

QUARTERLY OPERATIONS REPORT

DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

SECOND QUARTER, 2005

Prepared By:

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



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For

Combined Sewer System Month: April, 2005

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

Monthly Operations Report for Combined Sewer System Month: Aprily, 2005

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENACE

2.1 Regulators

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

Table 2-1 Regulator Structures

		Anna sinta d NDDEC		Co	ondition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	04/07/05	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	04/07/05	*			
5	Poplar Point Pumping Station	004	04/08/05	*			
6	Chicago Street and Railroad Ave, SE	005	04/08/05		*	Build up of sticks from rainfall, causing the flow to backup at the dam and overflow into the river.	Clean the line and remove the sticks.
7	W Street. and Railroad Ave, SE	005	04/08/05	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	04/01/05	*			
9	13 th Street and Ridge Place, SE	007	04/05/05	*			
11	"O" Street Pumping Station	011(a)	04/21/05	*			
12	Storm Pump Discharge at Main Pumping Station	011	04/21/05	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	04/05/05	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	04/14/05	*			
15	South Capitol and E Streets	010	04/14/05	*			
15a	Half and L Streets, SE	010	04/14/05	*			
15b	South Capitol and I Streets	010	04/26/05	*			
15c	South Capitol and I Streets	010	04/26/05	*			
16	North of Main Sewage Pumping Station	012	04/14/05	*			
17	4 th and N Streets, SE, Both Extended	013	04/25/05	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	04/26/05	*			
18	6 th and M Streets, SE	014	04/05/05	*			
19	9 th and M Streets, SE	015	04/05/05	*			
19a	9 th and M Streets, SE	015	04/05/05	*			
20	12 th and M Streets, SE	016	04/05/05	*			

		Associated NPDES		Ca	ondition		
Struct No.	Location	Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
20a	12 th and M Streets, SE	016	04/05/05	*			
21	14 th and M Streets, SE	017	04/21/05	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	04/19/05	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	04/19/05	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	04/19/05	*			
22d	Kentucky Ave and Potomac Street, SE	018	04/01/05	*			
22e	14 th Street and Kentucky Ave, SE	018	04/01/05	*			
23	Independence Ave, 21st Street, SE, Extended	019	04/23/05	*			
24a	East Capitol St, west of RFK stadium	019	04/23/05	*			
28	21st and Constitution Ave, NW	020	04/26/05	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	04/26/05	*			
30	17 th and D Streets, NW	020	04/11/05	*			
31	15 th Street and Pennsylvania Ave, NW	020	04/11/05	*			
33	10 th and F Streets, NW	020	04/11/05	*			
34	23 rd Street, north of Constitution Ave, NW	020	04/26/05	*			
34a	23 rd Street near C Street, NW	020	04/26/05	*			
35	Northeast of Roosevelt Bridge, NW	021	04/27/05	*			
36	27 th and I Streets, NW	022	04/19/05	*			
36a	New Hampshire Ave and Eye Street, NW	022	04/19/05	*			
36b	19th and L Streets, NW	022, 034	04/15/05	*			
36d	17 th and L Streets, NW	022, 034	04/15/05	*			
36g	18 th and M Streets, NW	022, 034	04/15/05	*			
36h	18 th and M Streets, NW	022, 034	04/15/05	*			
37	27 th and Eye Streets, NW	022	04/19/05	*			
38	29th and K Streets, NW	024	04/08/05	*			
38a	30 th Street, south of K Street, NW	024	04/15/05	*			
39a	30 th and K Streets, NW	024	04/15/05	*			

