### QUARTERLY OPERATIONS REPORT

### DISTRICT OF COLUMBIA

### COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER 2007

Prepared By:

D.C. Water and Sewer Authority
Department of Sewer Services
Sewer Pumping Division
2<sup>nd</sup> & 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 2007

### **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 2007

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### 1. INTRODUCTION

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

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

### 2. OPERATION AND 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

		Associated NPDES	Date	(	Condition		
Struct No.	Location	Outfall	Inspected	Cood	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/12/07	*		Work Ivected	work perjormed
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW		07/12/07	*			
		003	L				
5	Poplar Point Pumping Station	004	07/19/07	*			
6	Chicago Street and Railroad Ave, SE	005	07/03/07	*			
7	W Street and Railroad Ave, SE	005	07/03/07	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	07/03/07	*			
9	13 <sup>th</sup> Street and Ridge Place, SE	007	07/03/07	*			
11	"O" Street Pumping Station	011(a)	07/19/07	*			
12	Storm Pump Discharge at Main Pumping Station	011	07/19/07	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	07/11/07	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	07/19/07	*			
15	South Capitol and E Streets	010	07/19/07	*			
15a	Half and L Streets, SE	010	07/19/07	*			
15b	South Capitol and I Streets	010	07/20/07	*			
15c	South Capitol and I Streets	010	07/20/07	*			
16	North of Main Sewage Pumping Station	012	07/19/07	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	07/24/07	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	07/30/07	*			
18	6 <sup>th</sup> and M Streets, SE	014	07/09/07	*			
19	9 <sup>th</sup> and M Streets, SE	015	07/27/07	*			
19a	9 <sup>th</sup> and M Streets, SE	015	07/27/07	*			
20	12 <sup>th</sup> and M Streets, SE	016	07/27/07	*			
20a	12 <sup>th</sup> and M Streets, SE	016	07/27/07	*			
21	14 <sup>th</sup> and M Streets, SE	017	07/27/07	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	07/19/07	*			

		Associated NPDES	Date	(	Condition		
Struct No.	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
22b	Barney Circle and Pennsylvania Ave, SE	018	07/19/07	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	07/190/7	*			
22d	Kentucky Ave and Potomac Street, SE	018	07/19/07	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	07/19/07	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	07/27/07	*			
24a	East Capitol St, west of RFK stadium	019	07/27/07	*			
28	21st and Constitution Ave, NW	020	07/27/07	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	07/27/07	*			
30	17 <sup>th</sup> and D Streets, NW	020	07/27/07	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	07/30/07	*			
33	10 <sup>th</sup> and F Streets, NW	020	07/09/07	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	07/26/07	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	07/27/07	*			
35	Northeast of Roosevelt Bridge, NW	021	07/26/07	*			
36	27 <sup>th</sup> and I Streets, NW	022	07/16/07	*			
36a	New Hampshire Ave and Eye Street, NW	022	07/16/07	*			
36b	19th and L Streets, NW	022, 034	07/18/07	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	07/18/07	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	07/18/07	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	07/18/07	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	07/16/07	*			
38	29 <sup>th</sup> and K Streets, NW	024	07/18/07	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	07/18/07	*			
39a	30 <sup>th</sup> and K Streets, NW	024	07/18/07	*			
39b	30 <sup>th</sup> and K Streets, NW	024	07/18/07	*			
41b	31st and K Streets, NW	025	07/18/07	*			
41c	31st and K Streets, NW	025	07/18/07	*			
42	Wisconsin Ave and K Street, NW	026	07/18/07	*			

		Associated NPDES	Date	(	Condition		
Struct No.	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
43	Potomac and Water Streets, NW	027	07/18/07	*		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
43a	Potomac and Water Streets, NW	027	07/18/07	*			
44	Water Street, west of Potomac St, NW	027	07/18/07	*			
45	36 <sup>th</sup> and M Streets, NW	028	07/30/07	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	07/09/07	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	07/09/07	*			
47a	37 <sup>th</sup> and T Streets, NW	029	07/09/07	*			
47b	37 <sup>th</sup> and T Streets, NW	029	07/09/07	*			
47c	38 <sup>th</sup> and W Streets, NW	029	07/09/07	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	07/20/07	*			
50	26 and M Streets, NW	032	07/20/07	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	07/20/07	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	07/26/07	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	07/2607	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	07/26/07	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	07/26/07	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	07/26/07	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	07/26/07	*			
54	23 <sup>rd</sup> and O Streets, NW	034	07/30/07	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	07/20/07	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	07/20/07	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	07/20/07	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	07/20/07	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	07/10/07	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	07/10/07	*			
60	Connecticut Ave, east of Rock Creek, NW	039	07/10/07	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	07/10/07	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	07/16/07	*			

		Associated NPDES	Date	(	Condition		
Struct No.	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
63	Harvard Street and Rock Creek Parkway, NW	042	07/16/07	*		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
64	Adams Mill Road, south of Irving Street, NW	042	07/16/07	*			
65	Kenyon Street and Adams Mill Road, NW	044	07/16/07	*			
65a	Kenyon Street and Adams Mill Road, NW	044	07/16/07	*			
66	Adams Mill Road and Lamont Street, NW	045	07/16/07	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	07/16/07	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	07/16/07	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	07/16/07	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	0716/07	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	07/09/07	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	07/10/07	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	07/20/07	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	07/20/07	*			
73	O Street Extended and Rock Creek Parkway, NW	052	07/20/07	*			
74	Q Street, west of Rock Creek, NW	053	07/20/07	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	07/27/07	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	07/27/07	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	07/05/07	*			
78	28th Street Extended, west of Rock Creek, NW	057	07/27/07	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	07/10/07	*			
84	26 <sup>th</sup> and P Streets, NW	060	07/20/07	*			
84a	26 <sup>th</sup> and P Streets, NW	060	07/20/07	*			

- 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** 

			T =						1		
				Outfall		Gate	Tide G				
			Co	ondition	Pres	sent?	Condit	tion	(	CSO Sign	
NPDES		Date		Needs				Needs			
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and										
003	Chanute, SW	07/12/07	*		*		*		*		
	Across from Navy Yard, aligned with Parsons										
005	Ave., SE	07/12/07	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	07/12/07	*		*		*		*		
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	07/12/07	*		*		*		*		
009	O St. Sewage Pumping Station, SE	07/31/07	*		*		*		*		
010	O St. Sewage Pumping Station, SE	07/31/07	*			*			*		
011	Main Sewage Pumping Station, SE	07/31/07	*			*			*		
011(a)	Main Sewage Pumping Station, SE	07/31/07	*		*		*		*		
	M : G D : G C GE										
012	Main Sewage Pumping Station, SE	07/31/07	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	07/24/07	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	07/24/07	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	07/24/07	*			*			*		
016	12th and O Streets, SE	07/05/07	*		*		*		*		
017	M and Water Street, SE	07/05/07	*		*		*		*		
	East of Barney Circle and South of										
018	Pennsylvania Avenue Bridge, SE	07/05/07	*		*		*		*		
	Adjacent to Service Drive behind swirl facility										
019	and D.C. General Hospital	07/05/07	*			*			*		
020	Rock Creek Parkway and Independence, NW	07/31/07	*		*		*		*		
021	Rock Creek Parkway and C St., NW	07/31/07	*			*			*		
022	Rock Creek Parkway and G St., NW	07/31/07	*		*		*		*		

