QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

FIRST QUARTER, 2010

Prepared By:

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



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For Combined Sewer System Month: January 2010

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

Monthly Operations Report for Combined Sewer System Month: January 2010

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INTRODUCTION 1.

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

				(Condition		
		Associated NPDES	Date		Needs Work		
Struct No.	Location	Outfall	Inspected			Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	01/29/10	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	01/29/10	*			
5	Poplar Point Pumping Station	004	01/28/10	*			
6	Chicago Street and Railroad Ave, SE	005	01/04/10	*			
7	W Street and Railroad Ave, SE	005	01/04/10	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	01/04/10	*			
9	13 th Street and Ridge Place, SE	007	01/04/10	*			
11	"O" Street Pumping Station	011(a)	01/28/10	*			
12	Storm Pump Discharge at Main Pumping Station	011	01/28/10	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	01/06/10	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	01/28/10	*			
15	South Capitol and E Streets	010	01/28/10	*			
15a	Half and L Streets, SE	010	01/28/10	*			
15b	South Capitol and I Streets	010	01/05/10	*			
15c	South Capitol and I Streets	010	01/05/10	*			
16	North of Main Sewage Pumping Station	012	01/28/10	*			
17	4 th and N Streets, SE, Both Extended	013	01/12/10	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	01/25/10	*			
18	6 th and M Streets, SE	014	01/05/10	*			
19	9 th and M Streets, SE	015	01/06/10	*			
19a	9 th and M Streets, SE	015	01/06/10	*			
20	12 th and M Streets, SE	016	01/06/10	*			
20a	12 th and M Streets, SE	016	01/06/10	*			
21	14 th and M Streets, SE	017	01/07/10	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	01/27/10	*			

				(Condition		
		Associated NPDES			Needs Work		
Struct No.	Location	Outfall	Inspected			Work Needed	Work performed
22b	Barney Circle and Pennsylvania Ave, SE	018	01/27/10	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	01/27/10	*			
22d	Kentucky Ave and Potomac Street, SE	018	01/05/10	*			
22e	14 th Street and Kentucky Ave, SE	018	01/05/10	*			
23	Independence Ave, 21st Street, SE, Extended	019	01/08/10	*			
24a	East Capitol St, west of RFK stadium	019	01/08/10	*			
28	21 st and Constitution Ave, NW	020	01/29/10	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	01/29/10	*			
30	17 th and D Streets, NW	020	01/08/10	*			
31	15 th Street and Pennsylvania Ave, NW	020	01/08/10	*			
33	10 th and F Streets, NW	020	01/08/10	*			
34	23 rd Street, north of Constitution Ave, NW	020	01/28/10	*			
34a	23 rd Street near C Street, NW	020	01/29/10	*			
35	Northeast of Roosevelt Bridge, NW	021	01/28/10	*			
36	27 th and I Streets, NW	022	01/11/10	*			
36a	New Hampshire Ave and Eye Street, NW	022	01/11/10	*			
36b	19 th and L Streets, NW	022, 034	01/08/10	*			
36d	17 th and L Streets, NW	022, 034	01/08/10	*			
36g	18 th and M Streets, NW	022, 034	01/08/10	*			
36h	18 th and M Streets, NW	022, 034	01/08/10	*			
37	27 th and Eye Streets, NW	022	01/11/10	*			
38	29 th and K Streets, NW	024	01/06/10	*			
38a	30 th Street, south of K Street, NW	024	01/06/10	*			
39a	30 th and K Streets, NW	024	01/06/10	*			
39b	30 th and K Streets, NW	024	01/06/10	*			
41b	31st and K Streets, NW	025	01/06/10	*			
41c	31st and K Streets, NW	025	01/06/10	*			
42	Wisconsin Ave and K Street, NW	026	01/12/10	*			

				(Condition		
G M	T	Associated NPDES	Date		Needs Work	1	TT 1 C
Struct No.	Location	Outfall	Inspected	Good *		Work Needed	Work performed
43	Potomac and Water Streets, NW	027	01/12/10	*			
43a	Potomac and Water Streets, NW	027	01/12/10				
44	Water Street, west of Potomac St, NW	027	01/12/10	*			
45	36 th and M Streets, NW	028	01/04/10	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	01/04/10	*			
47	38 th Street and Reservoir Road, NW	029	01/04/10	*			
47a	37 th and T Streets, NW	029	01/04/10	*			
47b	37 th and T Streets, NW	029	01/04/10	*			
47c	38 th and W Streets, NW	029	01/04/10	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	01/20/10	*			
50	26 and M Streets, NW	032	01/20/10	*			
51	N Street Extended, west of 25 th Street, NW	033	01/20/10	*			
52	22 nd Street between M and N Streets, NW	034	01/29/10	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	01/29/10	*			
53	22 nd and M Streets, NW	022, 034	01/29/10	*			
53a	22 nd and M Streets, NW	022, 034	01/29/10	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	01/15/10	*			
53c	L and 22 nd Streets, NW	022	01/15/10	*			
54	23 rd and O Streets, NW	034	01/19/10	*			
55	22 nd Street, south of Q Street, NW	035	01/19/10	*			
55a	22 nd Street, south of Q Street, NW	035	01/19/10	*			
56	23 rd and Massachusetts Ave, NW	036	01/19/10	*			
57	23 rd Street, south of Q Street, NW	036	01/19/10	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	01/13/10	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	01/13/10	*			
60	Connecticut Ave, east of Rock Creek, NW	039	01/05/10	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	01/05/10	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	01/15/10	*			

5

		A LAND EG	Б.	(Condition		
G. M		Associated NPDES			Needs Work	TT7 1 37 1 1	117 1 6 1
Struct No.	Location	Outfall	Inspected			Work Needed	Work performed
63	Harvard Street and Rock Creek Parkway, NW	042	01/15/10	*			
64	Adams Mill Road, south of Irving Street, NW	043	01/15/10	*			
65	Kenyon Street and Adams Mill Road, NW	044	01/15/10	*			
65a	Kenyon Street and Adams Mill Road, NW	044	01/15/10	*			
66	Adams Mill Road and Lamont Street, NW	045	01/15/10	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	01/15/10	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	01/15/10	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	01/15/10	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	01/15/10	*			
70i	5 th and Quackenbos Streets, NW	049	01/05/10	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	01/06/10	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	01/19/10	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	01/19/10	*			
73	O Street Extended and Rock Creek Parkway, NW	052	01/19/10	*			
74	Q Street, west of Rock Creek, NW	053	01/19/10	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	01/29/10	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	01/29/10	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	01/25/10	*			
78	28th Street Extended, west of Rock Creek, NW	057	01/29/10	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	01/05/10	*			
84	26 th and P Streets, NW	060	01/19/10	*			
84a	26 th and P Streets, NW	060	01/19/10	*			

- 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

			1	Outfall	Tide	Gate	Tide G	Tate			
				ondition	Pres		Condi			CSO Sign	
NPDES		Date		Needs				Needs		222 21311	
Outfall	Location	Inspected	OK	Work	Yes	No	OK		OK	Needs Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and	*									
003	Chanute, SW	01/29/10	*		*		*		*		
	Across from Navy Yard, aligned with Parsons										
005	Ave., SE	01/07/10	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	01/07/10	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	01/06/10	*		*		*		*		
009	O St. Sewage Pumping Station, SE	01/12/10	*		*		*		*		
010	O St. Sewage Pumping Station, SE	01/12/10	*			*			*		
011	Main Sewage Pumping Station, SE	01/12/10	*			*			*		
011(a)	Main Sewage Pumping Station, SE	01/12/10	*		*		*		*		
	Main Sewage Pumping Station, SE	01/12/10			_						
012			*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	01/12/10	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	01/12/10	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	01/12/10	*			*			*		
016	12th and O Streets, SE	01/07/10	*		*		*		*		
017	M and Water Street, SE	01/07/10	*		*		*		*		
	East of Barney Circle and South of										
018	Pennsylvania Avenue Bridge, SE	01/07/10	*		*		*		*		
	Adjacent to Service Drive behind swirl facility										
019	and D.C. General Hospital	01/25/10	*			*			*		
020	Rock Creek Parkway and Independence, NW	01/14/10	*		*		*		*		
021	Rock Creek Parkway and C St., NW	01/14/10	*			*			*		
022	Rock Creek Parkway and G St., NW	01/14/10	*		*		*		*		

