

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

FIRST QUARTER, 2011

Prepared By:

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

**Monthly Operations Report
For
Combined Sewer System
Month: January 2011**

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DISTRICT OF COLUMBIA
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Monthly Operations Report for Combined Sewer System
Month: January 2011

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to CSO outfalls which discharge to receiving waters. The following table summarizes inspections of CSO regulators in the collection system.

**Table 2-1
Regulator Structures**

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				<i>Good</i>	<i>Needs Work</i>		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	01/06/11	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	01/06/11	*			
5	Poplar Point Pumping Station	004	01/06/11	*			
6	Chicago Street and Railroad Ave, SE	005	01/21/11	*			
7	W Street and Railroad Ave, SE	005	01/21/11	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A	*			
9	13 th Street and Ridge Place, SE	007	01/21/11	*			
11	"O" Street Pumping Station	011(a)	01/31/11	*			
12	Storm Pump Discharge at Main Pumping Station	011	01/31/11	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	01/07/11	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	01/31/11	*			
15	South Capitol and E Streets	010	01/31/11	*			
15a	Half and L Streets, SE	010	01/31/11	*			
15b	South Capitol and I Streets	010	01/19/11	*			
15c	South Capitol and I Streets	010	01/19/11	*			
16	North of Main Sewage Pumping Station	012	01/31/11	*			
17	4 th and N Streets, SE, Both Extended	013	01/06/11	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	01/21/11	*			
18	6 th and M Streets, SE	014	01/21/11	*			
19	9 th and M Streets, SE	015	01/05/11	*			
19a	9 th and M Streets, SE	015	01/05/11	*			
20	12 th and M Streets, SE	016	01/05/11	*			
20a	12 th and M Streets, SE	016	01/05/11	*			
21	14 th and M Streets, SE	017	01/06/11	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	01/19/11	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	01/19/11	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	01/19/11	*			
22d	Kentucky Ave and Potomac Street, SE	018	01/14/11	*			
22e	14 th Street and Kentucky Ave, SE	018	01/14/11	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
23	Independence Ave, 21 st Street, SE, Extended	019	01/19/11	*			
24a	East Capitol St, west of RFK stadium	019	01/19/11	*			
28	21 st and Constitution Ave, NW	020	01/28/11	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	01/28/11	*			
30	17 th and D Streets, NW	020	01/05/11	*			
31	15 th Street and Pennsylvania Ave, NW	020	01/05/11	*			
33	10 th and F Streets, NW	020	01/05/11	*			
34	23 rd Street, north of Constitution Ave, NW	020	01/31/11	*			
34a	23 rd Street near C Street, NW	020	01/28/11	*			
35	Northeast of Roosevelt Bridge, NW	021	01/31/11	*			
36	27 th and I Streets, NW	022	01/05/11	*			
36a	New Hampshire Ave and Eye Street, NW	022	01/05/11	*			
36b	19 th and L Streets, NW	022, 034	01/28/11	*			
36d	17 th and L Streets, NW	022, 034	01/28/11	*			
36g	18 th and M Streets, NW	022, 034	01/28/11	*			
36h	18 th and M Streets, NW	022, 034	01/28/11	*			
37	27 th and Eye Streets, NW	022	01/05/11	*			
38	29 th and K Streets, NW	024	01/07/11	*			
38a	30 th Street, south of K Street, NW	024	01/07/11	*			
39a	30 th and K Streets, NW	024	01/07/11	*			
39b	30 th and K Streets, NW	024	01/07/11	*			
41b	31 st and K Streets, NW	025	01/14/11	*			
41c	31 st and K Streets, NW	025	01/14/11	*			
42	Wisconsin Ave and K Street, NW	026	01/14/11	*			
43	Potomac and Water Streets, NW	027	01/14/11	*			
43a	Potomac and Water Streets, NW	027	01/14/11	*			
44	Water Street, west of Potomac St, NW	027	01/14/11	*			
45	36 th and M Streets, NW	028	01/07/11	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	01/07/11	*			
47	38 th Street and Reservoir Road, NW	029	01/07/11	*			
47a	37 th and T Streets, NW	029	01/07/11	*			
47b	37 th and T Streets, NW	029	01/07/11	*			
47c	38 th and W Streets, NW	029	01/07/11	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	01/21/11	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
50	26 and M Streets, NW	032	01/21/11	*			
51	N Street Extended, west of 25 th Street, NW	033	01/21/11	*			
52	22 nd Street between M and N Streets, NW	034	01/31/11	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	01/31/11	*			
53	22 nd and M Streets, NW	022, 034	01/28/11	*			
53a	22 nd and M Streets, NW	022, 034	01/28/11	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	01/14/11	*			
53c	L and 22 nd Streets, NW	022	01/14/11	*			
54	23 rd and O Streets, NW	034	01/25/11	*			
55	22 nd Street, south of Q Street, NW	035	01/25/11	*			
55a	22 nd Street, south of Q Street, NW	035	01/25/11	*			
56	23 rd and Massachusetts Ave, NW	036	01/25/11	*			
57	23 rd Street, south of Q Street, NW	036	01/25/11	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	01/14/11	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	01/14/11	*			
60	Connecticut Ave, east of Rock Creek, NW	039	01/06/11	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	01/06/11	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	01/24/11	*			
63	Harvard Street and Rock Creek Parkway, NW	042	01/24/11	*			
64	Adams Mill Road, south of Irving Street, NW	043	01/24/11	*			
65	Kenyon Street and Adams Mill Road, NW	044	01/24/11	*			
65a	Kenyon Street and Adams Mill Road, NW	044	01/24/11	*			
66	Adams Mill Road and Lamont Street, NW	045	01/24/11	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	01/24/11	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	01/24/11	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	01/24/11	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	01/24/11	*			
70i	5 th and Quackenbos Streets, NW	049	01/04/11	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	01/06/11	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	01/25/11	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	01/25/11	*			
73	O Street Extended and Rock Creek Parkway, NW	052	01/25/11	*			
74	Q Street, west of Rock Creek, NW	053	N/A	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	01/19/11	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	01/19/11	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	01/20/11	*			
78	28th Street Extended, west of Rock Creek, NW	057	01/19/11	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	01/31/11	*			
84	26 th and P Streets, NW	060	01/25/11	*			
84a	26 th and P Streets, NW	060	01/25/11	*			

Notes:

1. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
2. Where construction is indicated to be in progress at a regulator, the contractor maintains flow (i.e. prevents DWO) during construction by flow diversion, bypass pumping, fluming, sandbagging or other means.