				Outfall ondition	Tide Pres		Tide C Condi			CSO Sign	
NPDES		Date		Needs	1703	cm.	Conan	Needs		CBO Bigh	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work		Needs Work	Notes, Work Needed or Performed
024	South of 30 <sup>th</sup> and K Streets, NW	07/3/10/7	*		*			*	*		WASA has developed a capitol project to design and construct a replacement gate for improved performance.
	South of 31st and K Streets, NW	07/31/07	*		*		*		*		· · ·
026	Wisconsin Avenue and Water Street, NW	07/24/07	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	07/24/07	*			*			*		
	Key Bridge and Whitehurst Freeway, NW	07/24/07	*			*			*		
	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	07/24/07	*		*		*		*		
	Rock Creek Pkwy and Pennsylvania Avenue, NW.	07/20/07	*			*			*		
032	26th and M Street, NW.	07/20/07	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	07/20/07	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	07/30/07	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	07/30/07	*		*		*		*		
036	22nd Street, South of Q Street NW.	07/27/07	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	07/10/07	*		*		*		*		
	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	07/10/07	*		*		*		*		
	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	07/10/07	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	07/10/07	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	07/30/07	*		*		*		*		
042	Harvard St. and Beach Dr NW.	07/30/07	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	07/30/07	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	07/30/07	*		*		*		*		

NPDES		Date		Outfall ondition		Gate sent?	Tide G Condit	tion		CSO Sign	
Outfall	Location	Inspected	OK	Needs Work	Yes	No	OK	Needs Work		Needs Work	Notes, Work Needed or Performed
045	North of Beach Dr. and Walbridge Pl, NW.	07/30/07	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	07/16/07	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	07/16/07	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	07/16/07	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	07/16/07	*		*		*		*		
050	Rock Creek Parkway and L St., NW	07/10/07	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	07/05/07	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	07/05/07	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	07/27/07	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	07/27/07	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	07/27/07	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	07/27/07	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	07/10/07	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	07/27/07	*		*		*		*		

### 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

				1 0		1 1	
Pumping	No. of	No.	No.	Screens or Pumps			
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	12	None			
Eastside	31	2	4	None			
Poplar Point	31	2 1	3	Screen #1	July 1-31	Reconstruction	December 2007
				Pump #3	July 1-31	Replacement	October 2007
Potomac	31	4	5	Screen #1	July 1-19	Reconstruction	August 2007
				Screen #2	July 1-31	Reconstruction	August 2007
				Pump #1	July 1-31	Replacement	October 2007

### Notes:

<sup>1.</sup> 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

		Tumping Stations Treventer	
		Type of Preventive Maintenance	
Pumping Station	Date Performed	Performed <sup>1</sup>	Comments
Main	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
O St	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	07/27/07	Group A	Add oil, grease bearings and replace packing if needed.

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

		1 umpmg bu	mons rumpa	5*			
	Sanitary Pt	итраде	Storm Water/CSO Pumped To Anacostia River				
	Total Wastewater	Daily Average			Screenings Collected		
Pumping Station	(mg)	Wastewater (mg)	Date	Volume (mg)	(units)		
Main	1,892.10	61.04	N/A	N/A	N/A		
O St <sup>1</sup>	143.50	4.63	7/10/07	6.70	Normal		
Eastside	436.40	14.08	N/A	N/A	N/A		
Poplar Point	523.80	16.90	N/A	N/A	N/A		
Potomac	3,604.20	116.26	N/A	N/A	N/A		
Rock Creek	105.20	3.39	N/A	N/A	N/A		
Upper Anacostia	97.10	3.13	N/A	N/A	N/A		
Earle Place	0.16	0.01	N/A	N/A	N/A		

<sup>1.</sup> 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	#		Screens or Swirls			
Inspected	Screens	# Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service
07/26/07	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 <sup>1</sup>	Comments
07/26/07	Group A	

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

	1101 the dist Boundary Swift Luciney West Weather Operations											
	Approx. Storm				Approx. Screenings							
	Duration <sup>1</sup>	Total Influent	Total Foul Sewer	Total Effluent	Volume <sup>3</sup>							
Date	(Hours)	Volume (mg)	Volume (mg)	Volume <sup>2</sup> (mg)	# of bins (cu ft)							
7/04/07	5	2.4	2.4	0	0.60(48)							
7/05/07	2	2.7	2.08	0.62	0.25(20)							
7/05/07	3	0.80	0.80	0	0.15(12)							
7/10/07	3	4.7	4.7	0	1.20(96)							
7/10/07	3	1.80	1.00	0.80	0.30(24)							
7/11/07	3	1.70	1.00	0.70	0.30(24)							
7/11/07	3	0.90	0.90	0	0.15(12)							
7/30/07	5	7.7	5.5	2.2	0.50(40)							

### 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

	Chlor/			Residual Chlorine Test						
	Dechl	Dosages		Results		Enterococcus Test	t Results	Fecal Coliform Test Results		
	or									
	Syste						Count		Count	
	m	NaOCl	$NaHSO_3$		Conc.		Per		Per	
Date	Used?	(mg/l)	(mg/l)	Location	(mg/l)	Site	100ml	Site	100ml	
07/05/07	Yes	5	2	Mix Chamber	1.5	Mix Chamber	10,000	Mix Chamber	580	
07/05/07	Yes	5	2	Anacostia River	0.4	Anacostia River	99	Anacostia River	460	
07/10/07	Yes	5	2	Mix Chamber	0.6	Mix Chamber	27	Mix Chamber	63	
07/10/07	Yes	5	2	Anacostia River	0.0	Anacostia River	48,000	Anacostia River	58,000	
07/11/07	Yes	5	2	Mix Chamber	0.2	Mix Chamber	360	Mix Chamber	550	
07/11/07	Yes	5	2	Anacostia River	0.1	Anacostia River	510,000	Anacostia River	310,000	
07/30/07	Yes	5	2	Mix Chamber	0.3	Mix Chamber	390,000	Mix Chamber	750,000	
07/30/07	Yes	5	2	Anacostia River	0.0	Anacostia River	240,000	Anacostia River	470,000	

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

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

			F	Tlow Composited Sam	ple Results		
		Nitrite	Nitrate	Total Kjeldahl		Total	Carbonaceous
	Total suspended	(NO2-N)	(NO3-N))	Nitrogen	Total Nitrogen	Phosphorus	Biological Oxygen
Date	solids (mg/L)	mg/L	mg/L	(mg/L as N)	(mg/L)	(mg/L)	Demand (mg/L)
7/05/07	78.0	0.00	0.94	4.95	5.89	1.01	40.2
7/10/07	119	0.06	0.75	3.33	4.14	0.60	33.0
7/11/07	162	0.04	0.62	2.26	2.92	0.40	17.5
7/30/07	380	0.00	0.89	9.49	10.4	1.70	87.3

### 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		Was Dam Out of Service			Schedule to Restore to
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	07/24/07	No	N/A	N/A	N/A
14 - West	07/24/07	No	N/A	N/A	N/A
15	07/24/07	No	N/A	N/A	N/A
15A	07/24/07	No	N/A	N/A	N/A
16 - East	07/24/07	No	N/A	N/A	N/A
16 - West	07/24/07	No	N/A	N/A	N/A
24 - North	07/24/07	No	N/A	N/A	N/A
24 - Middle	07/24/07	No	N/A	N/A	N/A
24 - South	07/24/07	No	N/A	N/A	N/A
34	07/24/07	No	N/A	N/A	N/A
35	07/24/07	No	N/A	N/A	N/A
52	07/24/07	No	N/A	N/A	N/A

Report for July 2007

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

initiatible builts at Scribit Sites Wet Weather Specialists									
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)							
14 (E & W)	None	N/A							
15	None	N/A							
15A	None	N/A							
16 (E & W)	None	N/A							
24	None	N/A							
34	None	N/A							
35	None	N/A							
52	None	N/A							
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow (hrs)							
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							
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

Dry weather overflows (DWOs), are summarized below:

## Table 3-1 DRY WEATHER DISCHARGES

There was no record or knowledge of dry weather discharges.