				Outfall ondition	Tide Pres		Tide G Condii	tion		CSO Sign	
NPDES	·	Date	OIZ	Needs	37	NT	OIZ	Needs		N7 1 337 1	N. W. IN II D. C. I
Outfall	Location	<i>Inspected</i> 01/14/10	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed WASA has developed a capitol
	G t cooth try G	01/14/10									project to design and construct a
	South of 30 th and K Streets, NW										replacement gate for improved
024			*		*			*	*		performance.
	South of 31st and K Streets, NW	01/14/10	*		*		*		*		
	Wisconsin Avenue and Water Street, NW	01/14/10	*		*		*		*		
027	33 rd and Water Sts., NW	01/14/10	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	01/14/10	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	01/14/10	*		*		*		*		
	Rock Creek Pkwy and Pennsylvania Avenue,										
031	NW.	01/20/10	*			*			*		
032	26th and M Street, NW.	01/20/10	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	01/20/10	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	01/19/10	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	01/19/10	*		*		*		*		
036	22nd Street, South of Q Street NW.	01/07/10	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	01/13/10	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	01/13/10	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	01/05/10	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	01/05/10	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	01/07/10	*		*		*		*		
042	Harvard St. and Beach Dr NW.	01/07/10	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	01/07/10	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	01/07/10	*		*		*		*		

				Outfall		Gate	Tide G				
			Co	ondition	Pres	sent?	Condi			CSO Sign	
NPDES		Date		Needs				Needs			
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	-	Needs Work	Notes, Work Needed or Performed
045	North of Beach Dr. and Walbridge Pl, NW.	01/07/10	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	01/15/10	*			*			*		
	Piney Branch Parkway and Ingleside Terrace	01/15/10									
047	They Brunen runkway and ingressee Terrace		*		*		*		*		
		01/15/10									
	South of Piney Branch Parkway and 17 th St.										
048			*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	01/15/10	*		*		*		*		
050	Rock Creek Parkway and L St., NW	01/06/10	*		*		*		*		
051	Across Rock Creek Parkway, aligned with		*		*		*		*		
	Olive St., NW.	01/14/10									
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	01/14/10	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	01/07/10	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	01/29/10	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	01/29/10	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	01/29/10	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	01/05/10	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	01/07/10	*		*		*		*		

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	•		
	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	10	n/a			
Eastside	31	2	4	# 1 Screen	1/1/10	Bad Motor	February 28, 2010
Poplar Point	31	2 1	3	# 1 Sanitary Pump,	1/1/10	Bad Pump	March 30, 2010
				# 1 Screen	1/1/10	Needs rebuilding	February 28, 2010
Potomac	31	4	5	# 4 Sanitary Pump,	1/1/10	Motor Rebuild	March 31, 2010
				# 3 Screen	!/1/10	Needs overhaul	May 31,2010

Notes:

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 Treventi	, o 1.1011101101101
		Type of Preventive Maintenance	
Pumping Station	Date Performed	Performed ¹	Comments
Main	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
O St	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	01/26/10	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	01/26/10	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 umping bu	mons rumpa	5°				
	Sanitary Pı	ımpage	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	1,825.60	58.89	N/A	N/A	N/A			
O St ¹	142.80	4.61	N/A	N/A	Normal			
Eastside	480.50	15.50	N/A	N/A	N/A			
Poplar Point	687.60	22.18	N/A	N/A	N/A			
Potomac	3,673.10	118.49	N/A	N/A	N/A			
Rock Creek	235.83	7.61	N/A	N/A	N/A			
Upper Anacostia	46.67	1.51	N/A	N/A	N/A			
Earle Place	0.20	0.01	N/A	N/A	N/A			

^{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	#		Screens or Swirls			
Inspected	Screens	# Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service
01/27/10	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
01/26/10	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

	1 101 theuse		Trucine, Tree T		
	Approx. Storm			G 1 7 00	Approx. Screenings
	Duration ¹	Total Influent	Total Foul Sewer	Total Effluent	Volume ³
Date	(Hours)	Volume (mg)	Volume (mg)	Volume ² (mg)	# of bins (cu ft)
1/4/2010	4	16.19	16.190*	0	0.0(0)
1/17/2010	4	12.03	6.78*	5.25	0.30(24)
1/17/2010	4	0.90	0.900*	0	0.20(160
1/25/2010	4	2.36	2.360*	0	0.30(24)

Note

Fowl Sewer meters are not reading accurately, replacement meters are on order; anticipated replacement date is 04/30/2010.

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.

^{*} Total foul sewer was estimated.

Table 2-9 Northeast Boundary Swirl Facility – Disinfection Performance

	Chlor/	Residu		Residual Chlori	ne 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
1/17/2009	Yes	5	2	Mix Chamber	1.5	Mix Chamber	5,900	Mix Chamber	1,802
1/17/2009	Yes	5	2	Anacostia River	0.0	Anacostia River	54,000	Anacostia River	24,000

Mix Chr.: Mixing Chamber
 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)						
1/17/10	145	0.06	0.46	7.79	8.31	0.90	44.0						

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	01/20/10	No	N/A	N/A	N/A
14 - West	01/20/10	No	N/A	N/A	N/A
15	01/20/10	No	N/A	N/A	N/A
15A	01/20/10	No	N/A	N/A	N/A
16 - East	01/20/10	No	N/A	N/A	N/A
16 - West	01/20/10	No	N/A	N/A	N/A
24 - North	01/20/10	No	N/A	N/A	N/A
24 - Middle	01/20/10	No	N/A	N/A	N/A
24 - South	01/20/10	No	N/A	N/A	N/A
34	01/20/10	No	N/A	N/A	N/A
35	01/20/10	No	N/A	N/A	N/A
52	01/20/10	No	N/A	N/A	N/A

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

	atable Damb & be.	and the state of t
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	1/11/10	1 min
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	,			Clea	ning		
			CBs in	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	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	131	0	2186	1737	278	131	278	131
2	4,714	4,112	2,316	66	0	6697	5486	121	117	121	117
3	3,555	461	-	0	0	4101	555	1106	36	1106	36
4	2,782	1,985	159	11	0	4707	2471	585	138	585	138
5	2,167	1,035	1,035	3	0	4448	2250	47	3	47	3
6	1,783	1,594	1,594	6	0	4340	3205	13	6	13	6
7	2,313	-	-	0	0	4428	0	93	0	93	0
8	1,278	116	116	5	0	2258	885	25	5	25	5
WASA Subtotal	20,183	10,871	5,954	222	0	33,165	16,589	2,268	436	2,268	436
DDOT (via VMS) Subtotal				0	0			0	0	0	0
Grand Total	20,183	10,871	5,954	222	0			2,268	436	2,268	436
% Cleaned/Inspected to Date				4%	0%					11%	4%

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	1/8/10 and	Good	Minor	Nets	400 lbs.
	1/29/10		Maintenance	emptied/cleaned	
Bar Rack CSO 040	1/5/10	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	1/7/10	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in September 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	19
Days not Operating	4
Reason not Operating	Strong winds/Inclement weather/Ice on the river
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One
Dates	1/4/10 to 2/4/10
Reason	Skimmer B-28 needed a new throttle handle.
Plan to Restore to Service	Back in service 2/4/07
Volume Material Collected	40 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	0	bserv	ed	Qι	ıantity	of	Qua	ntity c	f	
cso	Time of Observa tion	Υ	N	L	М	Н	L	M	Н	L	M	Н	REMARKS/OTHER
009													
010													
011													
011a													
012													