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	01/06/11	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	01/06/11	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	01/06/11	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	01/06/11	*		*		*		*		
009	O St. Sewage Pumping Station, SE	01/28/11	*		*		*		*		
010	O St. Sewage Pumping Station, SE	01/28/11	*			*			*		
011	Main Sewage Pumping Station, SE	01/28/11	*			*			*		
011(a)	Main Sewage Pumping Station, SE	01/28/11	*		*		*		*		
012	Main Sewage Pumping Station, SE	01/28/11	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	01/06/11	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	01/31/11	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	01/31/11	*			*			*		
016	12th and O Streets, SE	01/06/11	*		*		*		*		
017	M and Water Street, SE	01/06/11	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	01/06/11	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	01/07/11	*			*			*		
020	Rock Creek Parkway and Independence, NW	01/20/11	*		*		*		*		
021	Rock Creek Parkway and C St., NW	01/20/11	*			*			*		
022	Rock Creek Parkway and G St., NW	01/20/11	*		*		*		*		
024	South of 30 th and K Streets, NW	01/20/11	*		*			*	*		
025	South of 31st and K Streets, NW	01/20/11	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	01/20/11	*		*		*		*		
027	33 rd and Water Sts., NW	01/20/11	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	01/20/11	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
029	Adjacent to C&O Canal, aligned with 38 th St. NW	01/20/11	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	01/21/11	*			*			*		
032	26th and M Street, NW.	01/21/11	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	01/21/11	*		*			*	*		
034	Just west of St. Francis Jr. High and north of N St., NW	01/25/11	*		*			*	*		
035	P St. Bridge and Rock Creek Parkway	01/25/11	*		*			*	*		
036	22nd Street, South of Q Street NW.	01/06/11	*		*			*	*		
037	Waterside Dr. and Rock Creek Parkway	01/14/11	*		*			*	*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	01/14/11	*		*			*	*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	01/06/11	*		*			*	*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	01/06/11	*		*			*	*		
041	Beach Dr. and Ontario Pl., NW	01/06/11	*		*			*	*		
042	Harvard St. and Beach Dr NW.	01/20/11	*		*			*	*		
043	Upstream of Harvard St. and Beach Dr NW.	01/20/11	*		*			*	*		
044	Kenyon Street and Beach Dr., NW.	01/20/11	*		*			*	*		
045	North of Beach Dr. and Walbridge Pl, NW.	01/20/11	*		*			*	*		
046	Piney Branch Parkway and Park Road, NW.	01/24/11	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	01/24/11	*		*			*	*		
048	South of Piney Branch Parkway and 17 th St.	01/24/11	*		*			*	*		
049	North of Piney Branch Parkway and 17 th St.	01/24/11	*		*			*	*		
050	Rock Creek Parkway and L St., NW	01/06/11	*		*			*	*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
051	Across Rock Creek Parkway, aligned with Olive St., NW.	01/06/11	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	01/06/11	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	01/06/11	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	01/19/11	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	01/19/11	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	01/19/11	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	01/31/11	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	01/06/11	*		*		*		*		

Notes:

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
Main	31	4	10	None			
Eastside	31	2	4	Screen #2	January 1-31	Screen being overhauled	February 2011
Poplar Point	31	2 ¹	3	Pump 1, 2 & 3 Screens 1 and 2	January 1-31	Pumps need major overhaul. Bypass pumping and screening in progress	February 2011
Potomac	31	4	5	#5 pump o/s	January 1-31	Pump being rehabbed.	April 2011

Notes:

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

**Table 2-4
Pumping Stations – Preventive Maintenance**

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
Main	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
O St	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	1/25/2011	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

Check depth of screening in the screen room and schedule Vector truck as required

Check all safety equipment

Issue work order requests as required

**Table 2-5
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Storm Water/CSO Pumped To Anacostia River</i>		
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>	<i>Date</i>	<i>Volume (mg)</i>	<i>Screenings Collected (units)</i>
Main	1,628.67	52.54	N/A	N/A	N/A
O St ¹	153.08	4.94	N/A	N/A	N/A
Eastside	436.88	14.09	N/A	N/A	N/A
Poplar Point	595.20	19.20	N/A	N/A	N/A
Potomac	3,209.10	103.52	N/A	N/A	N/A
Rock Creek	162.50	5.24	N/A	N/A	N/A
Upper Anacostia	155.00	5.00	N/A	N/A	N/A
Earle Place	0.14	0.00	N/A	N/A	N/A

Notes:

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

2-4 Northeast Boundary Swirl Facility

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

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

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

**Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance**

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
1/27/11	Group A	

Notes:

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

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

<i>Date</i>	<i>Approx. Storm Duration¹ (Hours)</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume² (mg)</i>	<i>Approx. Screenings Volume³ # of bins (cu ft)</i>
None					

Chlorination/Dechlorination Systems.

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

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

Table 2-9

Northeast Boundary Swirl Facility – Disinfection Performance

<i>Date</i>	<i>Chlor/ Dechlor System Used?</i>	<i>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO₃ (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
				Mixing Chamber		Mixing Chamber	
				Anacostia River ¹		Anacostia River	

Notes:

1. River: River Outfall

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

<i>Date</i>	<i>Flow Composited Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO₂-N) mg/L</i>	<i>Nitrate (NO₃-N) mg/L</i>	<i>Total Kjeldahl Nitrogen (mg/L as N)</i>	<i>Total Nitrogen (mg/L)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Carbonaceous Biological Oxygen Demand (mg/L)</i>
<i>None</i>							

2.5 Inflatable Dams

WASA operates and maintains twelve inflatable dams at eight different locations. The structure number, location and number of dams per site are presented in Table 2-10. The inflatable dams consist of multi-ply elastomeric (i.e., “rubber”) fabric dams installed in major overflow conduits within the combined sewer system. The objective of the inflatable dam installation is to increase the effective depth to which the sewage must rise in the combined sewer before overflows occur. The effect of the installation is to retain a greater volume of combined sewage flow resulting from low to moderate intensity storms by maximizing storage within the CSS. During higher intensity storms, when the full carrying capacity of the overflow conduit is required to prevent upstream flooding, the dam is deflated automatically. Inflatable dam operations are summarized below:

**Table 2-11
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	1/20/11	No	N/A	N/A	N/A
14 - West	1/20/11	No	N/A	N/A	N/A
15	1/20/11	No	N/A	N/A	N/A
15A	1/20/11	No	N/A	N/A	N/A
16 - East	1/20/11	No	N/A	N/A	N/A
16 - West	1/20/11	No	N/A	N/A	N/A
24 - North	1/20/11	No	N/A	N/A	N/A
24 - Middle	1/20/11	No	N/A	N/A	N/A
24 - South	1/20/11	No	N/A	N/A	N/A
34	1/20/11	No	N/A	N/A	N/A
35	1/20/11	No	N/A	N/A	N/A
52	1/20/11	No	N/A	N/A	N/A

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

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	None	N/A
15	None	N/A
15A	1/27	2 min
16 (E & W)	1/3	0.5 min
	1/5	0.5 min
24	1/6	0.2 min
	1/7	0.1 min
	1/26	0.5 min
34	1/26	0.1 min
35	None	N/A
52	None	N/A
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

Note:

3. DRY WEATHER OVERFLOWS

There was no dry weather overflow during January 2011.

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned this Month		Total CBs Cleaned This Year to Date	
						Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	16	0	2567	2335	16	16	16	16
2	4,714	4,112	2,316	30	0	6876	5762	81	64	81	64
3	3,555	461	-	0	0	5515	717	44	30	44	30
4	2,782	1,985	159	49	0	3509	2172	991	369	991	369
5	2,167	1,035	1,035	20	0	4016	2094	42	20	42	20
6	1,783	1,594	1,594	13	0	3662	2414	16	13	16	13
7	2,313	-	-	0	0	4812	0	64	0	64	0
8	1,278	116	116	0	0	2168	994	55	0	55	0
WASA Subtotal	20,183	10,871	5,954	128	0	33,125	16,488	1,309	512	1,309	512
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954	128	0					1,309	512
% Cleaned/Inspected to Date				2%	0%					6%	5%

4.2 BMP Demonstration Projects

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

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

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

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (CY)</i>
Netting System CSO 018	1/04/11	Good	None	Nets changed	400 lbs.
Bar Rack CSO 040	1/06/11	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	1/06/11	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

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

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	20
<i>Days not Operating</i>	16
<i>Reason not Operating</i>	Strong winds, frozen river, and low tide levels.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	One, B-29
<i>Dates</i>	1/3, 1 / 4, 1 / 7 and 1 / 10.
<i>Reason</i>	Starter failure.
<i>Plan to Restore to Service</i>	Repaired on 1/11/11.
<i>Volume Material Collected</i>	10 tons
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

Status: no activities this month.

