19/11	*			
7	W Street and Railroad Ave, SE	005	09/19/11	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A[3]				
9	13th Street and Ridge Place, SE	007	09/19/11	*			
11	"O" Street Pumping Station	011(a)	09/22/11	*			
12	Storm Pump Discharge at Main Pumping Station	011	09/22/11	*			
13	2nd Street, 300 ft. north of N Place, SE	009	09/22/11	*			
14	2nd Street, 250 ft. north of N Place, SE	011(a)	09/22/11	*			
15	South Capitol and E Streets	010	09/22/11	*			
15a	Half and L Streets, SE	010	09/22/11	*			
15b	South Capitol and I Streets	010	09/21/11	*			
15c	South Capitol and I Streets	010	09/21/11	*			
16	North of Main Sewage Pumping Station	012	09/22/11	*			
17	4th and N Streets, SE, Both Extended	013	09/06/11	*			
17a	K Street between 6th Street and 7th Street, SE	013	09/30/11	*			
18	6th and M Streets, SE	014	09/02/11	*			
19	9th and M Streets, SE	015	09/02/11	*			
19a	9th and M Streets, SE	015	09/02/11	*			
20	12th and M Streets, SE	016	09/02/11	*			
20a	12th and M Streets, SE	016	09/02/11	*			
21	14th and M Streets, SE	017	09/05/11	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	09/27/11	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	09/27/11	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	09/27/11	*			
22d	Kentucky Ave and Potomac Street, SE	018	09/27/11	*			
22e	14th Street and Kentucky Ave, SE	018	09/27/11	*			
23	Independence Ave, 21st Street, SE, Extended	019	09/29/11	*			
24a	East Capitol St, west of RFK stadium	019	09/29/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
28	21st and Constitution Ave, NW	020	09/3011	*			
29	22nd Street, between Constitution Ave and C St, NW	020	09/30/11	*			
30	17th and D Streets, NW	020	09/12/11	*			
31	15th Street and Pennsylvania Ave, NW	020	09/12/11	*			
33	10th and F Streets, NW	020	09/12/11	*			
34	23rd Street, north of Constitution Ave, NW	020	09/29/11	*			
34a	23rd Street near C Street, NW	020	09/30/11	*			
35	Northeast of Roosevelt Bridge, NW	021	09/29/11	*			
36	27th and I Streets, NW	022	09/12/11	*			
36a	New Hampshire Ave and Eye Street, NW	022	09/12/11	*			
36b	19th and L Streets, NW	022, 034	09/26/11	*			
36d	17th and L Streets, NW	022, 034	09/26/11	*			
36g	18th and M Streets, NW	022, 034	09/26/11	*			
36h	18th and M Streets, NW	022, 034	09/26/11	*			
37	27th and Eye Streets, NW	022	09/12/11	*			
38	29th and K Streets, NW	024	09/29/11	*			
38a	30th Street, south of K Street, NW	024	09/29/11	*			
39a	30th and K Streets, NW	024	09/29/11	*			
39b	30th and K Streets, NW	024	09/29/11	*			
41b	31st and K Streets, NW	025	09/29/11	*			
41c	31st and K Streets, NW	025	09/29/11	*			
42	Wisconsin Ave and K Street, NW	026	09/29/11	*			
43	Potomac and Water Streets, NW	027	09/29/11	*			
43a	Potomac and Water Streets, NW	027	09/29/11	*			
44	Water Street, west of Potomac St, NW	027	09/29/11	*			
45	36th and M Streets, NW	028	09/02/11	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	09/02/11	*			
47	38th Street and Reservoir Road, NW	029	09/02/11	*			
47a	37th and T Streets, NW	029	09/02/11	*			
47b	37th and T Streets, NW	029	09/02/11	*			
47c	38th and W Streets, NW	029	09/02/11	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A[3]				
50	26 and M Streets, NW	032	09/27/11	*			
51	N Street Extended, west of 25th Street, NW	033	09/27/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
52	22nd Street between M and N Streets, NW	034	09/29/11	*			
52a	N Street between 22nd and 23rd Streets, NW	034	09/29/11	*			
53	22nd and M Streets, NW	022, 034	09/30/11	*			
53a	22nd and M Streets, NW	022, 034	09/3011	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	09/27/11	*			
53c	L and 22nd Streets, NW	022	09/27/11	*			
54	23rd and O Streets, NW	034	09/19/11	*			
55	22nd Street, south of Q Street, NW	035	09/19/11	*			
55a	22nd Street, south of Q Street, NW	035	09/19/11	*			
56	23rd and Massachusetts Ave, NW	036	09/19/11	*			
57	23rd Street, south of Q Street, NW	036	09/19/11	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A[3]				
59	North of Belmont Rd, east of Kalorama Cir, NW	038	09/26/11	*			
60	Connecticut Ave, east of Rock Creek, NW	039	09/06/11	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	09/06/11	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	09/21/11	*			
63	Harvard Street and Rock Creek Parkway, NW	042	09/21/11	*			
64	Adams Mill Road, south of Irving Street, NW	043	09/21/11	*			
65	Kenyon Street and Adams Mill Road, NW	044	09/21/11	*			
65a	Kenyon Street and Adams Mill Road, NW	044	09/21/11	*			
66	Adams Mill Road and Lamont Street, NW	045	09/21/11	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	09/21/11	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	09/21/11	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	09/21/11	*			
70	Piney Branch Parkway, west of 16th Street, NW	049	09/21/11	*			
70i	5th and Quackenbos Streets, NW	049	09/06/11	*			
71	28th Street, west of Rock Creek Parkway, NW	050	09/06/11	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	09/19/11	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	09/19/11	*			
73	O Street Extended and Rock Creek Parkway, NW	052	09/19/11	*			
74	Q Street, west of Rock Creek, NW	053	N/A[3]				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	09/27/11	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	09/27/11	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	09/30/11	*			