		Associated NPDES		Сс	ondition		
Struct No.	Location	Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
39b	30 th and K Streets, NW	024	04/15/05	*			
41b	31st and K Streets, NW	025	04/15/05	*			
41c	31st and K Streets, NW	025	04/15/05	*			
42	Wisconsin Ave and K Street, NW	026	04/15/05	*			
43	Potomac and Water Streets, NW	027	04/08/05	*			
43a	Potomac and Water Streets, NW	027	04/08/'05	*			
44	Water Street, west of Potomac St, NW	027	04/08/05	*			
45	36 th and M Streets, NW	028	04/15/05	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	04/01/05	*			
47	38 th Street and Reservoir Road, NW	029	04/01/05	*			
47a	37th and T Streets, NW	029	04/01/05	*			
47b	37th and T Streets, NW	029	04/01/05	*			
47c	38th and W Streets, NW	029	04/01/05	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	04/11/05	*			
50	26 and M Streets, NW	032	04/11/05	*			
51	N Street Extended, west of 25 th Street, NW	033	04/11/05		*	Build up of grease clogged the 10 inches diversion connection causing the overflow to backup at the dam and overflow into the river.	Unclogged the 10 inches diversion connection at structure #51.
52	22 nd Street between M and N Streets, NW	034	04/27/04	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	04/26/05	*			
53	22 nd and M Streets, NW	022, 034	04/26/05	*			
53a	22 nd and M Streets, NW	022, 034	04/26/05	*			
53b	L Street between 21 st Street and New Hampshire Ave, NW	022, 034	04/26/05	*			
53c	L and 22 nd Streets, NW	022	04/26/05	*			
54	23 rd and O Streets, NW	034	04/27/05	*			
55	22 nd Street, south of Q Street, NW	035	04/18/05	*			
55a	22 nd Street, south of Q Street, NW	035	04/18/05	*			

		Associated NPDES		С	ondition		
Struct No.	Location	Associatea NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
56	23 rd and Massachusetts Ave, NW	036	04/18/05	*			
57	23 rd Street, south of Q Street, NW	036	04/18/05	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	04/19/05	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	04/19/05	*			
60	Connecticut Ave, east of Rock Creek, NW	039	04/08/05	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	04/08/05	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	04/08/05	*			
63	Harvard Street and Rock Creek Parkway, NW	042	04/08/05	*			
64	Adams Mill Road, south of Irving Street, NW	043	04/12/05	*			
65	Kenyon Street and Adams Mill Road, NW	044	04/12/05	*			
65a	Kenyon Street and Adams Mill Road, NW	044	04/12/05	*			
66	Adams Mill Road and Lamont Street, NW	045	04/12/05	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	04/12/05	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	04/12/05	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	04/12/05	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	04/12/05	*			
70i	5 th and Quackenbos Streets, NW	049	04/08/05	*			
71	28 th Street, west of Rock Creek Parkway, NW	050	04/19/05	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	04/18/05	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	04/18/05	*			

		Associated NPDES			ondition		
Struct No.	Location	Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
73	O Street Extended and Rock Creek Parkway, NW	052	04/18/05	*			
74	Q Street, west of Rock Creek, NW	053	04/18/05	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	04/07/05	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	04/07/05	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	04/07/05	*			
78	28th Street Extended, west of Rock Creek, NW	057	04/07/05	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	04/12/05	*			
84	26 th and P Streets, NW	060	04/18/05	*			
84a	26 th and P Streets, NW	060	04/18/05	*			

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

			(Outfall		Gate	Tide G	Tide Gate			
			Co	ondition	Pres	ent?	Condit	ion	(CSO Sign	
NPDES	Lagration	Data Income et al		Needs			_	Needs			N-4 W-ul N-d-d-d D
Outfall	Location	Date Inspected	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and										
003	Chanute, SW	04/07/05	*		*		*		*		
005	Across from Navy Yard, aligned with	0.4.10.0.10.5			*		*		*		
005	Parsons Ave., SE	04/08/05	*		*		*		*		
006	Good Hope Road and Welsh Memorial	0.4/20/05	*		*		*		*		
006	Bridge	04/29/05									
007	Between 11 th St. and Anacostia Bridges, SE	04/29/05	*		*		*		*		
009	O St. Sewage Pumping Station, SE	04/29/05	*		*		*		*		
010	O St. Sewage Pumping Station, SE	04/29/05	*			*			*		
011	Main Sewage Pumping Station, SE	04/29/05	*			*			*		
011(a)	Main Sewage Pumping Station, SE	04/29/05	*		*		*		*		
012	Main Sewage Pumping Station, SE	04/29/05	*		*		*		*		
	Southeast Federal Center, aligned with 4 th										
013	St.	04/25/05	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	04/21/05	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	04/21/05	*			*			*		
016	12th and O Streets, SE	04/21/05	*		*		*		*		
017	M and Water Street, SE	04/21/05	*		*		*		*		
	East of Barney Circle and South of										
018	Pennsylvania Avenue Bridge, SE	04/21/05	*		*		*		*		
	Adjacent to Service Drive behind swirl										
019	facility and D.C. General Hospital	04/25/05	*			*			*		
	Rock Creek Parkway and Independence,										
020	NW	04/29/05	*		*		*		*		
021	Rock Creek Parkway and C St., NW	04/29/05	*			*			*		