5. MONITORING

5.1 Visual Wet Weather Surveys at Main & O

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

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

Date:

Inspector's Initial:

CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009	None												
010	None												
011	None												
011a	None												
012	None												

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

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
1/1/2011	0	0	0.01	0
1/2/2011	0.05	0.02	0.02	0.02
1/3/2011	0	0	0	0
1/4/2011	0	0	0	0
1/5/2011	0	0	0	0
1/6/2011	0	0	0	0
1/7/2011	0	0	0	0
1/8/2011	0	0	0	0
1/9/2011	0	0	0	0
1/10/2011	0	0	0	0
1/11/2011	0	0	0	0
1/12/2011	0.01	0.12	0	0.02
1/13/2011	0	0	0	0
1/14/2011	0	0	0	0
1/15/2011	0	0	0	0
1/16/2011	0	0	0	0
1/17/2011	0	0	0	0.02
1/18/2011	0.35	0.28	0	0.42
1/19/2011	0.01	0.01	0	0
1/20/2011	0	0	0	0.01
1/21/2011	0.02	0.01	0	0
1/22/2011	0	0	0	0
1/23/2011	0	0	0	0
1/24/2011	0	0	0	0
1/25/2011	0	0	0.04	0
1/26/2011	0.17	0.46	0.66	0.78
1/27/2011	0.4	0.67	0.6	0.47
1/28/2011	0.16	0.2	0.25	0.23
1/29/2011	0.02	0.11	0	0.02
1/30/2011	0	0.05	0	0

1/31/2011	0	0	0	0
TOTALS	1.19	1.93	1.58	1.99



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

**Monthly Operations Report
For
Combined Sewer System
Month: February 2011**

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

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

*Monthly Operations Report for Combined Sewer System
Month: February 2011*

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to CSO outfalls which discharge to receiving waters. The following table summarizes inspections of CSO regulators in the collection system.

**Table 2-1
Regulator Structures**

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	02/28/11	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	02/28/11	*			
5	Poplar Point Pumping Station	004	02/01/11	*			
6	Chicago Street and Railroad Ave, SE	005	02/01/11	*			
7	W Street and Railroad Ave, SE	005	n/a	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	02/01/11	*			
9	13 th Street and Ridge Place, SE	007	02/24/11	*			
11	"O" Street Pumping Station	011(a)	02/24/11	*			
12	Storm Pump Discharge at Main Pumping Station	011	02/24/11	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	02/24/11	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	02/01/11	*			
15	South Capitol and E Streets	010	02/24/11	*			
15a	Half and L Streets, SE	010	02/24/11	*			
15b	South Capitol and I Streets	010	02/08/11	*			
15c	South Capitol and I Streets	010	02/08/11	*			
16	North of Main Sewage Pumping Station	012	02/24/11	*			
17	4 th and N Streets, SE, Both Extended	013	02/01/11	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	02/01/11	*			
18	6 th and M Streets, SE	014	02/02/11	*			
19	9 th and M Streets, SE	015	02/01/11	*			
19a	9 th and M Streets, SE	015	02/01/11	*			
20	12 th and M Streets, SE	016	02/01/11	*			
20a	12 th and M Streets, SE	016	02/09/11	*			
21	14 th and M Streets, SE	017	02/09/11	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	02/04/11	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	02/07/11	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	02/07/11	*			
22d	Kentucky Ave and Potomac Street, SE	018	02/07/11	*			
22e	14 th Street and Kentucky Ave, SE	018	02/04/11	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
23	Independence Ave, 21 st Street, SE, Extended	019	02/04/11	*			
24a	East Capitol St, west of RFK stadium	019	02/04/11	*			
28	21 st and Constitution Ave, NW	020	02/25/11	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	02/25/11	*			
30	17 th and D Streets, NW	020	02/07/11	*			
31	15 th Street and Pennsylvania Ave, NW	020	02/07/11	*			
33	10 th and F Streets, NW	020	02/07/11	*			
34	23 rd Street, north of Constitution Ave, NW	020	02/09/11	*			
34a	23 rd Street near C Street, NW	020	02/25/11	*			
35	Northeast of Roosevelt Bridge, NW	021	02/24/11	*			
36	27 th and I Streets, NW	022	02/07/11	*			
36a	New Hampshire Ave and Eye Street, NW	022	02/07/11	*			
36b	19 th and L Streets, NW	022, 034	02/09/11	*			
36d	17 th and L Streets, NW	022, 034	02/09/11	*			
36g	18 th and M Streets, NW	022, 034	02/09/11	*			
36h	18 th and M Streets, NW	022, 034	02/09/11	*			
37	27 th and Eye Streets, NW	022	02/07/11	*			
38	29 th and K Streets, NW	024	02/01/11	*			
38a	30 th Street, south of K Street, NW	024	02/01/11	*			
39a	30 th and K Streets, NW	024	02/01/11	*			
39b	30 th and K Streets, NW	024	02/01/11	*			
41b	31 st and K Streets, NW	025	02/01/11	*			
41c	31 st and K Streets, NW	025	02/01/11	*			
42	Wisconsin Ave and K Street, NW	026	02/17/11	*			
43	Potomac and Water Streets, NW	027	02/17/11	*			
43a	Potomac and Water Streets, NW	027	02/17/11	*			
44	Water Street, west of Potomac St, NW	027	02/17/11	*			
45	36 th and M Streets, NW	028	02/02/11	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	02/02/11	*			
47	38 th Street and Reservoir Road, NW	029	02/02/11	*			
47a	37 th and T Streets, NW	029	02/02/11	*			
47b	37 th and T Streets, NW	029	02/02/11	*			
47c	38 th and W Streets, NW	029	02/02/11	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	n/a	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
50	26 and M Streets, NW	032	02/17/11	*			
51	N Street Extended, west of 25 th Street, NW	033	02/17/11	*			
52	22 nd Street between M and N Streets, NW	034	02/28/11	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	02/28/11	*			
53	22 nd and M Streets, NW	022, 034	02/25/11	*			
53a	22 nd and M Streets, NW	022, 034	02/25/11	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	02/25/11	*			
53c	L and 22 nd Streets, NW	022	02/25/11	*			
54	23 rd and O Streets, NW	034	02/15/11	*			
55	22 nd Street, south of Q Street, NW	035	02/15/11	*			
55a	22 nd Street, south of Q Street, NW	035	02/15/11	*			
56	23 rd and Massachusetts Ave, NW	036	02/15/11	*			
57	23 rd Street, south of Q Street, NW	036	02/15/11	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	02/09/11	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	02/09/11	*			
60	Connecticut Ave, east of Rock Creek, NW	039	02/09/11	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	02/09/11	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	02/23/11	*			
63	Harvard Street and Rock Creek Parkway, NW	042	02/23/11	*			
64	Adams Mill Road, south of Irving Street, NW	043	02/23/11	*			
65	Kenyon Street and Adams Mill Road, NW	044	02/23/11	*			
65a	Kenyon Street and Adams Mill Road, NW	044	02/23/11	*			
66	Adams Mill Road and Lamont Street, NW	045	02/23/11	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	02/23/11	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	02/23/11	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	02/23/11	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	02/23/11	*			
70i	5 th and Quackenbos Streets, NW	049	02/01/11	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	02/03/11	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	02/15/11	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	02/15/11	*			
73	O Street Extended and Rock Creek Parkway, NW	052	02/15/11	*			
74	Q Street, west of Rock Creek, NW	053	n/a	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	02/25/11	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	02/25/11	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	02/08/11	*			
78	28th Street Extended, west of Rock Creek, NW	057	02/25/11	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	02/23/11	*			
84	26 th and P Streets, NW	060	02/15/11	*			
84a	26 th and P Streets, NW	060	02/15/11	*			

Notes:

1. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
2. Where construction is indicated to be in progress at a regulator, the contractor maintains flow (i.e. prevents DWO) during construction by flow diversion, bypass pumping, fluming, sandbagging or other means.