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

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

Table 5-2 Rainfall Data (inches)

ne s 2 Rumun	Duta (menes)	D 4 O4		Daal Ossal
Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
1/1/2010	0	0	0	0.01
1/2/2010	0	0.01	0	0
1/3/2010	0	0	0	0
1/4/2010	0	0	0	0
1/5/2010	0	0	0	0
1/6/2010	0	0	0	0
1/7/2010	0	0	0	0
1/8/2010	0	0	0	0
1/9/2010	0	0	0	0.01
1/10/2010	0	0	0	0
1/11/2010	0	0	0	0
1/12/2010	0	0	0	0
1/13/2010	0	0	0	0
1/14/2010	0	0	0	0
1/15/2010	0	0	0	0
1/16/2010	0	0	0	0
1/17/2010	0.06	0.59	0.6	0.68
1/18/2010	0	0	0	0
1/19/2010	0	0	0	0
1/20/2010	0	0.01	0.01	0
1/21/2010	0	0.06	0.07	0.07
1/22/2010	0	0.02	0.01	0.03
1/23/2010	0	0	0	0
1/24/2010	0	0.1	0.09	0.13
1/25/2010	0	0.11	0.23	0.36
1/26/2010	0	0.01	0	0
1/27/2010	0	0	0	0
1/28/2010	0	0	0	0
1/29/2010	0	0	0	0
1/30/2010	0	0	0	0
1/31/2010	0	0.07	0	0
TOTALS	0.06	0.98	1.01	1.29



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For Combined Sewer System Month: February

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: February 2010

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1. INTRODUCTION

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

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

2. OPERATION AND 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.

2

Table 2-1 Regulator Structures

					Condition		
		Associated NPDES	Date	Go	Needs Work		
Struct No.	Location	Outfall	Inspected	od		Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	02/24/10	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	02/24/10	*			
5	Poplar Point Pumping Station	004	02/03/10	*			
6	Chicago Street and Railroad Ave, SE	005	02/03/10	*			
7	W Street and Railroad Ave, SE	005	02/03/10	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	02/01/10	*			
9	13 th Street and Ridge Place, SE	007	02/23/10	*			
11	"O" Street Pumping Station	011(a)	02/23/10	*			
12	Storm Pump Discharge at Main Pumping Station	011	02/23/10	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	02/02/10	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	02/23/10	*			
15	South Capitol and E Streets	010	02/23/10	*			
15a	Half and L Streets, SE	010	02/23/10	*			
15b	South Capitol and I Streets	010	02/02/10	*			
15c	South Capitol and I Streets	010	02/02/10	*			
16	North of Main Sewage Pumping Station	012	02/23/10	*			
17	4 th and N Streets, SE, Both Extended	013	02/25/10	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	02/25/10	*			
18	6 th and M Streets, SE	014	02/02/10	*			
19	9 th and M Streets, SE	015	02/02/10	*			
19a	9 th and M Streets, SE	015	02/02/10	*			
20	12 th and M Streets, SE	016	02/02/10	*			
20a	12 th and M Streets, SE	016	02/25/10	*			
21	14 th and M Streets, SE	017	02/25/10	*			

					Condition		
		Associated NPDES	Date	Go	Needs Work		
Struct No.	Location	Outfall	Inspected	od		Work Needed	Work performed
22a	Barney Circle and Pennsylvania Ave, SE	018	02/22/10	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	02/22/10	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	02/22/10	*			
22d	Kentucky Ave and Potomac Street, SE	018	02/22/10	*			
22e	14 th Street and Kentucky Ave, SE	018	02/22/10	*			
23	Independence Ave, 21 st Street, SE, Extended	019	02/22/10	*			
24a	East Capitol St, west of RFK stadium	019	02/24/10	*			
28	21st and Constitution Ave, NW	020	02/24/10	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	02/25/10	*			
30	17 th and D Streets, NW	020	02/25/10	*			
31	15 th Street and Pennsylvania Ave, NW	020	02/05/10	*			
33	10 th and F Streets, NW	020	02/05/10	*			
34	23 rd Street, north of Constitution Ave, NW	020	02/05/10	*			
34a	23 rd Street near C Street, NW	020	02/23/10	*			
35	Northeast of Roosevelt Bridge, NW (1)	021	02/25/10	*			
36	27 th and I Streets, NW	022	02/25/10	*			
36a	New Hampshire Ave and Eye Street, NW	022	02/17/10	*			
36b	19 th and L Streets, NW	022, 034	02/17/10	*			
36d	17 th and L Streets, NW	022, 034	02/05/10	*			
36g	18 th and M Streets, NW	022, 034	02/05/10	*			
36h	18 th and M Streets, NW	022, 034	02/05/10	*			
37	27 th and Eye Streets, NW	022	02/17/10	*			
38	29 th and K Streets, NW	024	02/02/10	*			
38a	30 th Street, south of K Street, NW	024	02/02/10	*			
39a	30 th and K Streets, NW	024	02/02/10	*			
39b	30 th and K Streets, NW	024	02/02/10	*			
41b	31st and K Streets, NW	025	02/02/10	*			
41c	31st and K Streets, NW	025	02/02/10	*			

					Condition		
		Associated NPDES	Date	Go	Needs Work		
Struct No.	Location	Outfall	Inspected	od		Work Needed	Work performed
42	Wisconsin Ave and K Street, NW	026	02/02/10	*			
43	Potomac and Water Streets, NW	027	02/16/10	*			
43a	Potomac and Water Streets, NW	027	02/16/10	*			
44	Water Street, west of Potomac St, NW	027	02/16/10	*			
45	36 th and M Streets, NW (1)	028	02/01/10	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	02/01/10	*			
47	38 th Street and Reservoir Road, NW	029	02/01/10	*			
47a	37 th and T Streets, NW	029	02/01/10	*			
47b	37 th and T Streets, NW	029	02/01/10	*			
47c	38 th and W Streets, NW	029	02/01/10	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	02/24/10	*			
50	26 and M Streets, NW	032	02/24/10	*			
51	N Street Extended, west of 25 th Street, NW	033	02/24/10	*			
52	22 nd Street between M and N Streets, NW	034	02/23/10	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	02/23/10	*			
53	22 nd and M Streets, NW	022, 034	02/23/10	*			
53a	22 nd and M Streets, NW	022, 034	02/23/10	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	02/03/10	*			
53c	L and 22 nd Streets, NW	022	02/03/10	*			
54	23 rd and O Streets, NW	034	02/26/10	*			
55	22 nd Street, south of Q Street, NW	035	02/26/10	*			
55a	22 nd Street, south of Q Street, NW	035	02/26/10	*			
56	23 rd and Massachusetts Ave, NW	036	02/26/10	*			
57	23 rd Street, south of Q Street, NW	036	02/26/10	*			
58	Northwest of Belmont Road and Rock Creek and Potomac		02/03/10	*			
	Parkway, NW	037					
59	North of Belmont Rd, east of Kalorama Cir, NW	038	02/03/10	*			
60	Connecticut Ave, east of Rock Creek, NW	039	02/02/10	*			

					Condition		
		Associated NPDES	Date	Go	Needs Work		
Struct No.	Location	Outfall	Inspected	od		Work Needed	Work performed
61	Biltmore St, Extended, east of Rock Creek, NW	040	02/02/10	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	02/22/10	*			
63	Harvard Street and Rock Creek Parkway, NW	042	02/22/10	*			
64	Adams Mill Road, south of Irving Street, NW	043	02/22/10	*			
65	Kenyon Street and Adams Mill Road, NW	044	02/22/10	*			
65a	Kenyon Street and Adams Mill Road, NW	044	02/22/10	*			
66	Adams Mill Road and Lamont Street, NW	045	02/22/10	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	02/22/10	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	02/22/10	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	02/22/10	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	02/22/10	*			
70i	5 th and Quackenbos Streets, NW	049	02/01/10	*			
71	28th Street, west of Rock Creek Parkway, NW	050	02/01/10	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	02/17/10	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	02/17/10	*			
73	O Street Extended and Rock Creek Parkway, NW	052	02/17/10	*			
74	Q Street, west of Rock Creek, NW	053	02/26/10	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	02/26/10	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	02/26/10	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	02/04/10	*			
78	28th Street Extended, west of Rock Creek, NW	057	02/26/10	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	02/02/10	*			
84	26 th and P Streets, NW	060	02/17/10	*			
84a	26 th and P Streets, NW	060	02/17/10	*			