				Outfall ondition		Gate sent?		Tide Gate Condition		CSO Sign	
NPDES			C	Needs	Pres	sent?	Conaii	Needs	_	CSO Sign 	
Outfall	Location	Date Inspected	ОК	Work	Yes	No	OK	Work		Needs Work	Notes, Work Needed or Performed
022	Rock Creek Parkway and G St., NW	04/28/05	*		*		*		*		
024	South of 30 th and K Streets, NW	04/28/05	*		*			*	*		WASA has developed a capitol project to design and construct a replacement gate for improved performance.
025	South of 31st and K Streets, NW	04/28/05	*		*		*		*		·
026	Wisconsin Avenue and Water Street, NW	04/28/05	*		*		*		*		
027	33 rd and Water Sts., NW	04/28/05	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	04/28/05	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	04/28/05	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	04/11/05	*			*			*		
032	26th and M Street, NW.	04/11/05	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	04/11/05	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	04/25/05	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	04/25/05	*		*		*		*		
036	22nd Street, South of Q Street NW.	04/25/05	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	04/19/05	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	04/19/05	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	04/08/05	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	04/08/05	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	04/08/05	*		*		*		*		
042	Harvard St. and Beach Dr NW.	04/28/05	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	04/28/05	*		*		*		*		

				Outfall ondition		Gate sent?	Tide G Condi			CCO Sion	
NPDES			C		Pres	ieni?	Conan		'	CSO Sign	
Outfall	Location	Date Inspected	OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	Notes, Work Needed or Performed
	Kenyon Street and Beach Dr., NW.	04/28/05	*	WUIK	*	110	*	WUIK	*	receds work	
			*		*		*		*		
	North of Beach Dr. and Walbridge Pl, NW.	04/28/05			*		*				
046	Piney Branch Parkway and Park Road, NW.	04/12/05	*			*			*		
	Piney Branch Parkway and Ingleside Terrace	04/12/05	*		*		*		*		
047		04/12/05	•		•		*		·		
	South of Piney Branch Parkway and 17 th St.										
048	South of Thiey Branen Larkway and 17 St.	04/12/05	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	04/12/05	*		*		*		*		
	Rock Creek Parkway and L St., NW	04/19/05	*		*		*		*		
			*		*		*				
	Across Rock Creek Parkway, aligned with Olive St., NW.		*		*		*		*		
051		04/21/05									
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	04/21/05	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	04/25/05	*		*		*		*		
	Massachusetts Avenue and Rock Creek Parkway, NW.	04/07/05	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	04/07/05	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	04/07/05	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	04/12/05	*			*			*		
	North of P Street Bridge and Rock Creek Pkwy, NW	04/25/05	*		*		*		*		

1. Outfall is submerged and not visible. CSO is performing acceptably as evidenced by lack of capacity/flooding issues associated with pipe.