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	02/28/11	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	02/17/11	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	N/a	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	02/17/11	*		*		*		*		
009	O St. Sewage Pumping Station, SE	02/15/11	*		*		*		*		
010	O St. Sewage Pumping Station, SE	02/15/11	*			*			*		
011	Main Sewage Pumping Station, SE	02/15/11	*			*			*		
011(a)	Main Sewage Pumping Station, SE	02/15/11	*		*		*		*		
012	Main Sewage Pumping Station, SE	02/01/11	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	02/03/11	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	02/03/11	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	02/03/11	*			*			*		
016	12th and O Streets, SE	02/03/11	*		*		*		*		
017	M and Water Street, SE	02/03/11	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	02/17/11	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	02/28/11	*			*			*		
020	Rock Creek Parkway and Independence, NW	02/28/11	*		*		*		*		
021	Rock Creek Parkway and C St., NW	02/28/11	*			*			*		
022	Rock Creek Parkway and G St., NW	02/28/11	*		*		*		*		
024	South of 30 th and K Streets, NW	02/28/11	*		*			*	*		
025	South of 31st and K Streets, NW	02/28/11	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	02/28/11	*		*		*		*		
027	33 rd and Water Sts., NW	02/28/11	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	02/28/11	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
029	Adjacent to C&O Canal, aligned with 38 th St. NW	02/28/11	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	02/28/11	*			*			*		
032	26th and M Street, NW.	02/18/11	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	02/17/11	*		*			*	*		
034	Just west of St. Francis Jr. High and north of N St., NW	02/15/11	*		*			*	*		
035	P St. Bridge and Rock Creek Parkway	02/15/11	*		*			*	*		
036	22nd Street, South of Q Street NW.	02/03/11	*		*			*	*		
037	Waterside Dr. and Rock Creek Parkway	02/09/11	*		*			*	*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	02/09/11	*		*			*	*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	02/09/11	*		*			*	*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	02/09/11	*		*			*	*		
041	Beach Dr. and Ontario Pl., NW	02/03/11	*		*			*	*		
042	Harvard St. and Beach Dr NW.	02/03/11	*		*			*	*		
043	Upstream of Harvard St. and Beach Dr NW.	02/03/11	*		*			*	*		
044	Kenyon Street and Beach Dr., NW.	02/03/11	*		*			*	*		
045	North of Beach Dr. and Walbridge Pl, NW.	02/03/11	*		*			*	*		
046	Piney Branch Parkway and Park Road, NW.	02/23/11	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	02/23/11	*		*			*	*		
048	South of Piney Branch Parkway and 17 th St.	02/23/11	*		*			*	*		
049	North of Piney Branch Parkway and 17 th St.	02/23/11	*		*			*	*		
050	Rock Creek Parkway and L St., NW	02/23/11	*		*			*	*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
051	Across Rock Creek Parkway, aligned with Olive St., NW.	02/03/11	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	02/03/11	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	02/03/11	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	02/03/11	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	02/25/11	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	02/25/11	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	02/23/11	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	02/03/11	*		*		*		*		

Notes:

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
Main	28	4	10	None			
Eastside	28	2	4	Screen #2	February 1-28	Screen being overhauled.	March 2011
Poplar Point	28	2 ¹	3	Pump 1, 2 & 3 Screens 1 and 2	February 1-28	Pumps need major overhaul. Bypass pumping and screening in progress	March 2011
Potomac	28	4	5	#5 pump o/s	February 1-28	Pump being rehabbed.	April 2011

Notes:

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

**Table 2-4
Pumping Stations – Preventive Maintenance**

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
Main	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
O St	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	2/25/2011	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

Check depth of screening in the screen room and schedule Vector truck as required

Check all safety equipment

Issue work order requests as required

**Table 2-5
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Storm Water/CSO Pumped To Anacostia River</i>		
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>	<i>Date</i>	<i>Volume (mg)</i>	<i>Screenings Collected (units)¹</i>
Main	1,453.89	51.92	N/A	N/A	N/A
O St	136.84	4.89	2/28/2011	6.60	Normal
Eastside	423.31	15.12	N/A	N/A	N/A
Poplar Point	548.11	19.58	N/A	N/A	N/A
Potomac	3,353.40	119.76	N/A	N/A	N/A
Rock Creek	176.67	6.31	N/A	N/A	N/A
Upper Anacostia	149.40	5.34	N/A	N/A	N/A
Earle Place	0.14	0.01	N/A	N/A	N/A

Notes:

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

2-4 Northeast Boundary Swirl Facility

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

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

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

**Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance**

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
2/27/11	Group A	

Notes:

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

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

<i>Date</i>	<i>Approx. Storm Duration¹(hrs)</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume² (mg)</i>	<i>Approx. Screenings Volume³(Cu. ft)</i>
2/2/2011	9.5	29.38	3.689	25.691	168.0
2/25/2011	4	3.71	3.710	0.000	2.4
2/28/2011	6	6.81	6.810	0.000	240.0
2/28/2011	3	2.07	2.070	0.000	0.0

Chlorination/Dechlorination Systems.

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

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

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

<i>Date</i>	<i>Chlor/ Dechlor System Used?</i>	<i>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO₃ (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
2/02/11	Yes	5	0 ²	Mixing Chamber	0.1	Mixing Chamber	4,540
2/02/11	Yes	5	0 ²	Anacostia River ¹	0.0	Anacostia River ¹	12,700

Notes:

1. River: River Outfall
2. NaHSO₃: sodium bisulfate pump out of service

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

<i>Date</i>	<i>Flow Composited Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO₂-N) mg/L</i>	<i>Nitrate (NO₃-N) mg/L</i>	<i>Total Kjeldahl Nitrogen (mg/L as N)</i>	<i>Total Nitrogen (mg/L)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Carbonaceous Biological Oxygen Demand (mg/L)</i>
2/02/11	194	0.04	0.48	5.58	6.10	0.85	21.2

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

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	2/20/11	No	N/A	N/A	N/A
14 - West	2/20/11	No	N/A	N/A	N/A
15	2/20/11	No	N/A	N/A	N/A
15A	2/20/11	No	N/A	N/A	N/A
16 - East	2/20/11	No	N/A	N/A	N/A
16 - West	2/20/11	No	N/A	N/A	N/A
24 - North	2/20/11	No	N/A	N/A	N/A
24 - Middle	2/20/11	No	N/A	N/A	N/A
24 - South	2/20/11	No	N/A	N/A	N/A
34	2/20/11	No	N/A	N/A	N/A
35	2/20/11	No	N/A	N/A	N/A
52	2/20/11	No	N/A	N/A	N/A

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

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	None	N/A
15	2/2/11	43min
15A	2/2/11	6h 29min
16 (E & W)	2/2/11	39 min
	2/25/11	1 min
24	2/2/11	6 min
	2/5/11	0.3 min
	2/25/11	6 min
34	2/2/11	7 min
	2/5/11	0.1 min
	2/21/11	0.1 min
	2/25/11	0.1 min
35	2/2/11	1h 29min
52	None	N/A
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
<i>Outfall Sewer Control Gates</i>	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