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

			(Outfall	Tide	Gate	Tide Gate				
			Co	ondition	Pres	ent?	Cond	ition	CSO Sign		
NPDES		Date		Needs				Needs		Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
	Bolling Air Force Base, at Giavanolli and										
003	Chanute, SW	02/24/10	*		*		*		*		
	Across from Navy Yard, aligned with										
005	Parsons Ave., SE	02/18/10	*		*		*		*		
	Good Hope Road and Welsh Memorial	02/18/10									
006	Bridge		*		*		*		*		
	Between 11 th St. and Anacostia Bridges,	02/.18/10									
007	SE		*		*		*		*		
009	O St. Sewage Pumping Station, SE	02/26/10	*		*		*		*		
010	O St. Sewage Pumping Station, SE	02/26/10	*			*			*		
011	Main Sewage Pumping Station, SE	02/26/10	*			*			*		
011(a)	Main Sewage Pumping Station, SE	02/26/10	*		*		*		*		
	Main Sewage Pumping Station, SE	02/26/10									
012			*		*		*		*		
	Southeast Federal Center, aligned with 4 th										
013	St.	02/04/10	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	02/04/10	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	02/04/10	*			*			*		
016	12th and O Streets, SE	02/18/10	*		*		*		*		
017	M and Water Street, SE	02/18/10	*		*		*		*		
	East of Barney Circle and South of										
018	Pennsylvania Avenue Bridge, SE	02/18/10	*		*		*		*		
	Adjacent to Service Drive behind swirl			-							
019	facility and D.C. General Hospital	02/04/10	*			*			*		

				Outfall		Gate	Tide Gate				
			Co	ondition	Pres	sent?	Cond	1	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
	Rock Creek Parkway and Independence,										
020	NW	02/11/10	*		*		*		*		
021	Rock Creek Parkway and C St., NW	02/11/10	*			*			*		
022	Rock Creek Parkway and G St., NW	02/11/10	*		*		*		*		
		02/11/10									WASA has developed a capitol
	South of 30 th and K Streets, NW										project to design and construct a
	South of 30° and ix Streets, iv w										replacement gate for improved
024			*		*			*	*		performance.
025	South of 31st and K Streets, NW	02/11/10	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	02/11/10	*		*		*		*		
027	33 rd and Water Sts., NW	02/11/10	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	02/11/10	*			*			*		
	Adjacent to C&O Canal, aligned with 38 th	02/11/10									
029	St. NW		*		*		*		*		
	Rock Creek Pkwy and Pennsylvania										
031	Avenue, NW.	02/24/10	*			*			*		
032	26th and M Street, NW.	02/24/10	*			*			*		
	Across street from St. Francis Jr. High and										
033	aligned with N St., NW.	02/24/10	*		*		*		*		
	Just west of St. Francis Jr. High and north										
034	of N St., NW	02/26/10	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	02/26/10	*		*		*		*		
036	22nd Street, South of Q Street NW.	02/26/10	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	02/03/10	*		*		*		*		
	Between arch footbridge and Connecticut										
038	Ave., north of Kalorama Circle, NW.	02/03/10	*		*		*		*		
	Connecticut Avenue Bridge and Rock										
039	Creek Parkway, NW.	02/02/10	*		*		*		*		

			(Outfall	Tide	Gate	Tide	Gate			
				ndition	Pres	sent?	Cond	lition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
	Aligned with Biltmore Rd., between										
040	Connecticut Ave and Ellington Bridge.	02/02/10	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	02/04/10	*		*		*		*		
042	Harvard St. and Beach Dr NW.	02/04/10	*		*		*		*		
	Upstream of Harvard St. and Beach Dr	02/04/10									
043	NW.		*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	02/04/10	*		*		*		*		
	North of Beach Dr. and Walbridge Pl,	02/04/10									
045	NW.		*		*		*		*		
	Piney Branch Parkway and Park Road,										
046	NW.	02/22/10	*			*			*		
	Piney Branch Parkway and Ingleside	02/22/10									
	Terrace										
047			*		*		*		*		
	South of Piney Branch Parkway and 17 th	02/22/10									
048	St.		*		*		*		*		
048	N. (1 CD: D 1 D 1 117th	02/22/10	*		-1-		*				
049	North of Piney Branch Parkway and 17 th St.	02/22/10	*		*		*		*		
050	Rock Creek Parkway and L St., NW	02/26/10	*		*		*		*		
-			*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	02/26/10	*		*		*		~		
	Offive St., NW.										
	Between P and Penna. Ave Bridges,	02/26/10									
052	aligned with O Street, NW.	02,20,10	*		*		*		*		
	Q St. Bridge and Rock Creek Parkway,	02/26/10									
053	NW.		*		*		*		*		

				Outfall ondition		Gate sent?	Tide (Cond		CS	O Sign	
NPDES		Date		Needs				Needs		Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
	Massachusetts Avenue and Rock Creek	02/26/10									
054	Parkway, NW.		*		*		*		*		
	Normanstone Dr. and Rock Creek	02/26/10									
056	Parkway, NW.		*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	02/26/10	*		*		*		*		
	Connecticut Avenue and Rock Creek										
058	Parkway, NW.	02/02/10	*			*			*		
	North of P Street Bridge and Rock Creek										
060	Pkwy, NW	02/26/10	*		*		*		*		

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

Table 2-3

Pumping Stations – Inspections and Equipment in Service

				F8 ::			
	No. of						
	Inspectio	No.		Screens or Pumps Out of			Schedule to Restore
Pumping Station	ns	Screens	No. Pumps	Service	Dates	Reason	to Service
Main	30	4	10	n/a			
Eastside	30	2	4	# 1 Screen	1/1/10	Motor Bad	February 28,2010
				#2 Screen,	2/7/10	Motor Bad	March 30, 2010
Poplar Point	30	2 1	3	# 1 Sanitary Pump	1/1/10	Bad Pump	March 30, 2010
				# 1 Screen	1/1/10	Needs rebuilding	February 12,2010
Potomac	30	4	5	# 4 Sanitary Pump,	1/1/10	Motor Rebuild	March 31, 2010,
				# 3 Screen	1/1/10	Needs overhaul	May 31, 2010

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

		Type of Preventive	
Pumping Station	Date Performed	Maintenance Performed ¹	Comments
Main	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
O St	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	02/24/2010	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	02/24/2010	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 .	Pumpage		ater/CSO Pumped To	Anacostia River
	Total	Daily Average			
	Wastewater	Wastewater			Screenings
Pumping Station	(mg)	(mg)	Date	Volume (mg)	Collected (units)
Main	1,653.80	59.06	N/A	N/A	N/A
O St ¹	139.80	4.99	N/A	None	Normal
Eastside	512.87	18.32	N/A	N/A	N/A
Poplar Point	603.90	21.57	N/A	N/A	N/A
Potomac	3,695.40	131.98	N/A	N/A	N/A
Rock Creek	200.83	7.17	N/A	N/A	N/A
Upper Anacostia	48.96	1.75	N/A	N/A	N/A
Earle Place	0.22	0.01	N/A	N/A	N/A

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

	#		Screens or			
Date	Screen	#	Swirls Out of			
Inspected	S	Swirls	Service	Dates	Reason	Schedule to Restore to Service
02/25/10	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
02/25/10	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

- 1				·		
		Approx.				
		Storm		Total Foul		Approx. Screenings
		$Duration^{I}$	Total Influent	Sewer Volume	Total Effluent	$Volume^3$
	Date	(Hours)	Volume (mg)	(mg)	Volume ² (mg)	# of bins (cu ft)
	02/22/2010	4.7	5.61	5.61*	0	0.06(4.8)

Fowl Sewer meters are not reading accurately, replacement meters are on order; anticipated replacement date is 04/30/2010.

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.

^{*} Total foul sewer was estimated.

Table 2-9 Northeast Boundary Swirl Facility – Disinfection Performance

	Chlor/			Residual Chlorine Test					
	Dechl	Do	sages	Results		Enterococcus Test 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
				NONE IN THE	MONTH	OF FEBRUARY			
	Yes	5	2	Mix Chamber		Mix Chamber		Mix Chamber	
	Yes	5	2	Anacostia River		Anacostia River		Anacostia River	

1. Mix Chr.: Mixing Chamber

2. 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)
		NO	NE IN THE	E MONTH OF FEB	RUARY		

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 During the			Schedule to Restore to
Structure No	Date Inspected	Month?	Dates out of Service	Reason	Service
14 - East	02/22/10	No	N/A	N/A	N/A
14 - West	02/22/10	No	N/A	N/A	N/A
15	02/22/10	No	N/A	N/A	N/A
15A	02/22/10	No	N/A	N/A	N/A
16 - East	02/22/10	No	N/A	N/A	N/A
16 - West	02/22/10	No	N/A	N/A	N/A
24 - North	02/22/10	No	N/A	N/A	N/A
24 - Middle	02/22/10	No	N/A	N/A	N/A
24 - South	02/22/10	No	N/A	N/A	N/A
34	02/22/10	No	N/A	N/A	N/A
35	02/22/10	No	N/A	N/A	N/A
52	02/22/10	No	N/A	N/A	N/A

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

	initiatible bailing & Berlin'i 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

There was no Dry weather overflows (DWOs) in February 2010.