#### 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	1	Cleaning						
				Total	Total							
				Anacostia CBs	Anacostia CBs		ned Thru		caned this	Total CB		
			CBs in	Inspected	Inspected	Last I	10nth	Month		This Year to Date		
		CBs in	Anacostia	Once this	Twice this							
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS	
1	1 501	1.500	724	734	189	318	226	52	40	271	266	
1	1,591	1,568	734	/34	189	318	220	53	40	371	200	
2	4,714	4,112	2,316	1126	408	1552	1124	365	255	1917	1379	
3	3,555	461	_	0	0	1802	595	1209	348	3011	943	
3	3,333	401		0	0	1002	373	1207	310	3011	713	
4	2,782	1,985	159	159	159	3560	1990	284	120	3844	2110	
5	2,167	1,035	1,035	888	515	731	513	236	106	967	619	
6	1,783	1,594	1,594	1386	548	2145	1296	125	90	2270	1386	
6												
7	2,313	-	-	0	0	2261	0	244	0	2505	0	
8	1,278	116	116	116	116	1364	699	119	86	1483	785	
	20.402	40.051	<b>5</b> 0 <b>5</b> 1	4.400	4.005	10 =00	C 4.43	2 (25	1.045	16.266	<b>-</b> 400	
WASA Subtotal	20,183	10,871	5,954	4,409	1,935	13,733	6,443	2,635	1,045	16,368	7,488	
DDOT (via VMS) Subtotal				0	0			0	0	0	0	
Grand Total	20,183	10,871	5,954	4,409	1,935			2,635	1,045	16,368	7,488	
% Cleaned/Inspected to Date				74%	32%					81%	69%	

### **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	7/2/07 and	Good	Minor	Nets emptied.	220 lbs.
	7/30/07.		Maintenance		
Bar Rack CSO 040	7/10/07	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	7/30/07	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	4
Reason not Operating	Low Tide.
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One – B#28
Dates	7/23/07 to present.
Reason	Roller Replacement – Roller is being fabricated.
Plan to Restore to Service	As soon as possible.
Volume Material Collected	30 ton.
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 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	:								lı	nspector's Initials:
		Ove	rflow	O	Observed Quantity of Quar				Qua	ntity c	of		
cso	Time of Observa tion	Y	N	L	М	Н	L	M	Н	L	M	Н	REMARKS/OTHER
009													
010				NC	NC	E							
011													
011a													
012													

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

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

 Table 5-2
 Rainfall Data (inches)

Monthly Rain Totals	, ,			
Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
7/1/2007	0	0	0	0
7/1/2007	0	0	0	0
7/3/2007	0	0	0	0
7/4/2007	0.04	0.16	0.08	0.14
7/5/2007	0.06	0.12	0.14	0.23
7/6/2007	0	0	0	0
7/7/2007	0	0	0	0
7/8/2007	0	0	0	0
7/9/2007	0	0	0	0
7/10/2007	0.08	1.33	0.3	0.71
7/11/2007	0	0.95	0.68	0.09
7/12/2007	0.22	0	0.01	0.01
7/13/2007	0.24	0	0.01	0
7/14/2007	0.01	0	0	0
7/15/2007	0.62	0	0	0
7/16/2007	0	0	0	0
7/17/2007	0	0	0	0
7/18/2007	0	0	0	0
7/19/2007	0.03	0.06	0.07	0.07
7/20/2007	0	0	0	0
7/21/2007	0	0	0	0
7/22/2007	0	0	0	0
7/23/2007	0	0	0	0
7/24/2007	0.05	0.03	0.02	0.03
7/25/2007	0	0.01	0	0
7/26/2007	0	0	0	0
7/27/2007	0	0.22	0.03	0.1
7/28/2007	0.01	0.07	0.02	0.07
7/29/2007	0	0.13	0.3	0.27
7/30/2007	0	0.27	0.13	0.01
7/31/2007	0.01	0	0	0
TOTALS	1.37	3.35	1.79	1.73



# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**Serving the Public • Protecting the Environment** 

### Monthly Operations Report For Combined Sewer System Month: August 2007

### **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 2007

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### 1. INTRODUCTION

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

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

### 2. OPERATION AND 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

		Associated NPDES	Data	(	Condition		
Struct No.	Location	Associated NFDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/13/07	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/13/07	*			
5	Poplar Point Pumping Station	004	08/03/07	*			
6	Chicago Street and Railroad Ave, SE	005	08/07/07	*			
7	W Street and Railroad Ave, SE	005	08/07/07	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	08/07/07	*			
9	13 <sup>th</sup> Street and Ridge Place, SE	007	08/06/07	*			
11	"O" Street Pumping Station	011(a)	08/16/07	*			
12	Storm Pump Discharge at Main Pumping Station	011	08/16/07	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	08/03/07	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	08/16/07	*			
15	South Capitol and E Streets	010	08/28/07	*			
15a	Half and L Streets, SE	010	08/28/07	*			
15b	South Capitol and I Streets	010	08/28/07	*			
15c	South Capitol and I Streets	010	08/28/07	*			
16	North of Main Sewage Pumping Station	012	08/03/07	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	08/02/07	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	08/24/07	*			
18	6 <sup>th</sup> and M Streets, SE	014	08/03/07	*			
19	9 <sup>th</sup> and M Streets, SE	015	08/03/07	*			
19a	9 <sup>th</sup> and M Streets, SE	015	08/03/07	*			
20	12 <sup>th</sup> and M Streets, SE	016	08/03/07	*			
20a	12 <sup>th</sup> and M Streets, SE	016	08/03/07	*			
21	14 <sup>th</sup> and M Streets, SE	017	08/09/07	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	08/03/07	*			

		A INDEE	D. i	(	Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
22b	Barney Circle and Pennsylvania Ave, SE	018	08/03/07	*			1 0
22c	Barney Circle and Pennsylvania Ave, SE	018	08/03/07	*			
22d	Kentucky Ave and Potomac Street, SE	018	08/01/07	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	08/01/07	*			
23	Independence Ave, 21st Street, SE, Extended	019	08/09/07	*			
24a	East Capitol St, west of RFK stadium	019	08/30/07	*			
28	21st and Constitution Ave, NW	020	08/24/07	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	08/24/07	*			
30	17 <sup>th</sup> and D Streets, NW	020	08/06/07	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	08/06/07	*			
33	10 <sup>th</sup> and F Streets, NW	020	08/06/07	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	08/30/07	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	08/24/07	*			
35	Northeast of Roosevelt Bridge, NW	021	08/30/07	*			
36	27 <sup>th</sup> and I Streets, NW	022	08/08/07	*			
36a	New Hampshire Ave and Eye Street, NW	022	08/08/07	*			
36b	19th and L Streets, NW	022, 034	08/07/07	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	08/07/07	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	08/07/07	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	08/07/07	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	08/08/07	*			
38	29 <sup>th</sup> and K Streets, NW	024	08/06/07	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	08/06/07	*			
39a	30 <sup>th</sup> and K Streets, NW	024	08/06/07	*			
39b	30 <sup>th</sup> and K Streets, NW	024	08/06/07	*			
41b	31st and K Streets, NW	025	08/08/07	*			
41c	31st and K Streets, NW	025	08/08/07	*			
42	Wisconsin Ave and K Street, NW	026	08/08/07	*			

		A ' A LANDDEC	D. (	(	Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	   Work performed
43	Potomac and Water Streets, NW	027	08/08/07	*			1 0
43a	Potomac and Water Streets, NW	027	08/08/07	*			
44	Water Street, west of Potomac St, NW	027	08/08/07	*			
45	36 <sup>th</sup> and M Streets, NW	028	08/20/07	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	08/01/07	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	08/01/07	*			
47a	37 <sup>th</sup> and T Streets, NW	029	08/01/07	*			
47b	37 <sup>th</sup> and T Streets, NW	029	08/01/07	*			
47c	38 <sup>th</sup> and W Streets, NW	029	08/01/07	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	08/03/07	*			
50	26 and M Streets, NW	032	08/03/07	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	08/03/07	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	08/28/07	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	08/28/07	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	08/28/07	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	08/20/07	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	08/20/07	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	08/14/07	*			
54	23 <sup>rd</sup> and O Streets, NW	034	08/14/07	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	08/14/07	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	08/14/07	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	08/14/07	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	08/02/07	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	08/02/07	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	08/02/07	*			
60	Connecticut Ave, east of Rock Creek, NW	039	08/06/07	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	08/06/07	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	08/13/07	*			