3. DRY WEATHER OVERFLOWS

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

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned this Month		Total CBs Cleaned This Year to Date	
						Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	16	0	16	16	7	7	23	23
2	4,714	4,112	2,316	58	0	81	64	42	39	123	103
3	3,555	461	-	0	0	44	30	412	0	456	30
4	2,782	1,985	159	108	0	991	369	1628	980	2,619	1,349
5	2,167	1,035	1,035	42	0	42	20	41	22	83	42
6	1,783	1,594	1,594	33	0	16	13	28	20	44	33
7	2,313	-	-	0	0	64	0	7	0	71	0
8	1,278	116	116	13	0	55	0	51	13	106	13
WASA Subtotal	20,183	10,871	5,954	270	0	1,309	512	2,216	1,081	3,525	1,593
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954	270						3,525	1,593
% Cleaned/Inspected to Date				4%	0%					17%	15%

4.2 BMP Demonstration Projects

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

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

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

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (CY)</i>
Netting System CSO 018	2/08/11	Good	None	Nets changed	250 lbs
Bar Rack CSO 040	2/09/11	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	2/03/11	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

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

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	19
<i>Days not Operating</i>	12
<i>Reason not Operating</i>	Strong winds, frozen river, and low tide levels.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	0
<i>Dates</i>	n/a
<i>Reason</i>	n/a
<i>Plan to Restore to Service</i>	n/a
<i>Volume Material Collected</i>	10 tons
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

Status: no activities this month.

5. MONITORING

5.1 Visual Wet Weather Surveys at Main & O

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

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

Date: 2/28/2011

Inspector's Initial: CW

CSO	Time of Observation	Overflow		Observed			Quantity of			Quantity of			REMARKS/OTHER
		Y	N	L	M	H	L	M	H	L	M	H	
009	4:00pm	X		X			X			X			
	6:00pm	X		X			X			X			
010	None												
011	None												
011a	None												
012	None												

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

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
2/1/2011	0.1	0.1	0.1	0.69
2/2/2011	0.56	0.59	0.65	0.09
2/3/2011	0	0	0	0
2/4/2011	0	0	0	0
2/5/2011	0.12	0.06	0.13	0.16
2/6/2011	0	0	0	0
2/7/2011	0	0	0	0.01
2/8/2011	0	0.01	0.01	0
2/9/2011	0	0	0	0
2/10/2011	0	0	0	0
2/11/2011	0	0	0	0
2/12/2011	0	0	0	0
2/13/2011	0	0	0	0
2/14/2011	0	0	0	0
2/15/2011	0	0	0	0
2/16/2011	0	0	0	0
2/17/2011	0	0	0	0
2/18/2011	0	0	0	0
2/19/2011	0	0	0	0
2/20/2011	0	0	0	0
2/21/2011	0	0.01	0.02	0.03
2/22/2011	0.02	0.11	0.18	0.2
2/23/2011	0	0	0	0
2/24/2011	0.03	0.01	0.04	0.06
2/25/2011	0.26	0.22	0.25	0.25
2/26/2011	0	0	0	0
2/27/2011	0	0	0	0.32
2/28/2011	0	0	0	0
TOTALS	1.09	1.11	1.38	1.81



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

**Monthly Operations Report
For
Combined Sewer System
Month: March 2011**

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

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

Monthly Operations Report for Combined Sewer System
Month: March 2011

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENANCE

2.1 Regulators

Regulators divert combined sewage to interceptors, which convey flow to BPWWTP for treatment. When flows exceed the capacities of the systems such as during significant rain events, regulators divert excess flow to CSO outfalls which discharge to receiving waters. The following table summarizes inspections of CSO regulators in the collection system.

**Table 2-1
Regulator Structures**

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	03/21/11	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	03/21/11	*			
5	Poplar Point Pumping Station	004	03/24/11	*			
6	Chicago Street and Railroad Ave, SE	005	03/07/11	*			
7	W Street and Railroad Ave, SE	005	03/07/11	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	N/A	*			
9	13 th Street and Ridge Place, SE	007	03/07/11	*			
11	"O" Street Pumping Station	011(a)	03/24/11	*			
12	Storm Pump Discharge at Main Pumping Station	011	03/24/11	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	03/28/11	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	03/24/11	*			
15	South Capitol and E Streets	010	03/24/11	*			
15a	Half and L Streets, SE	010	03/24/11	*			
15b	South Capitol and I Streets	010	03/08/11	*			
15c	South Capitol and I Streets	010	03/08/11	*			
16	North of Main Sewage Pumping Station	012	03/24/11	*			
17	4 th and N Streets, SE, Both Extended	013	03/07/11	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	03/28/11	*			
18	6 th and M Streets, SE	014	03/08/11	*			
19	9 th and M Streets, SE	015	03/08/11	*			
19a	9 th and M Streets, SE	015	03/08/11	*			
20	12 th and M Streets, SE	016	03/08/11	*			
20a	12 th and M Streets, SE	016	03/08/11	*			
21	14 th and M Streets, SE	017	03/08/11	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	03/31/11	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	03/31/11	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	03/31/11	*			
22d	Kentucky Ave and Potomac Street, SE	018	03/31/11	*			
22e	14 th Street and Kentucky Ave, SE	018	03/31/11	*			
23	Independence Ave, 21 st Street, SE, Extended	019	03/08/11	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				Good	Needs Work		
24a	East Capitol St, west of RFK stadium	019	03/08/11	*			
28	21 st and Constitution Ave, NW	020	03/17/11	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	03/17/11	*			
30	17 th and D Streets, NW	020	03/14/11	*			
31	15 th Street and Pennsylvania Ave, NW	020	03/14/11	*			
33	10 th and F Streets, NW	020	03/14/11	*			
34	23 rd Street, north of Constitution Ave, NW	020	03/14/11	*			
34a	23 rd Street near C Street, NW	020	03/24/11	*			
35	Northeast of Roosevelt Bridge, NW	021	03/17/11	*			
36	27 th and I Streets, NW	022	03/24/11	*			
36a	New Hampshire Ave and Eye Street, NW	022	03/17/11	*			
36b	19 th and L Streets, NW	022, 034	03/17/11	*			
36d	17 th and L Streets, NW	022, 034	03/08/11	*			
36g	18 th and M Streets, NW	022, 034	03/08/11	*			
36h	18 th and M Streets, NW	022, 034	03/08/11	*			
37	27 th and Eye Streets, NW	022	03/17/11	*			
38	29 th and K Streets, NW	024	03/07/11	*			
38a	30 th Street, south of K Street, NW	024	03/07/11	*			
39a	30 th and K Streets, NW	024	03/07/11	*			
39b	30 th and K Streets, NW	024	03/07/11	*			
41b	31 st and K Streets, NW	025	03/07/11	*			
41c	31 st and K Streets, NW	025	03/07/11	*			
42	Wisconsin Ave and K Street, NW	026	03/14/11	*			
43	Potomac and Water Streets, NW	027	03/14/11	*			
43a	Potomac and Water Streets, NW	027	03/14/11	*			
44	Water Street, west of Potomac St, NW	027	03/14/11	*			
45	36 th and M Streets, NW	028	03/15/11	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	03/15/11	*			
47	38 th Street and Reservoir Road, NW	029	03/15/11	*			
47a	37 th and T Streets, NW	029	03/15/11	*			
47b	37 th and T Streets, NW	029	03/15/11	*			
47c	38 th and W Streets, NW	029	03/15/11	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A	*			
50	26 and M Streets, NW	032	03/17/11	*			