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

				Anaco	stia CSS								
					ections			Clea	ning				
				Total CBs	Total CBs	CRs Clea	ned Thru	CR's C	Cleaned	Total CBs Cleaned This Year			
			CBs in	Inspected	Inspected	Last Month			Month	to Date			
		CBs in	Anacosti	Once this	Twice this								
Ward	Total CBs	CSS	a CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS		
1	1,591	1,568	734	174	0	278	131	244	240	522	371		
2	4,714	4,112	2,316	216	0	121	117	305	266	426	383		
3	3,555	461	-	0	0	1106	36	474	61	1580	97		
4	2,782	1,985	159	12	0	585	138	3	3	588	141		
5	2,167	1,035	1,035	84	0	47	3	215	81	262	84		
6	1,783	1,594	1,594	6	0	13	6	0	0	13	6		
7	2,313	-	-	0	0	93	0	31	0	124	0		
8	1,278	116	116	5	0	25	5	0	0	25	5		
WASA Subtotal	20,183	10,871	5,954	497	0	2,268	436	1,272	651	3,540	1,087		
DDOT (via VMS) Subtotal				0	0			0	0	0	0		
Grand Total	20,183	10,871	5,954	497	0			1,272	651	3,540	1,087		
% Cleaned/Inspected to Date				8%	0%					18%	10%		

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	2/24/10	Good	Minor	Nets	350 lbs.
018			Maintenance	emptied/cleaned	
Bar Rack CSO 040	2/2/10	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	2/4/10	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

This program was initiated in September 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	19
Days not Operating	8
Reason not Operating	Ice on the river.
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	2 only on days below
Dates	B-29: 2/19/10 and B-28 from 2/25/10 to 2/28/10.
Reason	B-29: replacement of control stick. B-28: Right Propeller wing needed welding.
Plan to Restore to Service	Skimmers are back in service.
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 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:												spector's Initials:
		Ove	rflo	Ok	serv	ed	Qu	antity	/ of	Qua	ntity	of	
cso	Time of Observ ation	Y	N	L	M	Н	L	M	Н	L	M	Н	REMARKS/OTHER
009													
010				NON	1E				,				
011													
011a													
012													

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

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

Table 5-2Rainfall Data (inches)

Monthly Rain Totals

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
2/1/2010	0	0	0	0.01
2/2/2010	0.01	0.01	0	0.16
2/3/2010	0.21	0.29	0.21	0.31
2/4/2010	0	0	0	0
2/5/2010	0.01	0	0	0.07
2/6/2010	0	0.02	0.06	0
2/7/2010	0.09	0.12	0	0
2/8/2010	0.01	0.09	0.02	0
2/9/2010	0	0	0	0
2/10/2010	0	0	0.06	0
2/11/2010	0.01	0.18	0.04	0
2/12/2010	0	0.16	0	0
2/13/2010	0	0	0	0
2/14/2010	0	0	0	0
2/15/2010	0.02	0	0	0
2/16/2010	0	0.03	0.02	0
2/17/2010	0	0	0	0
2/18/2010	0	0	0	0
2/19/2010	0	0	0	0
2/20/2010	0	0	0	0.45
2/21/2010	0	0	0	0.83
2/22/2010	0	0	0	0.24
2/23/2010	0.01	0.21	0.28	0
2/24/2010	0	0	0	0
2/25/2010	0.03	0.03	0.02	0.02
2/26/2010	0	0	0	0
2/27/2010	0	0	0	0
2/28/2010	0	0	0	0
TOTALS	0.4	1.14	0.71	2.09



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For Combined Sewer System Month: March 2010

Prepared By:

D.C. Water and Sewer Authority Department of Sewer Services Washington, D.C. 20003

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

Monthly Operations Report for Combined Sewer System Month: March 2010

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1. INTRODUCTION

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

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

2. OPERATION AND 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

			_		Condition		
Church Ma	Logation	Associated NPDES Outfall	Date	Good	Needs Work	Work Nooded	Work norform
Struct No. 2	Location Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	<i>Inspected</i> 3-22-10	*		work Needed	Work performed
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW		3-22-10	*			
		003					
5	Poplar Point Pumping Station	004	3-11-10	*			
6	Chicago Street and Railroad Ave, SE	005	3-15-10	*			
7	W Street and Railroad Ave, SE	005	3-15-10	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A	*			Sewer separated
9	13 th Street and Ridge Place, SE	007	3-15-10	*			
11	"O" Street Pumping Station	011(a)	3-11-10	*			
12	Storm Pump Discharge at Main Pumping Station	011	3-11-10	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	3-1-10	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	3-11-10	*			
15	South Capitol and E Streets	010	3-11-10	*			
15a	Half and L Streets, SE	010	3-11-10	*			
15b	South Capitol and I Streets	010	3-17-10	*			
15c	South Capitol and I Streets	010	3-17-10	*			
16	North of Main Sewage Pumping Station	012	3-11-10	*			
17	4 th and N Streets, SE, Both Extended	013	3-1-10	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	3-17-10	*			
18	6 th and M Streets, SE	014	3-1-10	*			
19	9 th and M Streets, SE	015	3-1-10	*			
19a	9 th and M Streets, SE	015	3-1-10	*			
20	12 th and M Streets, SE	016	3-1-10	*			
20a	12 th and M Streets, SE	016	3-10-10	*			
21	14 th and M Streets, SE	017	3-10-10	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	3-08-10	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	03-08-10	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	03-08-10	*			
22d	Kentucky Ave and Potomac Street, SE	018	03-08-10	*			

				(Condition		
Struct No.	Location	Associated NPDES Outfall	Date In an act of	Good	Needs Work	Work Nooded	Work norformed
22e	14 th Street and Kentucky Ave, SE	NPDES Outjail 018	<i>Inspected</i> 03-08-10	*		work Needed	Work performed
23	Independence Ave, 21 st Street, SE, Extended	018	03-08-10	*			
				*			
24a 28	East Capitol St, west of RFK stadium	019 020	03-10-10	*			
28	21 st and Constitution Ave, NW 22 nd Street, between Constitution Ave and C St, NW	020	03-15-10	*			
30	17 th and D Streets, NW	020		*			
31			03-02-10	*			
	15 th Street and Pennsylvania Ave, NW	020	03-02-10	*			
33	10 th and F Streets, NW	020	03-02-10	*			
34	23 rd Street, north of Constitution Ave, NW	020	03-11-10	*			
34a	23 rd Street near C Street, NW	020	03-15-10				
35	Northeast of Roosevelt Bridge, NW (1)	021	03-11-10	*			
36	27 th and I Streets, NW	022	03-08-10	*			
36a	New Hampshire Ave and Eye Street, NW	022	03-08-10	*			
36b	19 th and L Streets, NW	022, 034	03-03-10	*			
36d	17 th and L Streets, NW	022, 034	03-03-10	*			
36g	18 th and M Streets, NW	022, 034	03-03-10	*			
36h	18 th and M Streets, NW	022, 034	03-03-10	*			
37	27 th and Eye Streets, NW	022	03-08-10	*			
38	29 th and K Streets, NW	024	03-02-10	*			
38a	30 th Street, south of K Street, NW	024	03-02-10	*			
39a	30 th and K Streets, NW	024	03-02-10	*			
39b	30 th and K Streets, NW	024	03-02-10	*			
41b	31st and K Streets, NW	025	03-08-10	*			
41c	31st and K Streets, NW	025	03-08-10	*			
42	Wisconsin Ave and K Street, NW	026	03-08-10	*			
43	Potomac and Water Streets, NW	027	03-08-10	*			
43a	Potomac and Water Streets, NW	027	03-08-10	*			
44	Water Street, west of Potomac St, NW	027	03-08-10	*			
45	36 th and M Streets, NW (1)	028	03-03-10	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	03-03-10	*			
47	38 th Street and Reservoir Road, NW	029	03-03-10	*			
47a	37 th and T Streets, NW	029	03-03-10	*			