Struct No.	*Location*	*Associated NPDES Outfall*	*Date Inspected*	*Condition*		*Work Needed*	*Work performed*
				Good	Needs Work		
78	28th Street Extended, west of Rock Creek, NW	057	09/29/11	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	N/A[3]				
84	26th and P Streets, NW	060	09/19/11	*			
84a	26th and P Streets, NW	060	09/19/11	*			

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 longer functions as a combined sewer overflow regulator structure.

2.2 Outfalls, Tide Gates and CSO Signs

The following table summarizes inspections, maintenance and work performed on outfall structures, tide gates and CSO signs in the collection system.

Table 2 - 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	09/08/11	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	09/08/11	*			*					
006	Good Hope Road and Welsh Memorial Bridge	09/08/11	*		*		*		*		
007	Between 11th St. and Anacostia Bridges, SE	09/08/11	*		*		*		*		
009	O St. Sewage Pumping Station, SE	09/01/11	*		*		*		*		
010	O St. Sewage Pumping Station, SE	09/01/11	*			*			*		
011	Main Sewage Pumping Station, SE	09/01/11	*			*			*		
011(a)	Main Sewage Pumping Station, SE	09/01/11	*		*		*		*		
012	Main Sewage Pumping Station, SE	09/01/11	*		*		*		*		
013	Southeast Federal Center, aligned with 4th St.	09/01/11	*		*		*		*		
014	Navy Yard, aligned with 6th St., SE	09/08/11	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	09/08/11	*			*			*		
016	12th and O Streets, SE	09/08/11	*		*		*		*		
017	M and Water Street, SE	09/05/11	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	09/01/11	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	09/11/11	*			*			*		
020	Rock Creek Parkway and Independence, NW	09/01/11	*		*		*		*		
021	Rock Creek Parkway and C St., NW	09/01/11	*			*			*		
022	Rock Creek Parkway and G St., NW	09/01/11	*		*		*		*		
024	South of 30th and K Streets, NW	09/01/11	*			*			*		
025	South of 31st and K Streets, NW	09/01/11	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	09/01/11	*		*		*		*		
027	33rd and Water Sts., NW	09/01/11	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	09/01/11	*			*			*		