		Associated NPDES	Data	(	Condition		
Struct No.	Location	Outfall	Date Inspected	Caad	Needs Work	Work Needed	   Work performed
63	Harvard Street and Rock Creek Parkway, NW	Ourjuit		G000		Work Precueu	тогк регјотнец
03	Harvard Street and Rock Creek Parkway, NW	042	08/13/07				
64	Adams Mill Road, south of Irving Street, NW	043	08/13/07	*			
65	Kenyon Street and Adams Mill Road, NW	044	08/13/07	*			
65a	Kenyon Street and Adams Mill Road, NW	044	08/13/07	*			
66	Adams Mill Road and Lamont Street, NW	045	08/13/07	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	08/13/07	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	08/13/07	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	08/13/07	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	08/13/07	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	08/06/07	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	08/03/07	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	08/14/07	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	08/14/07	*			
73	O Street Extended and Rock Creek Parkway, NW	052	08/14/07	*			
74	Q Street, west of Rock Creek, NW	053	08/14/07	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	08/24/07	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	08/24/07	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	08/20/07	*			
78	28th Street Extended, west of Rock Creek, NW	057	08/24/07	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	08/02/07	*			
84	26 <sup>th</sup> and P Streets, NW	060	0814/07	*			
84a	26 <sup>th</sup> and P Streets, NW	060	08/14/07	*			

- 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.

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### 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** 

Table 2 - Outraits and True Gates											
				Outfall		Gate	Tide Gate				
			Co	ondition	Pres	sent?	Condition		CSO Sign		
NPDES		Date		Needs				Needs			
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and										
003	Chanute, SW	08/13/07	*		*		*		*		
	Across from Navy Yard, aligned with Parsons										
005	Ave., SE	08/02/07	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	08/02/07	*		*		*		*		
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	08/02/07	*		*		*		*		
009	O St. Sewage Pumping Station, SE	08/31/07	*		*		*		*		
010	O St. Sewage Pumping Station, SE	08/31/07	*			*			*		
011	Main Sewage Pumping Station, SE	08/31/07	*			*			*		
011(a)	Main Sewage Pumping Station, SE	08/31/07	*		*		*		*		
	Main Sewage Pumping Station, SE										
012	Main Sewage Fullipling Station, SE	08/31/07	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	08/02/07	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	08/02/07	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	08/02/07	*			*			*		
016	12th and O Streets, SE	08/02/07	*		*		*		*		
017	M and Water Street, SE	08/02/07	*		*		*		*		
	East of Barney Circle and South of										
018	Pennsylvania Avenue Bridge, SE	08/02/07	*		*		*		*		
	Adjacent to Service Drive behind swirl facility										
019	and D.C. General Hospital	08/09/07	*			*			*		
020	Rock Creek Parkway and Independence, NW	08/27/07	*	-	*		*		*		
021	Rock Creek Parkway and C St., NW	08/27/07	*			*			*		
022	Rock Creek Parkway and G St., NW	08/27/07	*		*		*		*		

				Outfall		Gate	Tide Gate			~~~~	
NPDES		D 4	Co	ondition	Pres	sent?	Condi	Condition		CSO Sign	
Outfall	Location	Date Inspected	017	Needs	<b>X</b> 7	2.7	OW	Needs		N 1 X 1	Notes, Work Needed or Performed
Outjun	Location	търестеи	OK	Work	Yes	No	OK	Work	OK	Needs Work	,
											WASA has developed a capitol project to design and construct a
	South of 30 <sup>th</sup> and K Streets, NW										replacement gate for improved
024		08/27/07	*		*			*	*		performance.
025	South of 31st and K Streets, NW	08/27/07	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	08/27/07	*		*		*		*		
027	33 <sup>rd</sup> and Water Sts., NW	08/27/07	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	08/2707	*			*			*		
	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St.										
029	NW	08/27/07	*		*		*		*		
021	Rock Creek Pkwy and Pennsylvania Avenue,	00/02/07	*			*			*		
031	NW.	08/03/07	1			-			ļ		
032	26th and M Street, NW.	08/03/07	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	08/03/07	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	08/14/07	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	08/14/07	*		*		*		*		
036	22nd Street, South of Q Street NW.	08/31/07	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	08/20/07	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	08/02/07	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	08/06/07	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	08/06/07	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	08/30/07	*		*		*		*		
042	Harvard St. and Beach Dr NW.	08/30/07	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	08/30/07	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	08/30/07	*		*		*		*		

1100 Fg		_		Outfall ondition		Gate sent?	Tide C Condi	tion		CSO Sign	
NPDES Outfall	Location	Date Inspected	ОК	Needs Work	Yes	No	OK	Needs Work		Needs Work	Notes, Work Needed or Performed
045	North of Beach Dr. and Walbridge Pl, NW.	08/30/07	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	08/13/07	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	08/13/07	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	08/13/07	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	08/13/07	*		*		*		*		
050	Rock Creek Parkway and L St., NW	08/03/07	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	08/09/07	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	08/09/07	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	08/31/07	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	08/24/07	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	08/24/07	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	08/24/07	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	08/02/07	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	08/31/07	*		*		*		*		

#### 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

Table 2-3

Pumping Stations – Inspections and Equipment in Service

Pumping	No. of	No.	No.	Screens or Pumps			
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	12	None			
Eastside	31	2	4	None			
Poplar Point	31	2 1		Screen #1 Pump #3	U		December 2007 October 2007
Potomac	31	4	5	Pump #1	Aug 1-31	Replacement	October 2007

#### 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

Tumping Stations Treventive intuitionance										
		Type of Preventive Maintenance								
Pumping Station	Date Performed	Performed <sup>1</sup>	Comments							
Main	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
O St	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
Eastside	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
Poplar Point	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
Potomac	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
Rock Creek	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
Upper Anacostia	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							
Earle Place	08/28/07	Group A	Add oil, grease bearings and replace packing if needed.							

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 P	итраде		Vater/CSO Pumped To	Anacostia River
	Total Wastewater	Daily Average			Screenings Collected
Pumping Station	(mg)	Wastewater (mg)	Date	Volume (mg)	(units)
Main	1,953.90	63.03	N/A	N/A	N/A
O St <sup>1</sup>	93.50	3.02	8/20/07	19.00	Normal
			8/21/07	21.50	Normal
			8/22/07	6.30	Normal
			8/25/07	34.0	Normal
			8/26/07	51.20	Normal
Eastside	442.80	14.28	N/A	N/A	N/A
Poplar Point	531.00	17.13	N/A	N/A	N/A
Potomac	3,603.10	116.23	N/A	N/A	N/A
Rock Creek	108.10	3.49	N/A	N/A	N/A
Upper Anacostia	33.60	1.08	N/A	N/A	N/A
Earle Place	0.14	0.0001	N/A	N/A	N/A

<sup>1.</sup> 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	#		Screens or Swirls			
Inspected	Screens	# Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service
08/27/07	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 <sup>1</sup>	Comments
08/27/07	Group A	

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

	Approx. Storm				Approx. Screenings								
	Duration <sup>1</sup>	Total Influent	Total Foul Sewer	Total Effluent	Volume <sup>3</sup>								
Date	(Hours)	Volume (mg)	Volume (mg)	Volume <sup>2</sup> (mg)	# of bins (cu ft)								
08/06/2007	4	0.28	0.28	0	0								
08/20/2007	8	10.72	10.719	0.001	2.50(200)								
08/21/2007	6	13.87	13.64	0.23	0.10(8)								
08/25/2007	3	2.14	2.14	0	0.20(16)								
08/26/2007	1	1.07	1.07	0	0.05(4)								

#### 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

	Chlor/			Residual Chlorine Test					
	Dechl	Dosages		Results		Enterococcus Tes	t Results	Fecal Coliform Test Results	
	or								
	Syste						Count		Count
	m	NaOCl	$NaHSO_3$		Conc.		Per		Per
Date	Used?	(mg/l)	(mg/l)	Location	(mg/l)	Site	100ml	Site	100ml
08/20/07	Yes	5	2	Mix Chamber	0.2	Mix Chamber	34,000	Mix Chamber	280,000
08/20/07	Yes	5	2	Anacostia River	0.0	Anacostia River	<10	Anacostia River	27
08/21/07	Yes	5	2	Mix Chamber	0.3	Mix Chamber	44,000	Mix Chamber	190,000
08/21/07	Yes	5	2	Anacostia River	0.2	Anacostia River	12,700	Anacostia River	410,000

<u>Notes:</u> 1. Mix Chr.: Mixing Chamber River: River Outfall 2.