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

						1 1	
Pumping	No. of	No.	No.	Screens or Pumps			
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	12				
				None			
Eastside	31	2	4	None			
Poplar Point	31	2 1	3	Screen # 1	03/18/05	Rake misaligned	07/31/05
Potomac	31	4	5	None			

Notes:

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

Table 2-4
Pumping Stations – Preventive Maintenance

		Tumping Stations Treventer	
		Type of Preventive Maintenance	
Pumping Station	Date Performed	Performed ¹	Comments
Main	30 days	Group A	Add oil, grease bearings and replace packing if needed.
O St	30 days	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	30 days	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	30 days	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	30 days	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	30 days	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	30 days	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	30 days	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**

		r umping Stat	10					
	Sanitary .	Pumpage	Storm Wo	Storm Water/CSO Pumped To Anacostia River				
	Total	Daily Average			Screenings			
Pumping Station	Wastewater (mg)	Wastewater (mg)	Date	Volume (mg)	Collected (units)			
Main	2,975.10	99.17	N/A	N/A	N/A			
O St ¹	213.90	7.13			Normal			
			4/2/05	35.7				
			4/3/05	5.9				
Eastside	130.60	4.35	N/A	N/A	N/A			
Poplar Point	545.90	18.20	N/A	N/A	N/A			
Potomac	4,218.50	140.62	N/A	N/A	N/A			
Rock Creek	326.40	10.88	N/A	N/A	N/A			
Upper Anacostia	78.80	2.63	N/A	N/A	N/A			
Earle Place	0.76	0.03	N/A	N/A	N/A			

Notes:

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

2-6 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
04/27/05	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
4/27/05	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

Twitheast boundary Swirt Facility - Wet Weather Operations											
	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)						
4/2/05	10	13.49	6.2	7.29	1.20(96)						
4/2/05	8	29.45	2.0	27.45	0.55(44)						
4/2/05	8	15.60	2.70	12.90	1.50(120)						
4/3/05	8	8.3	2.34	5.96	0.50(40)						
4/8/05	6	5.81	5.81	0	0.50(40)						
4/22/05	4	3.39	3.39	0	0.65(52)						
4/23/05	4	1.98	1.98	0	1.75(140)						
4/30/05	8	8.24	5.71	2.53	0.20(16)						
4/30/05	4	5.3	5.3	0	0.65(52)						
4/30/05	9	8.46	3.6	4.86	0.5.(40)						

Chlorination/Dechlorination Systems.

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

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

Table 2-9 Northeast Boundary Swirl Facility - Disinfection Performance

	Chlor/			Residual Chlorii	ne Test					
	Dechl	Do	sages	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	
4/2/05	Yes	5	2	Mix Chamber	1.2	Mix Chamber	32,000	Mix Chamber	3,100	
4/2/05	Yes	5	2	Anacostia River	0.1	Anacostia River	29,000	Anacostia River	45,000	
4/2/05	Yes	5	2	Mix Chamber	0.5	Mix Chamber	13,600	Mix Chamber	24,000	
4/2/05	Yes	5	2	Anacostia River	0.0	Anacostia River	23,000	Anacostia River	41,000	
4/2/05	Yes	5	2	Mix Chamber	0.5	Mix Chamber	15,400	Mix Chamber	20,000	
4/2/05	Yes	5	2	Anacostia River	0.0	Anacostia River	4,100	Anacostia River	11,800	
4/2/05	Yes	5	2	Mix Chamber	2.5	Mix Chamber	126	Mix Chamber	54	
4/2/05	Yes	5	2	Anacostia River	0.0	Anacostia River	15,400	Anacostia River	23,000	
4/3/05	Yes	5	2	Mix Chamber	0.4	Mix Chamber	4,300	Mix Chamber	4,800	
4/3/05	Yes	5	2	Anacostia River	0.0	Anacostia River	3,700	Anacostia River	9,091	
4/30/05	Yes	5	2	Mix Chamber	0.4	Mix Chamber	49,00	Mix Chamber	160,000	
4/30/05	Yes	5	2	Anacostia River	0.0	Anacostia River	38,00	Anacostia River	310,000	

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

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

				Flow Composited So	ample Results		
Date	Total suspended solids (mg/L)	Nitrite (NO2-N) mg/L	Nitrate (NO3-N)) mg/L	Total Kjeldahl Nitrogen (mg/L as N)	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Carbonaceous Biological Oxygen Demand (mg/L)
4/02/05	122	< 0.05	0.80	2.38	3.18	0.43	12.5
4/03/05	86.0	< 0.05	0.97	2.60	3.57	0.51	18.5
4/30/05	63.0	0.05	0.78	3.48	4.31	0.66	28.8