Struct No.	Location	Associated NPDES Outfall	Date Inspected	Condition		Work Needed	Work performed
				Good	Needs Work		
51	N Street Extended, west of 25 th Street, NW	033	03/17/11	*			
52	22 nd Street between M and N Streets, NW	034	03/29/11	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	03/29/11	*			
53	22 nd and M Streets, NW	022, 034	03/29/11	*			
53a	22 nd and M Streets, NW	022, 034	03/29/11	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	03/08/11	*			
53c	L and 22 nd Streets, NW	022	03/08/11	*			
54	23 rd and O Streets, NW	034	03/22/11	*			
55	22 nd Street, south of Q Street, NW	035	03/22/11	*			
55a	22 nd Street, south of Q Street, NW	035	03/22/11	*			
56	23 rd and Massachusetts Ave, NW	036	03/22/11	*			
57	23 rd Street, south of Q Street, NW	036	03/22/11	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	N/A	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	03/22/11	*			
60	Connecticut Ave, east of Rock Creek, NW	039	03/08/11	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	03/21/11	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	03/21/11	*			
63	Harvard Street and Rock Creek Parkway, NW	042	03/21/11	*			
64	Adams Mill Road, south of Irving Street, NW	043	03/21/11	*			
65	Kenyon Street and Adams Mill Road, NW	044	03/21/11	*			
65a	Kenyon Street and Adams Mill Road, NW	044	03/21/11	*			
66	Adams Mill Road and Lamont Street, NW	045	03/21/11	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	03/21/11	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	03/21/11	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	03/21/11	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	03/21/11	*			
70i	5 th and Quackenbos Streets, NW	049	03/07/11	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	03/31/11	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	03/22/11	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	03/22/11	*			
73	O Street Extended and Rock Creek Parkway, NW	052	03/22/11	*			
74	Q Street, west of Rock Creek, NW	053	N/A	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	03/31/11	*			

<i>Struct No.</i>	<i>Location</i>	<i>Associated NPDES Outfall</i>	<i>Date Inspected</i>	<i>Condition</i>		<i>Work Needed</i>	<i>Work performed</i>
				<i>Good</i>	<i>Needs Work</i>		
77	Normanstone Dr Extended, west of Rock Creek, NW	056	03/31/11	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	03/15/11	*			
78	28th Street Extended, west of Rock Creek, NW	057	03/23/11	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	N/A	*			
84	26 th and P Streets, NW	060	03/22/11	*			
84a	26 th and P Streets, NW	060	03/22/11	*			

Notes:

1. For regulators noted as “visually checked outfall”, the outfall was visually observed to confirm no DWO was occurring.
2. Where construction is indicated to be in progress at a regulator, the contractor maintains flow (i.e. prevents DWO) during construction by flow diversion, bypass pumping, fluming, sandbagging or other means.

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	03/21/11	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	03/31/11	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	03/31/11	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	03/31/11	*		*		*		*		
009	O St. Sewage Pumping Station, SE	03/22/11	*		*		*		*		
010	O St. Sewage Pumping Station, SE	03/22/11	*			*			*		
011	Main Sewage Pumping Station, SE	03/22/11	*			*			*		
011(a)	Main Sewage Pumping Station, SE	03/22/11	*		*		*		*		
012	Main Sewage Pumping Station, SE	03/22/11	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	03/31/11	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	03/31/11	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	03/31/11	*			*			*		
016	12th and O Streets, SE	03/15/11	*		*		*		*		
017	M and Water Street, SE	03/15/11	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	03/15/11	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	03/29/11	*			*			*		
020	Rock Creek Parkway and Independence, NW	03/28/11	*		*		*		*		
021	Rock Creek Parkway and C St., NW	03/28/11	*			*			*		
022	Rock Creek Parkway and G St., NW	03/28/11	*		*		*		*		
024	South of 30 th and K Streets, NW	03/28/11	*		*			*	*		
025	South of 31st and K Streets, NW	03/28/11	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	03/28/11	*		*		*		*		
027	33 rd and Water Sts., NW	03/28/11	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	03/28/11	*			*			*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
029	Adjacent to C&O Canal, aligned with 38 th St. NW	03/28/11	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	N/A	*			*			*		
032	26th and M Street, NW.	03/17/11	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	03/17/11	*		*			*	*		
034	Just west of St. Francis Jr. High and north of N St., NW	03/22/11	*		*			*	*		
035	P St. Bridge and Rock Creek Parkway	03/22/11	*		*			*	*		
036	22nd Street, South of Q Street NW.	03/31/11	*		*			*	*		
037	Waterside Dr. and Rock Creek Parkway	N/A	*		*			*	*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	03/22/11	*		*			*	*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	03/08/11	*		*			*	*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	03/08/11	*		*			*	*		
041	Beach Dr. and Ontario Pl., NW	03/28/11	*		*			*	*		
042	Harvard St. and Beach Dr NW.	03/28/11	*		*			*	*		
043	Upstream of Harvard St. and Beach Dr NW.	03/28/11	*		*			*	*		
044	Kenyon Street and Beach Dr., NW.	03/28/11	*		*			*	*		
045	North of Beach Dr. and Walbridge Pl, NW.	03/28/11	*		*			*	*		
046	Piney Branch Parkway and Park Road, NW.	03/21/11	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	03/21/11	*		*			*	*		
048	South of Piney Branch Parkway and 17 th St.	03/21/11	*		*			*	*		
049	North of Piney Branch Parkway and 17 th St.	03/21/11	*		*			*	*		
050	Rock Creek Parkway and L St., NW	03/07/11	*		*			*	*		

NPDES Outfall	Location	Date Inspected	Outfall Condition		Tide Gate Present?		Tide Gate Condition		CSO Sign		Notes, Work Needed or Performed
			OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	
051	Across Rock Creek Parkway, aligned with Olive St., NW.	03/31/11	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	03/31/11	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	03/31/11	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	03/31/11	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	03/31/11	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	03/23/11	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	N/A	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	03/31/11	*		*		*		*		

Notes:

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

<i>Pumping Station</i>	<i>No. of Inspections</i>	<i>No. Screens</i>	<i>No. Pumps</i>	<i>Screens or Pumps Out of Service</i>	<i>Dates</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
Main	31	4	10	None			
Eastside	31	2	4	None			
Poplar Point	31	2 ¹	3	None			
Potomac	31	4	5	#5 pump o/s	March 1-31	Pump being rehabbed.	April 2011

Notes:

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

**Table 2-4
Pumping Stations – Preventive Maintenance**

<i>Pumping Station</i>	<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
Main	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
O St	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	3/25/2011	Group A	Add oil, grease bearings and replace packing if needed.