				(Condition		
Struct No.	Location	Associated	Date	Good	Needs Work	Wl-Nd-d	W
47b	37 th and T Streets, NW	NPDES Outfall 029	<i>Inspected</i> 03-03-10	*		work needed	Work performed
476 47c	38 th and W Streets, NW	029	03-03-10	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	03-03-10	*			
50	26 and M Streets, NW	031	03-10-10	*			
51	N Street Extended, west of 25 th Street, NW	032	03-10-10	*			
52	22 nd Street between M and N Streets, NW	034	03-10-10	*			
52a	N Street between 12 nd and 23 rd Streets, NW	034	03-18-10	*			
53	22 nd and M Streets, NW	022, 034	03-08-10	*			
53a	22 nd and M Streets, NW	022, 034	03-08-10	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	03-05-10	*			
53c	L and 22 nd Streets, NW	022	03-05-10	*			
54	23 rd and O Streets, NW	034	03-17-10	*			
55	22 nd Street, south of Q Street, NW	035	03-17-10	*			
55a	22 nd Street, south of Q Street, NW	035	03-17-10	*			
56	23 rd and Massachusetts Ave, NW	036	03-17-10	*			
57	23 rd Street, south of Q Street, NW	036	03-17-10	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	03-10-10	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	03-10-10	*			
60	Connecticut Ave, east of Rock Creek, NW	039	03-02-10	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	03-02-10	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	03-09-10	*			
63	Harvard Street and Rock Creek Parkway, NW	042	03-09-10	*			
64	Adams Mill Road, south of Irving Street, NW	043	03-09-10	*			
65	Kenyon Street and Adams Mill Road, NW	044	03-09-10	*			
65a	Kenyon Street and Adams Mill Road, NW	044	03-09-10	*			
66	Adams Mill Road and Lamont Street, NW	045	03-09-10	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	03-09-10	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	03-09-10	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	03-09-10	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	03-09-10	*			
70i	5 th and Quackenbos Streets, NW	049	03-01-10	*			

			D.	(Condition		
		Associated	Date		Needs Work		
Struct No.	Location	NPDES Outfall	Inspected	Good		Work Needed	Work performed
71	28 th Street, west of Rock Creek Parkway, NW	050	03-05-10	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	03-15-10	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	03-15-10	*			
73	O Street Extended and Rock Creek Parkway, NW	052	03-15-10	*			
74	Q Street, west of Rock Creek, NW	053	03-31-10	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	03-31-10	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	03-31-10	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	03-31-10	*			
78	28th Street Extended, west of Rock Creek, NW	057	03-31-10	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	03-02-10	*			
84	26 th and P Streets, NW	060	03-15-10	*			
84a	26 th and P Streets, NW	060	03-15-10	*			

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

				0 0-1-11-1		ue Gan					
				utfall		e Gate		le Gate			
			Co	ndition	Pre	sent?	Co	ndition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
	Bolling Air Force Base, at Giavanolli and										
003	Chanute, SW	03-22-10	*		*		*		*		
	Across from Navy Yard, aligned with										
005	Parsons Ave., SE	03-31-10	*		*		*		*		
	Good Hope Road and Welsh Memorial										
	Bridge	03-31-10	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	03-31-10	*		*		*		*		
009	O St. Sewage Pumping Station, SE	03-04-10	*		*		*		*		
010	O St. Sewage Pumping Station, SE	03-04-10	*			*			*		
011	Main Sewage Pumping Station, SE	03-04-10	*			*			*		
011(a)	Main Sewage Pumping Station, SE	03-04-10	*		*		*		*		
012	Main Sewage Pumping Station, SE	03-04-10	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	03-25-10	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	03-23-10	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	03-23-10	*			*			*		
016	12th and O Streets, SE	03-23-10	*		*		*		*		
017	M and Water Street, SE	03-23-10	*		*		*		*		
	East of Barney Circle and South of										
018	Pennsylvania Avenue Bridge, SE	03-23-10	*		*		*		*		
	Adjacent to Service Drive behind swirl										
019	facility and D.C. General Hospital	03-31-10	*			*			*		
	Rock Creek Parkway and Independence,										
020	NW	03-25-10	*		*		*		*		
021	Rock Creek Parkway and C St., NW	03-25-10	*			*			*		
022	Rock Creek Parkway and G St., NW	03-25-10	*		*		*		*		

				utfall	Tide Gate Present?			le Gate	- CO	10 g:	
		_	Co	ndition	Pre	sent?	Co.	ndition	CS	O Sign	
NPDES		Date	OV	Needs	37	NT-	OIZ	Needs	OIZ	Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
											WASA has developed a capitol project to design and construct
	South of 30 th and K Streets, NW										a replacement gate for
024		03-25-10	*		*			*	*		improved performance.
025	South of 31st and K Streets, NW	03-25-10	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	03-25-10	*		*		*		*		
027	33 rd and Water Sts., NW	03-25-10	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	03-25-10	*			*			*		
	Adjacent to C&O Canal, aligned with 38 th										
029	St. NW	03-25-10	*		*		*		*		
	Rock Creek Pkwy and Pennsylvania										
031	Avenue, NW.	03-10-10	*			*			*		
032	26th and M Street, NW.	03-10-10	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	03-10-10	*		*		*		*		
	Just west of St. Francis Jr. High and north of										
	N St., NW	03-17-10	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	03-17-10	*		*		*		*		
036	22nd Street, South of Q Street NW.	03-23-10	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	03-10-10	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	03-10-10	*		*		*		*		
	Connecticut Avenue Bridge and Rock Creek										
039	Parkway, NW.	03-02-10	*		*		*		*		
	Aligned with Biltmore Rd., between										
040	Connecticut Ave and Ellington Bridge.	03-02-10	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	03-04-10	*		*		*		*		
042	Harvard St. and Beach Dr NW.	03-04-10	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	03-04-10	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	03-04-10	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	03-04-10	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	03-09-10	*			*			*		

				outfall ndition		e Gate esent?		le Gate ndition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	Notes, Work Needed or
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Performed
047	Piney Branch Parkway and Ingleside Terrace	03-09-10	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	03-09-10	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	03-09-10	*		*		*		*		
050	Rock Creek Parkway and L St., NW	03-05-10	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.		*		*		*		*		
		03-04-10									
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	03-04-10	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	03-23-10	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	03-31-10	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	03-31-10	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	03-31-10	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	03-02-10	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	03-23-10	*		*		*		*		

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

Table 2-3

Pumping Stations – Inspections and Equipment in Service

	No. of						
	Inspectio	No.		Screens or Pumps Out of			Schedule to Restore
Pumping Station	ns	Screens	No. Pumps	Service	Dates	Reason	to Service
Main	31	4	10	# 1 Sanitary Pump	3/25/10	VFD DC Power Failure	April 30, 2010
Eastside	31	2	4	#2 Screen	2/7/10	Motor Bad	March 30, 2010
Poplar Point	31	2 1	3	#1 Sanitary Pump, #3 Sanitary Pump		•	March 30, 2010 March 30, 2010
Potomac	31	4	5	# 4 Sanitary Pump,	1/1/10	-	March 15, 2010
Otomac	31	·		# 3 Screen	1/1/10		May 31, 2010

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

		Type of Preventive	
Pumping Station	Date Performed	Maintenance Performed ¹	Comments
Main	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
O St	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	03/25/10	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	03/25/10	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	Pumpage		ter/CSO Pumped To	o Anacostia River
	Total	Daily Average			
	Wastewater	Wastewater			Screenings
Pumping Station	(mg)	(mg)	Date	Volume (mg)	Collected (units)
Main	1,903.90	61.42	N/A	N/A	N/A
O St ¹	171.50	5.53	3/11	0.0	Normal
			3/12	50.80	
			3/13	84.00	
			3/14	33.20	
			3/29	69.70	
Eastside	564.44	18.81	N/A	N/A	N/A
Poplar Point	595.80	19.22	N/A	N/A	N/A
Potomac	4,246.50	136.98	N/A	N/A	N/A
Rock Creek	247.53	7.98	N/A	N/A	N/A
Upper Anacostia	97.50	3.15	N/A	N/A	N/A
Earle Place	0.30	0.01	N/A	N/A	N/A

^{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

	#		Screens or			
Date	Screen	#	Swirls Out of			
Inspected	S	Swirls	Service	Dates	Reason	Schedule to Restore to Service
03/26/10	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
03/26/10	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

		U	U		
	Approx. Storm		Total Foul		Approx. Screenings
	Duration ¹	Total Influent	Sewer Volume	Total Effluent	Volume ³
Date	(Hours)	Volume (mg)	(mg)*	Volume ² (mg)	# of bins (cu ft)
3/12/2010	7	11.25	0.435	10.815	2.30(184.0)
3/13/2010	8	10.23	6.293	3.937	0.25(20)
3/13/2010	12	8.04	8.04	0	0.15(12)
3/14/2010	9	6.67	6.67	0	0.25(20)
3/22/2010	4	5.80	5.80	0	0.1(8.0)
3/22/2010	1	1.65	1.65	0	0.02(1.6)
3/28/2010	2	20.12	15.0	5.12	0.75(60)
3/29/2010	8	11.46	11.46	0	0.40(32)
3/29/2010	7	4.14	4.14	0	0.06(4.8)

Fowl Sewer meters are not reading accurately, replacement meters are on order; anticipated replacement date is 04/30/2010.