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

			F	Flow Composited Sam	ple Results		
		Nitrite	Nitrate	Total Kjeldahl		Total	Carbonaceous
	Total suspended	(NO2-N)	(NO3-N))	Nitrogen	Total Nitrogen	Phosphorus	Biological Oxygen
Date	solids (mg/L)	mg/L	mg/L	(mg/L as N)	(mg/L)	(mg/L)	Demand (mg/L)
8/20/07	19.0	0.00	0.00	3.02	3.02	.54	3.2
8/21/07	39.5	0.52	0.21	1.41	2.14	0.21	4.0

#### 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		Was Dam Out of Service			Schedule to Restore to
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	08/28/07	No	N/A	N/A	N/A
14 - West	08/28/07	No	N/A	N/A	N/A
15	08/28/07	No	N/A	N/A	N/A
15A	08/28/07	No	N/A	N/A	N/A
16 - East	08/28/07	Yes	8/29 – 8/31	Fiberdam was damaged during construction activity. Cause is under investigation.	September 2007
16 - West	08/28/07	No	8/29 – 8/31	Same as 16 east	September 2007
24 - North	08/28/07	No	N/A	N/A	N/A
24 - Middle	08/28/07	No	N/A	N/A	N/A
24 - South	08/28/07	No	N/A	N/A	N/A
34	08/28/07	No	N/A	N/A	N/A
35	08/28/07	No	N/A	N/A	N/A
52	08/28/07	No	N/A	N/A	N/A

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

	ATTRIBUTE DE MILIO ET DE	ABIT Sites Wet Weather Operations
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)
14 (E & W)	None	N/A
15	8/21/07	17min
15A	8/21/07	2hrs
	8/24/07	2hrs 10mins
16 (E & W)	8/21/07	1hr11min
24	None	N/A
34	8/21/07	1hr
35	None	N/A
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow (hrs)
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
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

Dry weather overflows (DWOs), are summarized below:

## Table 3-1 DRY WEATHER DISCHARGES

There was no record or knowledge of dry weather discharges.

#### 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				Clea	ning		
			CD.	Total Anacostia CBs	Total Anacostia CBs	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	Inspected Once this Year	Inspected Twice this Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	734	371	266	770	754	1141	1020
2	4,714	4,112	2,316	1215	541	1917	1379	229	133	2146	1512
3	3,555	461	-	0	0	3011	943	549	16	3560	959
4	2,782	1,985	159	159	159	3844	2110	305	182	4149	2292
5	2,167	1,035	1,035	1035	682	967	619	83	63	1050	682
6	1,783	1,594	1,594	1594	1464	2270	1386	99	78	2369	1464
7	2,313	-	-	0	0	2505	0	53	0	2558	0
8	1,278	116	116	116	116	1483	785	39	39	1522	824
WASA Subtotal	20,183	10,871	5,954	4,853	3,696	16,368	7,488	2,127	1,265	18,495	8,753
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	4,853	3,696			2,127	1,265	18,495	8,753
% Cleaned/Inspected to Date				82%	62%					92%	80%

### **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	8/1/07 and	Good	Minor	Nets emptied.	380 lbs.
	8/22/07		Maintenance		
Bar Rack CSO 040	8/6/07	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	8/30/07	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	5
Reason not Operating	Low tides and maintenance on boat.
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One, B-28
Dates	8/1/07 to 8/22/07
Reason	Replaced screen and roller on the right wing of skimmer.
Plan to Restore to Service	Back in service 8/22/07.
Volume Material Collected	30 ton.
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 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		lı	nspector's Initials:							
		Ove	rflow	Ol	oserv	ed	Qι	antity	of	Quantity of			
cso	Time of Observa tion	Y	N	L	M	Н	L	M	Н	L	M	Н	REMARKS/OTHER
009													
010				NC	NONE								
011													
011a													
012													

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

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

Table 5-2 Rainfall Data (inches)
Monthly Rain

Totals Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
Date	Brentwood Neservon	Diyant St 1 S	Maii i S	Nock Creek i S
8/1/2007		0 0	0	0
8/2/2007		0 0	0	0
8/3/2007		0 0	0	0
8/4/2007		0 0	0	0
8/5/2007		0 0	0	0
8/6/2007		0 0	0	0
8/7/2007		0 0	0.01	0
8/8/2007	0.0	1 0	0	0
8/9/2007	1	0.04	0.13	0
8/10/2007		0.01	0.01	0
8/11/2007		0 0	0	0
8/12/2007		0 0	0	0
8/13/2007		0 0	0	0
8/14/2007	0.1	4 C	0	0
8/15/2007	0.0	1 0	0	0
8/16/2007	0.0	1 0.07	0.03	0.04
8/17/2007	0.0	2 0.05	0.06	0.05
8/18/2007	0.0	1 0	0	0
8/19/2007		0 0	0	0
8/20/2007		0 1.28	0.94	1.1
8/21/2007		0.89	1.3	0.94
8/22/2007	0.0	1 0	0	0
8/23/2007		0 0	0	0
8/24/2007	0.0	2 (	0	0
8/25/2007		0.13	0.43	0.22
8/26/2007		0.03	0.04	0.02
8/27/2007		0 0	0	0
8/28/2007	0.0	4 0	0	0
8/29/2007	0.1	3 (	0	0
8/30/2007		0 0	0	0
8/31/2007		0 0	0	0
TOTALS	0.	4 2.5	2.95	2.37



# DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

**Serving the Public • Protecting the Environment** 

# Monthly Operations Report For

Combined Sewer System
Month: September 2007

## **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 2007

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#### 1. INTRODUCTION

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

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

#### 2. OPERATION AND 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

		A : - t - J NIDDEC	Donto	(	Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/10/07	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/10/07	*			
5	Poplar Point Pumping Station	004	09/13/07	*			
6	Chicago Street and Railroad Ave, SE	005	09/07/07	*			
7	W Street and Railroad Ave, SE	005	09/07/07	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	09/05/07	*			
9	13 <sup>th</sup> Street and Ridge Place, SE	007	09/05/07	*			
11	"O" Street Pumping Station	011(a)	09/18/07	*			
12	Storm Pump Discharge at Main Pumping Station	011	09/18/07	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	09/06/07	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	09/18/07	*			
15	South Capitol and E Streets	010	09/18/07	*			
15a	Half and L Streets, SE	010	09/18/07	*			
15b	South Capitol and I Streets	010	09/18/07	*			
15c	South Capitol and I Streets	010	09/18/07	*			
16	North of Main Sewage Pumping Station	012	09/04/07	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	09/07/07	*			
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	09/07/07	*			
18	6 <sup>th</sup> and M Streets, SE	014	09/04/07	*			
19	9 <sup>th</sup> and M Streets, SE	015	09/07/07	*			
19a	9 <sup>th</sup> and M Streets, SE	015	09/07/07	*			
20	12 <sup>th</sup> and M Streets, SE	016	09/07/07	*			
20a	12 <sup>th</sup> and M Streets, SE	016	09/07/07	*			
21	14 <sup>th</sup> and M Streets, SE	017	09/13/07	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	09/24/07	*			