Notes:

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

Check depth of screening in the screen room and schedule Vector truck as required

Check all safety equipment

Issue work order requests as required

**Table 2-5
Pumping Stations – Pumpage**

<i>Pumping Station</i>	<i>Sanitary Pumpage</i>		<i>Storm Water/CSO Pumped To Anacostia River</i>		
	<i>Total Wastewater (mg)</i>	<i>Daily Average Wastewater (mg)</i>	<i>Date</i>	<i>Volume (mg)</i>	<i>Screenings Collected (units)¹</i>
Main	1,606.12	51.81			
O St	181.90	5.87	3/12/2011	50.80	Normal
			3/13/2011	84.00	Normal
			3/14/2011	33.20	Normal
			3/29/2011	69.70	Normal
Eastside	498.63	16.08			
Poplar Point	680.76	21.96			
Potomac	4,226.40	136.34			
Rock Creek	228.33	7.37			
Upper Anacostia	193.75	6.25			
Earle Place	0.20	0.01			

Notes:

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

2-4 Northeast Boundary Swirl Facility

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

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

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

**Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance**

<i>Date Performed</i>	<i>Type of Preventive Maintenance Performed¹</i>	<i>Comments</i>
3/27/11	Group A	

Notes:

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

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

<i>Date</i>	<i>Approx. Storm Duration¹(hrs)</i>	<i>Total Influent Volume (mg)</i>	<i>Total Foul Sewer Volume (mg)</i>	<i>Total Effluent Volume² (mg)</i>	<i>Approx. Screenings Volume³(Cu. ft)</i>
3/6/2011	8.5	38.82	1.753	37.067	0.0
3/7/2011	7	2.38	2.380	0.000	0.0
3/10/2011	8.5	20.71	4.648	16.062	0.0
3/10/2011	10	22.57	2.559	20.011	0.0
3/11/2011	7.5	4.62	4.620	0.000	0.0
3/16/2011	6	16.00	16.000	0.000	72.0
3/21/2011	3.3	4.75	4.750	0.000	48.0
3/23/2011	5.5	5.63	5.630	0.000	60.0

Chlorination/Dechlorination Systems.

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

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

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

<i>Date</i>	<i>Chlor/ Dechlor System Used?</i>	<i>Dosages</i>		<i>Residual Chlorine Test Results</i>		<i>E. Coli Test Results</i>	
		<i>NaOCl (mg/l)</i>	<i>NaHSO₃ (mg/l)</i>	<i>Location</i>	<i>Conc. (mg/l)</i>	<i>Site</i>	<i>Count Per 100ml</i>
3/6/2011	Yes	5	2	Mixing Chamber	0.1	Mixing Chamber	631
3/6/2011	Yes	5	2	Anacostia River ¹	0.0	Anacostia River ¹	1,170
3/10/2011	Yes	5	2	Mixing Chamber	0.2	Mixing Chamber	<10
3/10/2011	Yes	5	2	Anacostia River ¹	0.0	Anacostia River ¹	<10
3/10/2011	Yes	5	2	Mixing Chamber	0.2	Mixing Chamber	230
3/10/2011	Yes	5	2	Anacostia River ¹	0.0	Anacostia River ¹	45

Notes:

1. River: River Outfall

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

<i>Date</i>	<i>Flow Compositied Sample Results</i>						
	<i>Total suspended solids (mg/L)</i>	<i>Nitrite (NO₂-N) mg/L</i>	<i>Nitrate (NO₃-N) mg/L</i>	<i>Total Kjeldahl Nitrogen (mg/L as N)</i>	<i>Total Nitrogen (mg/L)</i>	<i>Total Phosphorus (mg/L)</i>	<i>Carbonaceous Biological Oxygen Demand (mg/L)</i>
3/06/11	70.0	0.00	0.61	2.22	2.83	0.44	10.9
3/10/11	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3/10/11	72.0	0.05	0.81	5.47	6.33	0.63	12.8

2.5 Inflatable Dams

WASA operates and maintains twelve inflatable dams at eight different locations. The structure number, location and number of dams per site are presented in Table 2-10. The inflatable dams consist of multi-ply elastomeric (i.e., “rubber”) fabric dams installed in major overflow conduits within the combined sewer system. The objective of the inflatable dam installation is to increase the effective depth to which the sewage must rise in the combined sewer before overflows occur. The effect of the installation is to retain a greater volume of combined sewage flow resulting from low to moderate intensity storms by maximizing storage within the CSS. During higher intensity storms, when the full carrying capacity of the overflow conduit is required to prevent upstream flooding, the dam is deflated automatically. Inflatable dam operations are summarized below:

**Table 2-11
Inflatable Dams – Inspections and Equipment in Service**

<i>Inflatable Dam Structure No</i>	<i>Date Inspected</i>	<i>Was Dam Out of Service During the Month?</i>	<i>Dates out of Service</i>	<i>Reason</i>	<i>Schedule to Restore to Service</i>
14 - East	3/20/11	No	N/A	N/A	N/A
14 - West	3/20/11	No	N/A	N/A	N/A
15	3/20/11	No	N/A	N/A	N/A
15A	3/20/11	No	N/A	N/A	N/A
16 - East	3/20/11	No	N/A	N/A	N/A
16 - West	3/20/11	No	N/A	N/A	N/A
24 - North	3/20/11	No	N/A	N/A	N/A
24 - Middle	3/20/11	No	N/A	N/A	N/A
24 - South	3/20/11	No	N/A	N/A	N/A
34	3/20/11	No	N/A	N/A	N/A
35	3/20/11	No	N/A	N/A	N/A
52	3/20/11	No	N/A	N/A	N/A

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

<i>Inflatable Dam Structure No.</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>
14 (E & W)	None	N/A
15	3/6 3/7 3/10 3/11 3/16 3/21 3/23	22min 17 min 5h 5min 2 min 20 min 2 min 13 min
15A	3/6 3/7 3/10 3/11 3/16 3/21 3/23	1h 47min 5h 55min 2h 48min 2h 2min 6h 32min 14 min 2 min
16 (E & W)	3/6 3/10 3/16	1h 32min 11 min 15 min
24	3/6 3/7 3/10 3/11 3/16 3/21 3/23 3/24	52 min 6 min 0.2 min 6 min 6 min 6 min 0.3 min 6 min
34	3/6 3/10 3/16 3/18 3/21 3/23	11 min 0.1 min 0.1 min 0.1 min 0.2 min 0.01 min
35	3/6 3/10 3/16 3/21	2h 6min 29 min 22 min 3 min
52	None	N/A
<i>Structures on Outfall Sewers</i>	<i>Overflow Dates</i>	<i>Estimated Duration of Overflow</i>

Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
<i>Outfall Sewer Control Gates</i>		
	<i>Operational Status</i>	<i>Position</i>
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

Note:

3. DRY WEATHER OVERFLOWS

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

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

Ward	Total CBs	CBs in CSS	Inspections			Cleaning					
			CBs in Anacostia CSS	Total Anacostia CBs Inspected Once this Year	Total Anacostia CBs Inspected Twice this Year	CBs Cleaned Thru Last Month		CB's Cleaned this Month		Total CBs Cleaned This Year to Date	
						Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	46	0	23	23	76	74	99	97
2	4,714	4,112	2,316	516		123	103	182	111	305	214
3	3,555	461	-	0	0	456	30	2425	605	2881	635
4	2,782	1,985	159	159	108	2,619	1,349	248	221	2867	1570
5	2,167	1,035	1,035	350	0	83	42	86	86	169	128
6	1,783	1,594	1,594	88	0	44	33	70	55	114	88
7	2,313	-	-	0	0	71	0	137	0	208	0
8	1,278	116	116	46	0	106	13	35	33	141	46
WASA Subtotal	20,183	10,871	5,954	1,205	108	3,525	1,593	3,259	1,185	6,784	2,778
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954	1,205	108					6,784	2,778
% Cleaned/Inspected to Date				20%	2%					34%	25%

4.2 BMP Demonstration Projects

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

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

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

<i>Facility</i>	<i>Date Inspected</i>	<i>Condition</i>	<i>Work Needed</i>	<i>Work performed</i>	<i>Material Removed (CY)</i>
Netting System CSO 018	3/16/2011	Good	None	Nets changed	275 pounds
Bar Rack CSO 040	3/8/2011	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	3/28/2011	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

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

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

<i>Program Operation</i>	5-day work week, excluding holidays, weather permitting
<i>Work Days this month:</i>	23
<i>Days not Operating</i>	4
<i>Reason not Operating</i>	Strong winds.
<i># Skimmer in Fleet</i>	2 skimmers
<i># Skimmers Out of Service</i>	0
<i>Dates</i>	n/a
<i>Reason</i>	n/a
<i>Plan to Restore to Service</i>	n/a
<i>Volume Material Collected</i>	90 tons
<i>Nature of Material</i>	Bottles, cans, natural debris and plastics.