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.

^{*} Total foul sewer was estimated.

Table 2-9 Northeast Boundary Swirl Facility – Disinfection Performance

	Chlor/	Residual Chlorine Test							
	Dechl	Dosages		Results		Enterococcus Test 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
03/12/10	Yes	5	2	Mix Chamber	0.01	Mix Chamber	56,000	Mix Chamber	240,000
03/12/10	Yes	5	2	Anacostia River	0.0	Anacostia River	350,000	Anacostia River	420,000
03/13/10	Yes	5	2	Mix Chamber	0.05	Mix Chamber	540	Mix Chamber	360
03/13/10	Yes	5	2	Anacostia River	0.0	Anacostia River	162	Anacostia River	26,000
03/28/10	Yes	5	2	Mix Chamber	0.1	Mix Chamber	150,000	Mix Chamber	540,000
03/28/10	Yes	5	2	Anacostia River	0.1	Anacostia River	20,000	Anacostia River	42,000

1. Mix Chr.: Mixing Chamber

2. River: River Outfall

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

	Flow Composited Sample Results										
		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)				
3/12/10	434	0.11	0.83	12.8	13.7	2.01	89.8				
3/13/10	62.0	0.00	0.58	2.71	3.29	0.61	23.5				
3/28/10	175	0.03	0.39	5.65	6.07	0.90	17.2				

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

		Was Dam Out of			
Inflatable Dam		Service During the			Schedule to Restore to
Structure No	Date Inspected	Month?	Dates out of Service	Reason	Service
14 - East	03/29/10	No	N/A	N/A	N/A
14 - West	03/29/10	No	N/A	N/A	N/A
15	03/29/10	No	N/A	N/A	N/A
15A	03/29/10	No	N/A	N/A	N/A
16 - East	03/29/10	No	N/A	N/A	N/A
16 - West	03/29/10	No	N/A	N/A	N/A
24 - North	03/29/10	No	N/A	N/A	N/A
24 - Middle	03/29/10	No	N/A	N/A	N/A
24 - South	03/29/10	No	N/A	N/A	N/A
34	03/29/10	No	N/A	N/A	N/A
35	03/29/10	No	N/A	N/A	N/A
52	03/29/10	No	N/A	N/A	N/A

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

innatable bains a Belibri Sites Wet Weather Operations										
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)								
14 (E & W)	3/29	0.01min								
15	3/29	1hr. 1min								
15A	3/29	1hr. 10mins								
16 (E & W)	3/29	13hr. 1min 35sec								
24	3/29	0.51min								
34	None	N/A								
35	3/29	0.34min								
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								

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3. DRY WEATHER OVERFLOWS

There was no Dry weather overflows (DWOs) in March 2010.

Sanitary Sewer Overflow

Location	Potomac Avenue and Manning PL., NW.				
	A tree growing in close proximity to a sewer manhole had moved the manhole frame and cover				
Cause	sufficiently to allow roots to enter the manhole and destabilize the brick walls.				
Date/ Time Discovered	March 17, 2010 @ 2:00 PM				
	A DC WASA crew immediately applied quick setting concrete to stop the leak and on the following				
	day, March 18, we applied additional concrete and mortar around the manhole to eliminate dampness				
Action Taken	observed on the initial patch.				
	March 17, 2010 @ 5:25 PM - Visual inspection on March 19 and March 22 revealed no leakage or				
Date/Time Discharge Ceased	dampness on the concrete patch.				
Estimated Volume (mg)	100 gallons of sanitary sewage was discharged into the storm channel.				
Did Overflow Reach Receiving water?	Yes, leaking into an open storm sewer drainage ditch.				
	The National Park Services has promised to grant us a permit today to remove the tree. Our tree				
	contractor plans to cut down the tree tomorrow then we will perform an interior inspection to determine				
Action taken to prevent reoccurrence	what additional repairs may be required.				

Sanitary Sewer Overflow

	J
Location	Foundry Branch in the vicinity south of the 4000 block of Van Ness Street, NW.
	A broken 6" sanitary line, in a heavily wooded area of Foundry Branch. The six inch line was a private
Cause	sewer service that appeared to be coming from a nearby church.
Date/ Time Discovered	March 10, 2010 @ 9: 48 AM
	The crew was unable to contact anyone at the church concerning the collapsed sewer so DC WASA
	made the repair. Our contractor mobilized his equipment and began repairs on the broken pipe on
	March 10. He returned the following day to complete the pipe repair and permanently stop the leak to
Action Taken	Foundry Branch. He also placed rip-rap around the pipe to protect it from fallen trees in the creek.
Date/Time Discharge Ceased	March 10, 2010 @ 6:15 PM
Estimated Volume (mg)	DCWASA estimates that approximately 1500 gallons of sewage.
Did Overflow Reach Receiving water?	Yes, discharged into the creek.
	We will continue our efforts to notify the church staff so they may take action to maintain and protect
Action taken to prevent reoccurrence	the pipe in the future.

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

Table 4-1 Catch Dashi Summaries												
					stia CSS							
				Inspe	ections	Cleaning						
				Total							Total CBs	
				CBs	Total CBs	CBs Clea	ned Thru	CB's Cleaned		Cleaned This Year		
			CBs in	Inspected	Inspected	Last N	10nth	this Month		to Date		
		CBs in	Anacosti	Once this	Twice this							
Ward	Total CBs	CSS	a CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS	
1	1,591	1,568	734	480	0	522	371	665	655	1187	1026	
_					_							
2	4,714	4,112	2,316	418	0	426	383	435	359	861	742	
						4.700	^ -	1000	2.5	2.400	244	
3	3,555	461	-	0	0	1580	97	1909	247	3489	344	
	2.502	4.007	4.50	•		~ 00			22.5	0.1.7	2.5	
4	2,782	1,985	159	29	0	588	141	227	225	815	366	
_	0.167	1.025	1.025	201	0	262	0.4	2.42	217	504	201	
5	2,167	1,035	1,035	301	0	262	84	242	217	504	301	
	1.702	1.504	1.504	7.1	0	12		40	4.5	60	<i>7</i> 1	
6	1,783	1,594	1,594	51	0	13	6	49	45	62	51	
7	2,313	-	-	0	0	124	0	132	0	256	0	
					_							
8	1,278	116	116	22	0	25	5	17	17	42	22	
WASA Subtotal	20,183	10,871	5,954	1,301	0	3,540	1,087	3,676	1,765	7,216	2,852	
DDOT (via VMS)												
Subtotal				0	0			0	0	0	0	
Grand Total	20,183	10,871	5,954	1,301	0			3,676	1,765	7,216	2,852	
% Cleaned/Inspected		_									26%	
to Date				22%	0%					36%	4070	

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	3/30/10	Good	Minor	Nets Emptied/	400 lbs.
018			Maintenance	Changed	
Bar Rack CSO 040	3/2/10	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	3/4/10	Good	None	Routine Cleaning	(1)

Notes:

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

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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	6
Reason not Operating	Inclement weather - strong winds
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	None
Dates	N/A
Reason	N/A
Plan to Restore to Service	N/A
Volume Material Collected	70 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:03/12/10 Inspector's Initials: GDS