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	
029	Adjacent to C&O Canal, aligned with 38th St. NW	09/01/11	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	09/27/11	*			*			*		
032	26th and M Street, NW.	09/27/11	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	09/27/11	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	09/19/11	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	09/22/11	*		*		*		*		
036	22nd Street, South of Q Street NW.	09/22/11	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	09/22/11	*		*		*				
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	09/26/11	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	09/06/11	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	09/06/11	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	09/01/11	*		*		*		*		
042	Harvard St. and Beach Dr NW.	09/01/11	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	09/01/11	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	09/01/11	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	09/01/11	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	09/21/11	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	09/21/11	*		*		*		*		
048	South of Piney Branch Parkway and 17th St.	09/21/11	*		*		*		*		
049	North of Piney Branch Parkway and 17th St.	09/21/11	*		*		*		*		
050	Rock Creek Parkway and L St., NW	09/21/11	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	09/22/11	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	09/22/11	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	09/22/11	*		*		*				
054	Massachusetts Avenue and Rock Creek Parkway, NW.	09/27/11	*		*		*		*		

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	
056	Normanstone Dr. and Rock Creek Parkway, NW.	09/27/11	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	09/27/11	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	09/22/11	*			*					
060	North of P Street Bridge and Rock Creek Pkwy, NW	09/22/11	*		*		*		*		

Notes:

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

Table 2-3
Pumping Stations – Inspections and Equipment in Service

Pumping Station	*No. of Inspections*	*No. Screens*	*No. Pumps*	*Screens or Pumps Out of Service*	*Dates*	*Reason*	*Schedule to Restore to Service*
Main	30	4	10	# 1 Sanitary Pump #1 Screen	September 1-15 September 3-30	Pump being rehabbed Screen being rehabbed	 October 2011
Eastside	30	2	4	#1 Screen	September 29-30	Screen being rehabbed	October 2011
Poplar Point	30	2	3	#1 Screen	September 1-9	Screens being rehabbed	
Potomac	30	4	5	#3 Screen # 1 Sanitary Pump	September 1-30 September 6-30	Screen being rehabbed Pump being rehabbed	October 2011 October 2011

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

Pumping Station	*Date Performed*	*Type of Preventive Maintenance Performed*[1]	*Comments*
Main	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
O St	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	9/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	9/25/2011	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

	Sanitary Pumpage		*Storm Water/CSO Pumped To Anacostia River*		
Pumping Station	*Total Wastewater (mg)*	*Daily Average Wastewater (mg)*	*Date*	*Volume (mg)*	*Screenings Collected (units)*[1]
Main	Main	1,680.10	N/A	N/A	N/A
O St	O St	211.50	9/7/2011	114.20	Normal
			9/8/2011	92.40	Normal
			9/9/2011	14.30	Normal
			9/23/2011	6.70	Normal
Eastside	552.44	18.41	N/A	N/A	N/A
Poplar Point	797.22	26.57	N/A	N/A	N/A
Potomac	3,827.20	127.57	N/A	N/A	N/A
Rock Creek	272.50	9.08	N/A	N/A	N/A
Upper Anacostia	161.67	5.39	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

Date Inspected	*# of Screens*	*# of Swirls*	*Screens or Swirls Out of Service*	*Dates*	*Reason*	*Schedule to Restore to Service*
9/27/11	1, 2 & 3	1, 2 & 3	None	N/a	N/a	N/a

Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance

Date Performed	*Type of Preventive Maintenance Performed*[1]	*Comments*
9/27/11	Group A	

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

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

Date	*Approx. Storm Duration (hrs)*	*Total Influent Volume (mg)*	*Total Foul Sewer Volume (mg)*	*Total Effluent Volume[2] (mg)*	*Approx. Screenings Volume[1] (Cu. ft)*
9/2/2011	4.5	4.2	4.2	0.0	100.0
9/5/2011	4.5	10.3	10.3	0.0	0.0
9/6/2011	6.5	29.6	4.6	25.0	0.0
9/6/2011	4.5	11.9	11.9	0.0	0.0
9/7/2011	8.5	45.1	3.3	41.8	0.0
9/7/2011	8	21.8	4.9	16.9	0.0
9/8/2011	7.5	28.5	4.7	23.8	0.0
9/8/2011	7	5.6	5.6	0.0	0.0
9/8/2011	5	17.5	17.5	0.0	0.0
9/9/2011	7.5	11.9	11.9	0.0	0.0
9/9/2011	4	12.2	12.2	0.0	0.0
9/23/2011	4	20.4	20.4	0.0	156.0
9/23/2011	6	4.9	4.9	0.0	8.0
9/28/2011	2.5	2.9	2.9	0.0	12.0
9/28/2011	6	7.8	7.8	0.0	12.0

Notes:
1. When the screening bin is full, the volume of collected screenings cannot be approximated.