4.4 CSS Litter Control

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

Status: no activities this month.

5. MONITORING

5.1 Visual Wet Weather Surveys at Main & O

Condition Report

Bar Racks at Main and O Street Storm Pumps

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

Inspector: CW

Date Inspected: 3/31/11

Pumping Station	Inspector	Date Inspected	Condition		Work Needed	Work Performed or Schedule for Completion
			Good	Needs Work		
Bar Racks at O Street Storm Pumps (CSO 010)	CW	3/31/11	X			
Bar Racks at Main Storm Pumps (CSO 011)	CW	3/31/11	X			

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS
3/1/2011	0	0	0	0
3/2/2011	0	0	0	0
3/3/2011	0	0	0	0
3/4/2011	0	0	0	0
3/5/2011	0	0	0	0
3/6/2011	1.11	1.26	1.27	1.41
3/7/2011	0.04	0.02	0.03	0
3/8/2011	0.01	0.02	0.02	0.23
3/9/2011	0.01	0.02	0.02	0.23
3/10/2011	1.36	1.33	1.25	1.6
3/11/2011	0.01	0.01	0	0.01
3/12/2011	0	0	0	0
3/13/2011	0	0	0	0
3/14/2011	0	0	0	0
3/15/2011	0.01	0.1	0.1	0.57
3/16/2011	0	0.32	0.44	0
3/17/2011	0	0	0	0
3/18/2011	0	0	0	0
3/19/2011	0	0	0	0
3/20/2011	0	0	0	0
3/21/2011	0.01	0.21	0.21	0.3
3/22/2011	0	0	0	0
3/23/2011	0.18	0.26	0.38	0.39
3/24/2011	0.02	0.01	0.03	0.04
3/25/2011	0	0	0	0
3/26/2011	0	0	0	0
3/27/2011	0	0	0.01	0.01
3/28/2011	0	0	0	0
3/29/2011	0	0	0	0
3/30/2011	0	0.12	0.14	0.15
3/31/2011	0	0	0	0
TOTALS	2.76	3.68	3.9	4.94

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

Period: January, February, March 2011

SCENARIO: Q1Y2011, 4-11-2011

NPDES No.	Description	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
Anacostia CSOs							
005	Chicago St and Railroad Station SE	10	1.72	54.00	5.40	13.50	0.25
006	Good Hope Road, West of Nichols Ave.,SE	0	0.00	0.00	0.00	0.00	0.00
007	13 th Street and Ridge Place,SE	2	0.34	3.00	1.50	2.25	0.75
009	2nd Street, 300 feet North of N Place, SE	3	0.32	4.75	1.58	2.25	0.75
010	O Street SewagePumping Station, SE (pumped Overflow)	5	23.02	5.75	1.15	3.00	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	1	0.83	0.25	0.25	0.25	0.25
011a	South of Main SewagePumping Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
012	North of Main SewagePumping Station, SE (Tiber Creek)	2	0.21	0.75	0.38	0.50	0.25
013	4th and N Streets, SE	4	0.87	10.25	2.56	3.75	1.25
014	6th and M Streets, SE	9	4.37	38.25	4.25	10.75	1.25
015	9th and M Streets, SE	2	0.02	3.00	1.50	2.00	1.00
016	12th and M Streets, SE	2	0.38	2.75	1.38	2.25	0.50
017	14th and M Streets, SE	7	2.88	31.00	4.43	10.50	1.25
018	Barney Circle andPennsylvania Ave, SE	13	3.65	109.00	8.38	29.25	1.25
019	Northeast Boundary - Swirl Effluent	5	64.41	42.25	8.45	13.25	3.25
019	Northeast Bound. - Swirl Bypass	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL		103.01				
Potomac CSOs							
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
020	23rd Street, North ofConstitution Ave, NW (Easby Point)	1	0.16	2.25	2.25	2.25	2.25
021	Northeast ofRoosevelt Bridge, NW	3	13.54	5.75	1.92	4.00	0.75
022	27th and K Streets, NW	6	0.05	17.75	2.96	6.75	0.25
024	30th and K Streets, NW	2	1.30	5.25	2.63	4.00	1.25
025	31st & K St NW	0	0.00	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	Water Street West ofStreet, NW	12	8.87	147.00	12.25	30.25	4.50
028	36th and M Streets, NW	5	0.29	13.75	2.75	6.50	0.25
029	Canal Road 1000 feet east of Rock Creek,NW	0	0.00	0.00	0.00	0.00	0.00
	SUBTOTAL		24.22				
Rock Creek							
031	Pennsylvania Avenue, East Rock 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
033	N Street extendedwest of 25th Street,NW	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	1	0.00	1.75	1.75	1.75	1.75
037	Northwest of Belmontand Rock Creek and Potomac Parkway	0	0.00	0.00	0.00	0.00	0.00
038	North of Belmont Road,east of Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
039	Connecticut Avenue east of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
040	Biltmore Street extended east of RockCreek, NW	0	0.00	0.00	0.00	0.00	0.00
041	Ontario extended and Rock Creek Parkway	0	0.00	0.00	0.00	0.00	0.00

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results

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SCENARIO: Q1Y2011, 4-11-2011

NPDES No.	Description	Number of Overflows (Occurrences)	CSO Overflow Volume (mg)	Total Duration of Overflow (hrs)	Avg Duration of Overflow (hrs)	Maximum Duration of Overflow (hrs)	Minimum Duration of Overflow (hrs)
042	Harvard Street and RockCreek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
043	Adams Mill Road South of Irving Street, NW	0	0.00	0.00	0.00	0.00	0.00
044	Kenyon Street and Adams Mill Road, NW	0	0.00	0.00	0.00	0.00	0.00
045	Adams Mill Road and Lamont Street, NW	0	0.00	0.00	0.00	0.00	0.00
046	Park Road south of Piney Branch Parkway, NW	0	0.000	0.00	0.00	0.00	0.00
047	Ingleside Terrace extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
048	Mt. Pleasant Street extended and Piney Branch Parkway	0	0.00	0.00	0.00	0.00	0.00
049	Piney Branch and LamontStreet, NW	2	1.05	4.75	2.38	3.25	1.50
050	28th Street west of 16th Street, NW	0	0.00	0.00	0.00	0.00	0.00
051	Olive Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
052	O Street extended and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
053	O Street west of Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
054	West Side of Rock Creek300 ft. south of Mass. Ave, NW	0	0.00	0.00	0.00	0.00	0.00
056	Normanstone Drive extended west of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
057	28th Street extended west of Rock Creek, NW	0	0.00	0.00	0.00	0.00	0.00
058	Connecticut Avenue and Rock Creek Parkway, NW	0	0.00	0.00	0.00	0.00	0.00
060	P St and 26 th St, NW	0	0.0000	0.00	0.00	0.00	0.00
	SUBTOTAL		1.05				
	TOTAL		128.28				

[https://tftp.jacobssf.com/Documents/05/0501/130 DSS/Quarterly Reports/2011/Q1/\[Copy of Q1Y2011_Report_11Apr2011.xlsx\]Q1Y2011](https://tftp.jacobssf.com/Documents/05/0501/130 DSS/Quarterly Reports/2011/Q1/[Copy of Q1Y2011_Report_11Apr2011.xlsx]Q1Y2011)

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