2.10 Inflatable Dams

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

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

Inflatable Dam		Was Dam Out of Service)		Schedule to Restore to
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	4/26/05	No	N/A	N/A	N/A
14 - West	4/26/05	No	N/A	N/A	N/A
15	4/26/05	No	N/A	N/A	N/A
15A	4/26/05	No	N/A	N/A	N/A
16 - East	4/26/05	No	N/A	N/A	N/A
16 - West	4/26/05	No	N/A	N/A	N/A
24 - North	4/26/05	No	N/A	N/A	N/A
24 - Middle	4/26/05	No	N/A	N/A	N/A
24 - South	4/26/05	No	N/A	N/A	N/A
34	4/26/05	No	N/A	N/A	N/A
35	4/26/05	No	N/A	N/A	N/A
52	4/26/05	No	N/A	N/A	N/A

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

innatable Dams & SCADA Sites - Wet Weather Operations										
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)								
14 (E & W)	None	N/A								
15	4/2/05	5hr 53mins								
	4/3/05	9hrs 48								
15A	4/3/05	13hrs 27mins								
	4/17/05	5hrs 37min								
16 (E & W)	4/2/05	5hr 29mins								
	4/23/05	10mins								
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										

3. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

Table 3-1
Dry Weather Overflows

21/11/00/10/10						
Anacostia Park, S.E. at NPDES Outfall #005 - Good Hope Road and Welsh						
Memorial Bridge						
A build up of sticks from rainfall earlier in the day clogged the 10 inch diversion						
connection at structure #6, Chicago Street and Railroad St., SE, causing the flow						
to backup at the dam and overflow into the river						
4/8/05 at 3:10 p.m						
Clean the line and remove the sticks.						
4/8/05 at 6: 00 p.m						
2.2						
Yes, Anacostia River						
Evaluate the operation of the structure and monitor the system.						

.Location:	NPDES Outfall #033 - N Street extended west of 25th Street, NW
	A build up of grease clogged the 10 inch diversion connection at structure #51,
Cause	(25th and N St., NW), causing the flow to backup at the dam and overflow into
	the river.
Date/ Time Discovered	4/11/05 at 11:20 a.m.
Action Taken	Unclogged the 10 inches diversion connection at structure #51.
Date/Time Discharge Ceased	4/11/05 at 11:30 a.m.
Estimated Volume (mg)	1.2
Did Overflow Reach Receiving water?	Yes, Rock Creek river
	Contract to re-line the 10 inches diversion drop connection and the 24 inch
	overflow is scheduled to start in the summer. Additionally, we will work with the
	Department of Health and DCRA's (Office of the Chief Plumbing Inspector) to
Action taken to prevent reoccurrence	identify restaurants that may be contributing to the grease problem.

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

				Inspe	ections			Clea	ıning		
		CBs in	CBs in Anacostia	Total CBs Inspected Once this	Total CBs Inspected Twice this	CBs Clea Last N			eaned this		s Cleaned r to Date
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	350	2377	2327	0	0	2377	2327
2	4,714	4,112	2,316	624	0	1631	1336	0	0	1631	1336
3	3,555	461	-	0	0	1790	751	2473	303	4263	1054
4	2,782	1,985	159	14	0	131	66	0	0	131	66
5	2,167	1,035	1,035	119	0	204	119	0	0	204	119
6	1,783	1,594	1,594	149	0	193	124	27	25	220	149
7	2,313	-	-	0	0	282	0	132	0	414	0
8	1,278	116	116	65	0	416	65	0	0	416	65
WASA Subtotal	20,183	10,871	5,954	1705	0	7,024	4,788	2632	328	9,656	5,116
DDOT (via VMS) Subtotal				0	0	0	0	0	0	0	0
Grand Total	20,183	10,871	5,954	1705	0	7,024	4,788	2632	328	9,656	5,116
% Cleaned/Inspected to Date				29%	6%					48%	47%