		Associated NPDES Date Condition  Needs Work					
Struct No.	Location	Associatea NPDES Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
22b	Barney Circle and Pennsylvania Ave, SE	018	09/24/07	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	09/24/07	*			
22d	Kentucky Ave and Potomac Street, SE	018	09/04/07	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	09/04/07	*			
23	Independence Ave, 21st Street, SE, Extended	019	09/27/07	*			
24a	East Capitol St, west of RFK stadium	019	09/27/07	*			
28	21st and Constitution Ave, NW	020	09/24/07	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	09/24/07	*			
30	17 <sup>th</sup> and D Streets, NW	020	09/10/07	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	09/10/07	*			
33	10 <sup>th</sup> and F Streets, NW	020	09/10/07	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	09/18/07	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	09/24/07	*			
35	Northeast of Roosevelt Bridge, NW	021	09/14/07	*			
36	27 <sup>th</sup> and I Streets, NW	022	09/14/07	*			
36a	New Hampshire Ave and Eye Street, NW	022	09/14/07	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	09/10/07	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	09/10/07	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	09/10/07	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	09/10/07	*			
37	27 <sup>th</sup> and Eye Streets, NW	022	09/14/07	*			
38	29 <sup>th</sup> and K Streets, NW	024	09/05/07	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	09/05/07	*			
39a	30 <sup>th</sup> and K Streets, NW	024	09/05/07	*			
39b	30 <sup>th</sup> and K Streets, NW	024	09/05/07	*			
41b	31st and K Streets, NW	025	09/07/07	*			
41c	31st and K Streets, NW	025	09/07/07	*			
42	Wisconsin Ave and K Street, NW	026	09/07/07	*			
43	Potomac and Water Streets, NW	027	09/07/07	*			

		AINDDEC	D4 -	(	Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
43a	Potomac and Water Streets, NW	027	09/07/07	*		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , or a perjorated
44	Water Street, west of Potomac St, NW	027	09/07/07	*			
45	36 <sup>th</sup> and M Streets, NW	028	09/14/07	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	09/05/07	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	09/05/07	*			
47a	37 <sup>th</sup> and T Streets, NW	029	09/05/07	*			
47b	37 <sup>th</sup> and T Streets, NW	029	09/05/07	*			
47c	38 <sup>th</sup> and W Streets, NW	029	09/05/07	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	09/14/07	*			
50	26 and M Streets, NW	032	09/14/07	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	09/14/07	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	09/18/07	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	09/18/07	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	09/24/07	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	09/24/07	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	09/24/07	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	09/24/07	*			
54	23 <sup>rd</sup> and O Streets, NW	034	09/26/07	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	09/26/07	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	09/26/07	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	09/26/07	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	09/26/07	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	09/24/07	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	09/24/07	*			
60	Connecticut Ave, east of Rock Creek, NW	039	09/11/07	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	09/11/07	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	09/17/07	*			
63	Harvard Street and Rock Creek Parkway, NW	042	09/17/07	*			

		Associated NPDES	Date	(	Condition		
Struct No.	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
64	Adams Mill Road, south of Irving Street, NW	043	09/17/07	*			
65	Kenyon Street and Adams Mill Road, NW	044	09/17/07	*			
65a	Kenyon Street and Adams Mill Road, NW	044	09/17/07	*			
66	Adams Mill Road and Lamont Street, NW	045	09/17/07	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	09/19/07	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	09/19/07	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	09/19/07	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	09/19/07	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	09/27/07	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	09/05/07	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	09/28/07	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	09/28/07	*			
73	O Street Extended and Rock Creek Parkway, NW	052	09/28/07	*			
74	Q Street, west of Rock Creek, NW	053	09/26/07	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	09/27/07	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	09/27/07	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	09/28/07	*			
78	28th Street Extended, west of Rock Creek, NW	057	09/27/07	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	09/27/07	*			
84	26 <sup>th</sup> and P Streets, NW	060	09/28/07	*			
84a	26 <sup>th</sup> and P Streets, NW	060	09/28/07	*			

- 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** 

				Outfall		Gate	Tide G				
MDDEG		ъ.	Co	ondition	Pres	sent?	Condit		(	CSO Sign	
NPDES Outfall	Location	Date Inspected		Needs				Needs			Notes, Work Needed or Performed
Ouijan		тврестей	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed of Ferjormed
002	Bolling Air Force Base, at Giavanolli and	00/40/05			*		*		*		
003	Chanute, SW	09/10/07	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons	00/06/07	*		*		*		*		
005	Ave., SE	09/06/07							*		
006	Good Hope Road and Welsh Memorial Bridge	09/06/07	*		*		*				
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	09/06/07	*		*		*		*		
009	O St. Sewage Pumping Station, SE	09/27/07	*		*		*		*		
010	O St. Sewage Pumping Station, SE	09/27/07	*			*			*		
011	Main Sewage Pumping Station, SE	09/27/07	*			*			*		
011(a)	Main Sewage Pumping Station, SE	09/27/07	*		*		*		*		
012	Main Sewage Pumping Station, SE	09/27/07	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	09/07/07	*		*		*		*		
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	09/13/07	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	09/13/07	*			*			*		
016	12th and O Streets, SE	09/13/07	*		*		*		*		
017	M and Water Street, SE	09/13/07	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	09/13/07	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	09/27/07	*			*			*		
020	Rock Creek Parkway and Independence, NW	08/27/07	*		*		*		*		
021	Rock Creek Parkway and C St., NW	09/13/07	*			*			*		
022	Rock Creek Parkway and G St., NW	09/13/07	*		*		*		*		

				Outfall		Gate	Tide G			GG 0 G1	
NPDES		Date	Co	ondition	Pres	sent?	Condi			CSO Sign	
Outfall	Location	Inspected	ОК	Needs Work	Yes	No	OK	Needs Work	ОК	Needs Work	Notes, Work Needed or Performed
024	South of 30 <sup>th</sup> and K Streets, NW	09/13/07	*		*			*	*		WASA has developed a capitol project to design and construct a replacement gate for improved performance.
025	South of 31st and K Streets, NW	09/13/07	*		*		*		*		performance.
	Wisconsin Avenue and Water Street, NW		*		*		*		*		
026	,	09/13/07	*		*	*	*		*		
027	33 <sup>rd</sup> and Water Sts., NW	09/13/07	*			-			*		
028	Key Bridge and Whitehurst Freeway, NW	09/13/07	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	09/13/07	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	09/14/07	*			*			*		
032	26th and M Street, NW.	09/14/07	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	09/14/07	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	09/26/07	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	09/26/07	*		*		*		*		
036	22nd Street, South of Q Street NW.	09/06/07	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	09/26/07	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	09/24/07	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	09/11/07	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	09/11/07	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	09/06/07	*		*		*		*		
042	Harvard St. and Beach Dr NW.	09/06/07	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	09/06/07	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	09/06/07	*		*		*		*		

NPDES		Date		Outfall ondition		Gate sent?	Tide G Condit	tion		CSO Sign	
Outfall	Location	Inspected	OK	Needs Work	Yes	No	OK	Needs Work		Needs Work	Notes, Work Needed or Performed
045	North of Beach Dr. and Walbridge Pl, NW.	09/19/07	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	09/19/07	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	09/19/07	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	09/19/07	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	09/19/07	*		*		*		*		
050	Rock Creek Parkway and L St., NW	09/05/07	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	09/27/07	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	09/27/07	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	09/06/07	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	09/27/07	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	09/27/07	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	09/27/07	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	09/11/07	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	09/06/07	*		*		*		*		

### 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

**Table 2-3** 

**Pumping Stations – Inspections and Equipment in Service** 

Pumping	No. of	No.	No.	Screens or Pumps			
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	12	None			
Eastside	31	2	4	None			
Poplar Point	31	2 1	3				December 2007
				Pump #3	Sept 1-30	Replacement	October 2007
Potomac	31	4	5	Pump #1	Sept 1-30	Replacement	October 2007

#### Notes:

<sup>1.</sup> 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

1 uniping stations 110 tolities intuition									
		Type of Preventive Maintenance							
Pumping Station	Date Performed	Performed <sup>1</sup>	Comments						
Main	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
O St	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
Eastside	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
Poplar Point	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
Potomac	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
Rock Creek	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
Upper Anacostia	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						
Earle Place	09/27/07	Group A	Add oil, grease bearings and replace packing if needed.						