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

Date	*Chlor/ Dechlor System Used?*	*Dosages*		*Residual Chlorine Test Results*		*E. Coli Test Results*	
		NaOCl (mg/l)	*$NaHSO_3$ (mg/l)*	*Location*	*Conc. (mg/l)*	*Site*	*Count Per 100ml*
9/6/2011	Yes	5	2	Mix Chamber	0.2	Mix Chamber	18
9/6/2011	Yes	5	2	Anacostia River[1]	0.0	Anacostia River	<10
9/7/2011	Yes	5	2	Mix Chamber	0.1	Mix Chamber	<10
9/7/2011	Yes	5	2	Anacostia River[1]	0.0	Anacostia River	6,540
9/8/2011	Yes	5	2	Mix Chamber	0.1	Mix Chamber	<10
9/8/2011	Yes	5	2	Anacostia River[1]	0.0	Anacostia River	300

Notes:
1. River: River Outfall

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

	Flow Composited Sample Results						
Date	*Total suspended solids (mg/L)*	*Nitrite (NO2-N) mg/L*	*Nitrate (NO3-N)) mg/L*	*Total Kjeldahl Nitrogen (mg/L as N)*	*Total Nitrogen (mg/L)*	*Total Phosphorus (mg/L)*	*Carbonaceous Biological Oxygen Demand (mg/L)*
9/6/11	34.0	0.00	0.17	1.13	1.30	0.28	6.5
9/7/11	44.0	0.00	0.90	2.89	3.79	0.32	11.0
9/8/11	35.0	0.00	1.08	2.19	3.27	0.29	4.7

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

Inflatable Dam Structure No	*Date Inspected*	*Was Dam Out of Service During the Month?*	*Dates out of Service*	*Reason*	*Schedule to Restore to Service*
14 - East	9/20/11	**No**	**N/A**	**N/A**	**N/A**
14 - West	9/20/11	**No**	**N/A**	**N/A**	**N/A**
15	9/20/11	**No**	**N/A**	**N/A**	**N/A**
15A	9/20/11	**No**	**N/A**	**N/A**	**N/A**
16 - East	9/20/11	**No**	**N/A**	**N/A**	**N/A**
16 - West	9/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - North	9/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - Middle	9/20/11	**No**	**N/A**	**N/A**	**N/A**
24 - South	9/20/11	**No**	**N/A**	**N/A**	**N/A**
34	9/20/11	**No**	**N/A**	**N/A**	**N/A**
35	9/20/11	**No**	**N/A**	**N/A**	**N/A**
52	9/20/11	**No**	**N/A**	**N/A**	**N/A**

Table 2-12
Inflatable Dams & SCADA Sites - Wet Weather Operations

Inflatable Dam Structure No.	*Overflow Dates*	*Estimated Duration of Overflow*
14 (E & W)	*None*	*N/A*
15	*9/6*	*25 min*
	9/7	*41 min*
	9/8	*78 min*
	9/9	*30 min*
	9/23	*2 min*
15A	*9/6*	*187 min*
	9/7	*407 min*
	9/8	*420 min*
	9/9	*159 min*
	9/23	*80 min*
16 (E & W)	*9/6*	*134 min*
	9/7	*75 min*
	9/8	*0.5 min*
	9/9	*2 min*
	9/23	*2 min*
24	*9/2*	*8 min*
	9/5	*2 min*
	9/6	*23 min*
	9/7	*12 min*
	9/8	*4 min*
	9/9	*4 min*
	9/23	*9 min*
	9/28	*2 min*
	9/29	*2 min*
34	*9/6*	*28 min*
	9/7	*51 min*
	9/8	*29 min*
	9/28	*0.5 min*
35	*9/2*	*12 min*
	9/5	*19 min*
	9/6	*78 min*
	9/7	*127 min*
	9/8	*125 min*
	9/9	*44 min*
	9/23	*0.5 min*
	9/28	*14 min*
52	*None*	*N/A*

Structures on Outfall Sewers	*Overflow Dates*	*Estimated Duration of Overflow*
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
Outfall Sewer Control Gates	*Operational Status*	*Position*
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during September 2011.