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 Netting System CSO 018	Date Inspected 4/6/05 4/18/05	Condition Good	Work Needed None	Work performed Nets emptied.	Material Removed (CY) 150 lbs.
Bar Rack CSO 040	4/8/05	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	4/8/05	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

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

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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	4
Reason not Operating	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	80 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: 4/2/05 Inspector's Initials: CD

		Ove	rflow	Ol	bserv	ed		antity		Quai	ntity o	f	
		Obse	rved	Ove	rflow	Rate	Flo	oatabl	es	Man-	-Made		
	Time of												
	Observa												
CSO	tion	Υ	N	L	M	Н	L	M	Н	L	M	Н	REMARKS/OTHER
	2.pm	Х		Х			Х			Х			
009	3 pm			v			v			Y			
009	.5 DIII	Х		X			Х			_х			
	4 pm	Х		Х			Х			Х			
	. p												
010													
011													
011a													
Ulla													
012													

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

Date: 4/2/05 Inspector's Initials: CD

		Overflow Observed Quantity of Quantity Observed Overflow Rate Floatables Man-I		ntity c									
cso	Time of Observati	Υ	N		М	Н	L	М	Н		M	н	REMARKS/OTHER
<u> </u>	on		IN	<u> </u>	IVI	11	¥	IVI	п	L v	IVI	п	REMARKS/OTHER
009	4.pm	Х		X			X			X			
010													
011													
011a													
012													

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

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS	National Airport
		•			
4/1/2005	0	0	0	0	0.3
4/2/2005	0	0	0	0	1.79
4/3/2005	0	0	0	0	0.13
4/4/2005	0	0	0	0	0
4/5/2005	0	0	0	0	0
4/6/2005	0	0	0	0	0
4/7/2005	0.16	0.27	0.13	0.11	0.12
4/8/2005	0.11	0.27	0.46	0.2	0.21
4/9/2005	0	0	0	0	0
4/10/2005	0	0	0	0	0
4/11/2005	0	0	0	0	0
4/12/2005	0	0	0	0	0.01
4/13/2005	0	0	0	0	Т
4/14/2005	0	0	0	0	0
4/15/2005	0	0	0	0	0
4/16/2005	0	0	0	0	0
4/17/2005	0	0	0	0	0
4/18/2005	0	0	0	0	0
4/19/2005	0	0	0.01	0	Т
4/20/2005	0	0	0	0	0
4/21/2005	0.13	0.16	0.11	0.1	0.12
4/22/2005	0.21	0.22	0.18	0.22	0.16
4/23/2005	0.36	0.25	0.35	0.27	0.32
4/24/2005	0	0	0	0	Т
4/25/2005	0	0	0	0	Т
4/26/2005	0	0	0	0	Т
4/27/2005	0.01	0	0	0	0
4/28/2005	0	0	0	0	0
4/29/2005	0.01	0	0	0	0.01
4/30/2005	0.86	1.03	1.09	0.94	1.16
Total	1.85	2.2	2.33	1.84	4.33



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For Combined Sewer System Month: May, 2005

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: May, 2005

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENACE

2.1 Regulators

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

Table 2-1 Regulator Structures

		Anna sinta d NDDES		Condition			
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	5/24/05	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	5/24/05	*			
5	Poplar Point Pumping Station	004	5/25/05	*			
6	Chicago Street and Railroad Ave, SE	005	5/10/05	*			
7	W Street. and Railroad Ave, SE	005	5/10/05	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	5/06/05	*			
9	13 th Street and Ridge Place, SE	007	5/06/05	*			
11	"O" Street Pumping Station	011(a)	5/25/05	*			
12	Storm Pump Discharge at Main Pumping Station	011	5/25/05	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	5/04/05	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	5/17/05	*			
15	South Capitol and E Streets	010	5/17/05	*			
15a	Half and L Streets, SE	010	5/17/05	*			
15b	South Capitol and I Streets	010	5/17/05	*			
15c	South Capitol and I Streets	010	5/04/05	*			
16	North of Main Sewage Pumping Station	012	5/04/05	*			
17	4 th and N Streets, SE, Both Extended	013	5/11/05	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	5/25/05	*			
18	6 th and M Streets, SE	014	5/11/05	*			
19	9 th and M Streets, SE	015	5/06/05	*			
19a	9 th and M Streets, SE	015	5/06/05	*			
20	12 th and M Streets, SE	016	5/06/05	*			
20a	12 th and M Streets, SE	016	5/06/05	*			
21	14 th and M Streets, SE	017	5/12/05	*			