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

Tumping Stations Tumpage											
	Sanitary P	итраде	Storm V	Storm Water/CSO Pumped To Anacostia River							
	Total Wastewater	Daily Average			Screenings Collected						
Pumping Station	(mg)	Wastewater (mg)	Date	Volume (mg)	(units)						
Main	1,904.10	63.47	N/A	N/A	N/A						
O St <sup>1</sup>	70.27	2.34	09/11/07	33.20	Normal						
Eastside	412.00	13.73	N/A	N/A	N/A						
Poplar Point	513.90	17.13	N/A	N/A	N/A						
Potomac	3,371.80	112.39	N/A	N/A	N/A						
Rock Creek	102.40	3.41	N/A	N/A	N/A						
Upper Anacostia	27.60	0.92	N/A	N/A	N/A						
Earle Place	0.12	0.004	N/A	N/A	N/A						

<sup>1.</sup> 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	#		Screens or Swirls			
Inspected	Screens	# Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service
09/28/07	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 <sup>1</sup>	Comments
09/28/07	Group A	

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

	Approx. Storm				Approx. Screenings
	Duration <sup>1</sup>	Total Influent	Total Foul Sewer	Total Effluent	Volume <sup>3</sup>
Date	(Hours)	Volume (mg)	Volume (mg)	Volume <sup>2</sup> (mg)	# of bins (cu ft)
09/11/07	7hrs 30mins	9.26	8.259	1.001	0.90(72)

#### 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

	Chlor/			Residual Chlorine Test					
	Dechl	Do	sages	Results		Enterococcus Tes	t Results	Fecal Coliform T	Test Results
	or								
	Syste						Count		Count
	m	NaOCl	$NaHSO_3$		Conc.		Per		Per
Date	Used?	(mg/l)	(mg/l)	Location	(mg/l)	Site	100ml	Site	100ml
09/11/07	Yes	5	2	Mix Chamber	0.3	Mix Chamber	44,000	Mix Chamber	57,000
09/11/07	Yes	5	2	Anacostia River	0.0	Anacostia River	140,000	Anacostia River	>600,000

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

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

		Flow Composited Sample Results										
		Nitrite	Nitrate	Total Kjeldahl		Total	Carbonaceous					
	Total suspended	(NO2-N)	(NO3-N))	Nitrogen	Total Nitrogen	Phosphorus	Biological Oxygen					
Date	solids (mg/L)	mg/L	mg/L	(mg/L as N)	(mg/L)	(mg/L)	Demand (mg/L)					
9/11/07	91.0	0.00	0.91	6.06	6.97	0.60	54.0					

#### 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		Was Dam Out of Service	2		Schedule to Restore to
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	09/27/07	No	N/A	N/A	N/A
14 - West	09/27/07	No	N/A	N/A	N/A
15	09/27/07	No	N/A	N/A	N/A
15A	09/27/07	No	N/A	N/A	N/A
16 - East	09/28/07	Yes	9/01 to 9/19	Fiberdam was damaged during construction activity. Cause is under investigation.	September 19, 2007
16 - West	09/28/07	No	9/01 to 9/19	Same as 16 east	<b>September 19, 2007</b>
24 - North	09/28/07	No	N/A	N/A	N/A
24 - Middle	09/28/07	No	N/A	N/A	N/A
24 - South	09/28/07	No	N/A	N/A	N/A
34	09/27/07	No	N/A	N/A	N/A
35	09/27/07	No	N/A	N/A	N/A
52	09/27/07	No	N/A	N/A	N/A

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

	ATTRIBUTE DE MILIO ET DE	abil bites wet weather operations
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)
14 (E & W)	None	N/A
15	None	N/A
15A	None	N/A
16 (E & W)	None	N/A
24	None	N/A
34	None	N/A
35	None	N/A
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow (hrs)
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
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

Dry weather overflows (DWOs), are summarized below:

Table 3-1 DRY WEATHER DISCHARGES

## **Sanitary Sewer Overflow**

	Near Water St and 30 <sup>th</sup> Street, NW				
Location	(Thompson' Boat House).				
Cause	Grease blockage in 8 inch public sewer.				
	9/21/07. Customer Services Office received				
	call at 9:17 a.m. regarding an overflowing				
	manhole.				
Date/ Time Discovered	Sewer Investigation's crew on-site at 9:50 a.m.				
	Use High pressure jet and chemical degreaser				
Action Taken	to clear blockage in the sewer.				
	9/21/07. The sewer is back in service at 11:35				
Date/Time Discharge Ceased	a.m.				
Estimated Volume (mg)	1430 gallons				
Did Overflow Reach Receiving	Yes, Rock Creek Tributary.				
water?	•				
	Perform CCTV evaluation to determine the				
	type of preventive maintenance needed to				
	correct condition. Additionally work with				
	DCRA's (Office of the Chief Plumbing				
Action taken to prevent	Inspector) to identify restaurants that may be				
reoccurrence	contributing to the grease problem.				

#### 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 in	Total Anacostia CBs Inspected	Total Anacostia CBs Inspected	CBs Cleaned Thru Last Month				s Total CBs Cleanea This Year to Date	
Ward	Total CBs	CBs in CSS	Anacostia CSS	Once this Year	Twice this Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	734	1141	1020	782	770	1923	1790
2	4,714	4,112	2,316	1455	983	2146	1512	437	385	2583	1897
3	3,555	461	-	0	0	3560	959	98	0	3658	959
4	2,782	1,985	159	159	159	4149	2292	97	72	4246	2364
5	2,167	1,035	1,035	1035	781	1050	682	134	99	1184	781
6	1,783	1,594	1,594	1594	1494	2369	1464	34	30	2403	1494
7	2,313	-	-	0	0	2558	0	24	0	2582	0
8	1,278	116	116	116	116	1522	824	6	0	1528	824
WASA Subtotal	20,183	10,871	5,954	5,093	4,267	18,495	8,753	1,612	1,356	20,107	10,109
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	5,093	4,267			1,612	1,356	20,107	10,109
% Cleaned/Inspected to Date				85%	72%					99%	93

### **4.2** BMP Demonstration Projects

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

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

Table 4-2 BMP Demonstration Projects – Report

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (CY)
Netting System CSO 018	9/04/07 and	Good	Minor	Nets emptied.	285 lbs.
	9/26/07		Maintenance		
Bar Rack CSO 040	9/11/07	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	9/6/07	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:	19
Days not Operating	3
Reason not Operating	Strong winds.
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One
Dates	9/26/07 to 9/30/07.
Reason	Skimmer B-28. Seal on right propeller motor is leaking.
Plan to Restore to Service	As soon as possible.
Volume Material Collected	20 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 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:									lı	nspector's Initials:		
		Overflow Observed			ed	Quantity of Quar			ntity c	f			
cso	Time of Observa tion	Υ	N	L	M	Н	L	M	Н	L	M	Н	REMARKS/OTHER
009													
010				NONE									
011													
011a													
012													

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

#### 5.2 Rain Data

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

 Table 5-2
 Rainfall Data (inches)