3.1 Sanitary Sewer Overflows

Location	Directly across from 229 Valley Avenue SE, Washington, DC
Cause	On September 19, 2011 at 10:30 am, the District of Columbia Water and Sewer Authority (DC Water) received a service call regarding a an overflowing sewer manhole at Atlantic Street and Valley Ave, SE. A sewer maintenance crew was dispatched to the site to investigate the report. The DC Water crew found an overflowing manhole in a wooded area directly across from 229 Valley Avenue, SE. Furthers investigations revealed that a car tire was stuck across the channel in the manhole partially obstructing the flow in the pipe an causing it to back up and overflow into Oxon Run Creek.
Date/ Time Discovered	September 19, 2011 at 11:00 am
Action Taken	On September 19, 2011 at 1:45 pm, the DC Water crew removed the tire to clear the obstruction in the sewer.
Date/Time Discharge Ceased	September 19, 2011 at 1:45 pm
Estimated Volume	Approximately 9,000 gallons of sanitary sewage.
Did Overflow Reach Receiving water?	Oxon Run Creek
Action taken to prevent reoccurrence	We plan to evaluate and secure vulnerable upstream locations for illicit entry on the sanitary line in the park area.

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

			Inspections			*Cleaning*					
						CBs Cleaned Thru Last Month		*CB's Cleaned this Month*		*Total CBs Cleaned This Year to Date*	
Ward	*Total CBs*	*CBs in CSS*	*CBs in Anacostia CSS*	*Total Anacostia CBs Inspected Once this Year*	*Total Anacostia CBs Inspected Twice this Year*	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	734	2302	2168	66	66	2368	2234
2	4,714	4,112	2,316	2104	595	3881	2906	953	831	4834	3737
3	3,555	461	-	0	0	5940	1555	58	15	5998	1570
4	2,782	1,985	159	159	159	4029	2454	45	11	4074	2465
5	2,167	1,035	1,035	1035	1035	3117	1903	312	159	3429	2062
6	1,783	1,594	1,594	1087	465	726	465	696	622	1422	1087
7	2,313	-	-	0	0	1122	0	85	0	1207	0
8	1,278	116	116	116	116	604	213	70	23	674	236
WASA Subtotal	**20,183**	**10,871**	**5,954**	**5,235**	**3,104**	**21,721**	**11,664**	**2,285**	**1,727**	**24,006**	**13,391**
DDOT (via VMS) Subtotal											
Grand Total	**20,183**	**10,871**		**5,235**	**3,104**						
% Cleaned/Inspected to Date				**88%**	**52%**						

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

Facility	*Date Inspected*	*Condition*	*Work Needed*	*Work performed*	*Material Removed (CY)*
Netting System CSO 018	9/14/2011	Fair	None	Nets replaced	900 pounds
Bar Rack CSO 040	9/6/2011	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	9/1/2011	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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	8
Reason not Operating	High winds (6) and PM service (2).
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	one
Dates	B28: 9/23 – 9/26/2011 and B29: 9/1 – 9/30/2011.
Reason	B28: damage to loading screen and B29: defective hydraulic hose.
Plan to Restore to Service	B: 28 - repaired. B-29: ASAP
Volume Material Collected	60 tons
Nature of Material	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 Condition Report Bar Racks at Main and O Street Storm Pumps

DC Water performs visual surveys of the bar racks at Main and O Street Pumping Stations to characterize the quantity and nature of floatable discharge. The physical condition of the bar racks and any maintenance requirements are also noted.