	Date:00/12/10									mapector a mitiala.			
		Ove	rflo	Ol	oserv	ed	Qu	antity	/ of	Quantity of		of	
cso	Time of Observ ation	Y	N	L	M	Н	L	M	Н	L	M	Н	REMARKS/OTHER
	8 am	Χ		Χ			Χ			Х			
009													
010													
011													
011a													
012													

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

Date:03/13/10 Inspector's Initials: GDS

		Ove	rtlo	Ok	serv	ea	Qu	antity	/ Of	Qua	ntity	OT	
	Time of Observ												
CSO	ation	Υ	N	L	M	H	L	M	Н	L	M	Н	REMARKS/OTHER
	8 am	Χ		χ			Χ			Χ			
009	9 am	Y		Y			Y			Y			
	10 am	Х		Χ			Х			Х			
010													
	11 am	Χ		Х			Х			Х			
	40												
	12 nm	Y		Y			Y			Y			
011	1 nm	¥		Y			Y			Y			
	2 nm	Y		Y			Y			Y			
011a	3 nm	Y		Y			Y			Y			
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 5-2Rainfall Data (inches)

Monthly Rain Totals

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
3/1/2009	0	0	0	0
3/2/2009	0	0	0	0
3/3/2009	0	0	0	0
3/4/2009	0	0	0	0
3/5/2009	0	0	0	0
3/6/2009	0	0	0	0
3/7/2009	0	0	0	0
3/8/2009	0	0	0	0
3/9/2009	0	0	0	0
3/10/2009	0	0	0.03	0
3/11/2009	0	0	0.61	0
3/12/2009	0.67	0.67	0.57	0.68
3/13/2009	0.68	0.68	0.21	0.76
3/14/2009	0.17	0.17	0.03	0.4
3/15/2009	0.05	0.05	0	0.06
3/16/2009	0	0	0	0.01
3/17/2009	0	0	0	0
3/18/2009	0	0	0	0
3/19/2009	0	0	0	0
3/20/2009	0	0	0	0
3/21/2009	0	0	0.25	0
3/22/2009	0.25	0.25	0.01	0.43
3/23/2009	0	0	0	0.02
3/24/2009	0	0	0.03	0
3/25/2009	0.02	0.02	0.31	0.05
3/26/2009	0.26	0.26	0	0.28
3/27/2009	0	0	0.72	0
3/28/2009	0.42	0.42	0.19	0.84
3/29/2009	0.34	0.34	0.01	0.19
3/30/2009	0.01	0.01	0	0.02
3/31/2009	0	0	0	0.01
TOTALS	2.87	2.87	2.97	3.75

Combined Sewer System Model Results Period: January, February, March 2010 SCENARIO: Q1Y2010, 4-20-10

				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 CS0	ne.						
005	Chicago St and Railroad Station SE	11	0.62	26.75	2.43	6.25	0.25
003	Good Hope Road, West of Nichols	11	0.02	20.73	2.40	0.25	0.25
006	Ave.,SE	0	0.00	0.00	0.00	0.00	0.00
007	13 th Street and Ridge Place,SE	0	0.00	0.00	0.00	0.00	0.00
001	2nd Street, 300 feet North of N Place,	Ů	0.00	0.00	0.00	0.00	0.00
009	SE	3	0.08	4.25	1.42	1.75	1.00
	O Street SewagePumping Station, SE						
010	(pumped Overflow)	4	4.79	1.25	0.31	0.50	0.25
	South of Main Sewage Pumping						
011	Station, SE (pumped overflow)	1	0.83	0.25	0.25	0.25	0.25
	South of Main SewagePumping						
011a	Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
	North of Main SewagePumping						
012	Station, SE (Tiber Creek)	0	0.000	0.00	0.00	0.00	0.00
013	4th and N Streets, SE	2	0.02	1.50	0.75	1.25	0.25
014	6th and M Streets, SE	11	1.72	40.50	3.68	7.25	1.00
015	9th and M Streets, SE	0	0.00	0.00	0.00	0.00	0.00
016 017	12th and M Streets, SE 14th and M Streets, SE	5	0.00 0.44	0.00 10.50	0.00 2.10	0.00 4.00	0.00 0.50
017	Barney Circle and Pennsylvania Ave,	5	0.44	10.50	2.10	4.00	0.50
018	SE	13	2.05	122.25	9.40	66.00	0.50
019	Northeast Boundary - Swirl Effluent	8	8.36	18.00	2.25	7.50	0.30
019	Northeast Bound Swirl Bypass	0	0.00	0.00	0.00	0.00	0.00
010	SUBTOTAL	Ů	18.92	0.00	0.00	0.00	0.00
	1002.0		10.02				
Potomac CSO	s						
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
	23rd Street, North of Constitution Ave,						
020	NW (Easby Point)	0	0.00	0.00	0.00	0.00	0.00
021	Northeast ofRoosevelt Bridge, NW	1	2.05	1.25	1.25	1.25	1.25
022	27th and K Streets, NW	7	0.09	32.00	4.57	21.00	0.50
024	30th and K Streets, NW	3	0.12	3.25	1.08	2.00	0.25
025	31st & K St NW	0	0.000	0.00	0.00	0.00	0.00
026	Wisconsin Avenue andK St., NW	0	0.00	0.00	0.00	0.00	0.00
027 028	Water Street West ofStreet, NW 36th and M Streets, NW	11 6	5.51 0.18	96.50 9.25	8.77 1.54	30.25 3.00	4.00 0.25
020	Canal Road 1000 feet east of Rock	0	0.16	9.25	1.54	3.00	0.25
029	Creek,NW	0	0.00	0.00	0.00	0.00	0.00
023	SUBTOTAL	0	7.95	0.00	0.00	0.00	0.00
			1.00				
Rock Creek			<u> </u>				
	Pennsylvania Avenue, East Rock						· · · · · · · · · · · · · · · · · · ·
031	Creek, NW	0	0.00	0.00	0.00	0.00	0.00
032	26th and M Streets, NW	0	0.00	0.00	0.00	0.00	0.00
	N Street extendedwest of 25th						
033	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 Northwest of Belmontand Rock Creek	1	0.0002	0.25	0.25	0.25	0.25
037	and Potomac Parkway	0	0.00	0.00	0.00	0.00	0.00
037	North of Belmont Road,east of	0	0.00	0.00	0.00	0.00	0.00
038	Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
U30	Connecticut Avenue east of Rock	U	0.00	0.00	0.00	0.00	0.00
039	Creek, NW	0	0.00	0.00	0.00	0.00	0.00
	Biltmore Street extended east of	ļ ,	0.00	0.00	0.00	0.00	0.00
040	RockCreek, NW	0	0.00	0.00	0.00	0.00	0.00
	Ontario extended and Rock Creek	Ĭ	2.00	2.00	2.00	2.00	2.00
041	Parkway	0	0.00	0.00	0.00	0.00	0.00

Combined Sewer System Model Results Period: January, February, March 2010 SCENARIO: Q1Y2010, 4-20-10

				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)
	Harvard Street and RockCreek						
042	Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
	Adams Mill Road South of Irving						
043	Street, NW	0	0.00	0.00	0.00	0.00	0.00
	Kenyon Street and Adams Mill Road,						
044	NW	0	0.00	0.00	0.00	0.00	0.00
	Adams Mill Road and Lamont Street,						
045	NW	0	0.00	0.00	0.00	0.00	0.00
	Park Road south of Piney Branch						
046	Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
	Ingleside Terrace extended and Piney						
047	Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
	Mt. Pleasant Street extended and						
048	Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and LamontStreet, NW	1	0.02	0.75	0.75	0.75	0.75
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
	Olive Street extended and Rock Creek						
051	Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
	O Street extended and Rock Creek						
052	Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
	O Street west of Rock Creek Parkway,						
053	NW	0	0.00	0.00	0.00	0.00	0.00
	West Side of Rock Creek300 ft. south						
054	of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
	Normanstone Drive extended west of						
056	Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
	28th Street extended west of Rock	_					
057	Creek, NW	1	0.0001	0.25	0.25	0.25	0.25
	Connecticut Avenue and Rock Creek						
058	Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
060	P St and 26 th St, NW	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL		0.02				
	TOTAL		26.89				

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