Monthly Rain Totals

Totals Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
8/1/2007	0	0	0	0
8/2/2007	0	0	0	0
8/3/2007	0	0	0	0
8/4/2007	0.22	0	0	0
8/5/2007	0.18	0	0	0
8/6/2007	0	0	0	0
8/7/2007	0	0	0	0
8/8/2007	0	0	0	0
8/9/2007	0	0	0	0
8/10/2007	0	0.38	0.28	0
8/11/2007	0	0.11	0.13	0
8/12/2007	0.01	0	0	0
8/13/2007	0.01	0	0	0
8/14/2007	0.01	0.05	0.11	0.07
8/15/2007	0	0.04	0.04	0.04
8/16/2007	0	0	0	0
8/17/2007	0	0	0	0
8/18/2007	0.01	0	0	0
8/19/2007	0.02	0	0	0
8/20/2007	0	0	0	0
8/21/2007	0.04	0	0	0
8/22/2007	0	0	0	0
8/23/2007	0	0	0	0
8/24/2007	0	0	0	0
8/25/2007	0.01	0	0	0
8/26/2007	0.03	0	0	0
8/27/2007	0.01	0.01	0	0
8/28/2007	0.02	0.01	0	0
8/29/2007	0	0	0	0
8/30/2007	0.01	0	0	0
TOTALS	0.58	0.6	0.56	0.11

#### Combined Sewer System Model Results Period: July, August, September 2007 SCENARIO: Q3Y2007, 10-19-07

				Total		Maximum	Minimum
		Number of	CSO	Duration of	Avg Duration	Duration of	Duration of
		Overflows	Overflow	Overflow	of Overflow	Overflow	Overflow
NPDES No.	Description	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
Anacostia CSC							
005	Chicago St and Railroad Station SE	10	1.6	49.3	4.9	12.0	1.0
	Good Hope Road, West of Nichols						
006	Ave.,SE	2	0.0	1.8	0.9	1.0	0.8
007	13 <sup>th</sup> Street and Ridge Place,SE	3	0.6	3.3	1.1	1.3	1.0
	2nd Street, 300 feet North of N Place,						
009	SE	11	1.2	29.8	2.7	6.0	0.5
	O Street SewagePumping Station, SE						
010	(pumped Overflow)	2	6.1	1.5	0.8	1.0	0.5
	South of Main Sewage Pumping						
011	Station, SE (pumped overflow)	1	0.8	0.3	0.3	0.3	0.3
	South of Main SewagePumping						
011a	Station, SE (gravity overflow)	0	0.0	0.0	0.0	0.0	0.0
	North of Main SewagePumping						
012	Station, SE (Tiber Creek)	0	0.0	0.0	0.0	0.0	0.0
013	4th and N Streets, SE	10	0.2	12.8	1.3	2.8	0.3
014	6th and M Streets, SE	9	4.1	37.5	4.2	10.8	1.8
015	9th and M Streets, SE	4	0.2	4.0	1.0	1.3	0.5
016	12th and M Streets, SE	3	1.3	4.5	1.5	1.8	1.0
017	14th and M Streets, SE	5	3.0	14.5	2.9	4.3	0.3
	Barney Circle andPennsylvania Ave,						
018	SE	13	2.5	92.5	7.1	25.5	0.3
019	Northeast Boundary - Swirl Effluent	4	55.0	21.8	5.4	8.5	3.3
019	Northeast Bound Swirl Bypass	0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL		76.5				
Potomac CSO							
003	Bolling AFB	0	0.0	0.0	0.0	0.0	0.0
	23rd Street, North of Constitution Ave,						
020	NW (Easby Point)	3	0.4	4.0	1.3	2.0	0.5
021	Northeast ofRoosevelt Bridge, NW	4	24.2	6.0	1.5	2.3	0.8
022	27th and K Streets, NW	13	0.5	40.3	3.1	9.5	0.3
024	30th and K Streets, NW	18	0.9	91.5	5.1	21.8	0.5
025	31st & K St NW	14	0.0	29.3	2.1	4.8	0.3
026	Wisconsin Avenue andK St., NW	0	0.0	0.0	0.0	0.0	0.0
027	Water Street West ofStreet, NW	10	5.0	52.0	5.2	18.3	0.8
028	36th and M Streets, NW	5	0.4	10.8	2.2	3.0	0.8
200	Canal Road 1000 feet east of Rock	•	0.5			4.0	0.5
029	Creek,NW	3	0.5	3.3	1.1	1.8	0.5
	SUBTOTAL		31.9				
Rock Creek							
	Pennsylvania Avenue, East Rock		<u> </u>				
031	Creek, NW	3	0.0	2.3	0.8	0.8	0.8
031	26th and M Streets, NW	0	0.0	0.0	0.0	0.0	0.0
- 552	N Street extendedwest of 25th	, ,	0.0	0.0	0.0	0.0	0.0
033	Street.NW	0	0.0	0.0	0.0	0.0	0.0
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	0.0	4.0	1.3	1.8	1.0
	Northwest of Belmontand Rock Creek	ļ ,	0.0		1.0	1.0	
037	and Potomac Parkway	0	0.0	0.0	0.0	0.0	0.0
007	North of Belmont Road,east of	<u> </u>	0.0	0.0	0.0	0.0	0.0
038	Kalorama Circle, NW	0	0.0	0.0	0.0	0.0	0.0
000	Connecticut Avenue east of Rock	U	0.0	0.0	0.0	0.0	0.0
039	Creek, NW	0	0.0	0.0	0.0	0.0	0.0
- 555	Biltmore Street extended east of	, , , , , , , , , , , , , , , , , , ,	0.0	0.0	0.0	0.0	0.0
040	RockCreek, NW	0	0.0	0.0	0.0	0.0	0.0
040	Ontario extended and Rock Creek	Ü	0.0	0.0	0.0	0.0	0.0
041	Parkway	0	0.0	0.0	0.0	0.0	0.0
<u> </u>	1			U.U	. 0.0	0.0	0.0

#### District of Columbia Water and Sewer Authority

#### Combined Sewer System Model Results Period: July, August, September 2007 SCENARIO: Q3Y2007, 10-19-07

		Number	CSO	Total	Ava Duration	Maximum	Minimum Duration of
		Number of		Duration of	Avg Duration	Duration of	
NDDEON	<b>D</b>	Overflows	Overflow	Overflow	of Overflow	Overflow	Overflow
NPDES No.	Description	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
2.42	Harvard Street and RockCreek						
042	Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
0.40	Adams Mill Road South of Irving						
043	Street, NW	0	0.0	0.0	0.0	0.0	0.0
	Kenyon Street and Adams Mill Road,	_					
044	NW	0	0.0	0.0	0.0	0.0	0.0
	Adams Mill Road and Lamont Street,	_					
045	NW	0	0.0	0.0	0.0	0.0	0.0
	Park Road south of Piney Branch						
046	Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
	Ingleside Terrace extended and Piney						
047	Branch Parkway	0	0.0	0.0	0.0	0.0	0.0
	Mt. Pleasant Street extended and						
048	Piney Branch Parkway	0	0.0	0.0	0.0	0.0	0.0
049	Piney Branch and LamontStreet, NW	4	1.3	8.0	2.0	2.5	1.5
050	28th Street west of 16th Street, NW	0	0.0	0.0	0.0	0.0	0.0
	Olive Street extended and Rock Creek						
051	Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
	O Street extended and Rock Creek						
052	Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
	O Street west of Rock Creek Parkway,						
053	NW	0	0.0	0.0	0.0	0.0	0.0
	West Side of Rock Creek300 ft. south						
054	of Mass. Ave, NW	0	0.0	0.0	0.0	0.0	0.0
	Normanstone Drive extended west of						
056	Rock Creek, NW	0	0.0	0.0	0.0	0.0	0.0
	28th Street extended west of Rock						
057	Creek, NW	3	0.1	2.5	0.8	1.0	0.8
	Connecticut Avenue and Rock Creek						
058	Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
060	P St and 26 <sup>th</sup> St, NW	0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL	-	1.5				
	TOTAL		110				

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