Table 5.1
Bar Racks at Main & O Street Pumping Stations

Inspector: Claude Price
Date Inspected: 9/29/11

Pumping Station	Inspector	Date Inspected	Condition		Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	CP	9/29	X			
Bar Racks at Main Storm Pumps (CSO 011)	CP	9/29	X			

5.2 Rain Data

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

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
9/1/2011	0	0	0	0
9/2/2011	0.02	0.42	0.21	0
9/3/2011	0	0.02	0.01	0.01
9/4/2011	0	0	0	0
9/5/2011	0	0.5	0.69	0
9/6/2011	0.33	1.44	0.95	0.01
9/7/2011	2.04	2.05	2.1	4.24
9/8/2011	0.96	1.46	0.97	1.27
9/9/2011	0.44	0.29	0.34	0.44
9/10/2011	0	0	0	0
9/11/2011	0.01	0.08	0.06	0.11
9/12/2011	0	0.01	0.02	0
9/13/2011	0	0	0	0.01
9/14/2011	0	0	0	0
9/15/2011	0.01	0.06	0.07	0.04
9/16/2011	0	0	0	0
9/17/2011	0	0	0	0
9/18/2011	0	0	0	0
9/19/2011	0	0	0	0
9/20/2011	0.12	0.13	0.12	0.14
9/21/2011	0	0	0.01	0
9/22/2011	0	0	0	0
9/23/2011	1.18	0.71	1.05	0.73
9/24/2011	0.01	0	0	0
9/25/2011	0.01	0.01	0.03	0
9/26/2011	0	0	0	0.01
9/27/2011	0.01	0.01	0	0.01
9/28/2011	0.39	0.71	0.37	0.89
9/29/2011	0	0	0	0
9/30/2011	0	0	0	0
TOTAL	5.53	7.9	7	7.91

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
Period: July, August, & September 2011
SCENARIO: Q3Y2011, 10-10-2011

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	20	7.10	82.50	4.13	24.75	0.25
006	Good Hope Road, West of Nichols Ave.,SE	8	0.10	4.25	0.53	1.25	0.25
007	13th Street and Ridge Place,SE	13	6.63	31.50	2.42	13.75	0.25
009	2nd Street, 300 feet North of N Place, SE	14	3.57	27.75	1.98	10.50	0.25
010	O Street SewagePumping Station, SE (pumped Overflow)	9	106.46	25.25	2.81	12.75	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	1	0.83	0.25	0.25	0.25	0.25
011a	South of Main SewagePumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	2	22.40	13.00	6.50	8.75	4.25
013	4th and N Streets, SE	19	6.24	38.75	2.04	14.25	0.25
014	6th and M Streets, SE	15	10.16	44.25	2.95	15.25	0.25
015	9th and M Streets, SE	15	0.90	23.00	1.53	9.00	0.25
016	12th and M Streets, SE	11	5.61	23.50	2.14	11.00	0.25
017	14th and M Streets, SE	18	16.57	68.00	3.78	23.25	0.25
018	Barney Circle andPennsylvania Ave, SE	13	8.04	35.75	2.75	13.75	0.25
019	Northeast Boundary - Swirl Effluent	10	304.09	89.50	8.95	34.00	0.50
019	Northeast Bound. - Swirl Bypass	3	21.95	5.00	1.67	2.75	0.50
	SUBTOTAL		**520.65**				
Potomac CSOs							
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	5	9.32	18.75	3.75	10.00	0.25
021	Northeast ofRoosevelt Bridge, NW	8	94.25	25.00	3.13	10.50	0.25
022	27th and K Streets, NW	11	1.77	26.00	2.36	11.75	0.25
024	30th and K Streets, NW	8	7.26	26.25	3.28	16.50	0.25
025	31st & K St NW	3	0.25	2.75	0.92	1.25	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	15	11.59	98.50	6.57	38.00	0.50
028	36th and M Streets, NW	14	1.42	33.50	2.39	10.75	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	3	2.00	4.00	1.33	2.25	0.25
	SUBTOTAL		**127.86**				
Rock Creek							
031	Pennsylvania Avenue, East Rock Creek, NW	1	0.02	2.75	2.75	2.75	2.75
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	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	7	0.134	14.75	2.11	6.25	0.25
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	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	0	0.00	0.00	0.00	0.00	0.00

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results
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NPDES No.	Description	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
042	Harvard Street and RockCreek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	1	0.06	0.25	0.25	0.25	0.25
044	Kenyon Street and Adams Mill Road, NW	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and LamontStreet, NW	11	11.159	32.00	2.91	11.75	0.25
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
054	West Side of Rock Creek300 ft. south of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	4	1.93	22.25	5.56	16.00	0.25
058	Connecticut Avenue and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
060	P St and 26th St, NW	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL		**13.30**				
	TOTAL		**661.81**				

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