		A : A LUDDEG		(Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
22a	Barney Circle and Pennsylvania Ave, SE	018	5/23/05	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	5/23/05	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	5/23/05	*			
22d	Kentucky Ave and Potomac Street, SE	018	5/05/05	*			
22e	14 th Street and Kentucky Ave, SE	018	5/05/05	*			
23	Independence Ave, 21st Street, SE, Extended	019	5/11/05	*			
24a	East Capitol St, west of RFK stadium	019	5/11/05	*			
28	21st and Constitution Ave, NW	020	5/27/05	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	5/27/05	*			
30	17 th and D Streets, NW	020	5/16/05	*			
31	15 th Street and Pennsylvania Ave, NW	020	5/16/05	*			
33	10 th and F Streets, NW	020	5/16/05	*			
34	23 rd Street, north of Constitution Ave, NW	020	5/19/05	*			
34a	23 rd Street near C Street, NW	020	5/19/05	*			
35	Northeast of Roosevelt Bridge, NW	021	5/19/05	*			
36	27 th and I Streets, NW	022	5/26/05	*			
36a	New Hampshire Ave and Eye Street, NW	022	5/26/05	*			
36b	19 th and L Streets, NW	022, 034	5/06/05	*			
36d	17 th and L Streets, NW	022, 034	5/06/05	*			
36g	18 th and M Streets, NW	022, 034	5/06/05	*			
36h	18 th and M Streets, NW	022, 034	5/06/05	*			
37	27 th and Eye Streets, NW	022	5/26/05	*			
38	29 th and K Streets, NW	024	5/04/05	*			
38a	30 th Street, south of K Street, NW	024	5/04/05	*			
39a	30 th and K Streets, NW	024	5/04/05	*			
39b	30 th and K Streets, NW	024	5/04/05	*			
41b	31st and K Streets, NW	025	5/06/05	*			

		Associated NPDES		C	ondition		
Struct No.	Location	Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
41c	31st and K Streets, NW	025	5/06/05	*			
42	Wisconsin Ave and K Street, NW	026	5/06/05	*			
43	Potomac and Water Streets, NW	027	5/06/05	*			
43a	Potomac and Water Streets, NW	027	5/06/05	*			
44	Water Street, west of Potomac St, NW	027	5/06/05	*			
45	36 th and M Streets, NW	028	5/24/05	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	5/02/05	*			
47	38 th Street and Reservoir Road, NW	029	5/02/05	*			
47a	37 th and T Streets, NW	029	5/02/05	*			
47b	37 th and T Streets, NW	029	5/02/05	*			
47c	38th and W Streets, NW	029	5/02/05	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	031	5/05/05	*			
50	26 and M Streets, NW	032	5/05/05	*			
51	N Street Extended, west of 25 th Street, NW	033	5/05/05	*			
52	22 nd Street between M and N Streets, NW	034	5/19/05	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	5/19/05	*			
53	22 nd and M Streets, NW	022, 034	5/19/05	*			
53a	22 nd and M Streets, NW	022, 034	5/19/05	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	5/19/05	*			
53c	L and 22 nd Streets, NW	022	5/19/05	*			
54	23 rd and O Streets, NW	034	5/18/05	*			
55	22 nd Street, south of Q Street, NW	035	5/18/05	*			
55a	22 nd Street, south of Q Street, NW	035	5/18/05	*			
56	23 rd and Massachusetts Ave, NW	036	5/18/05	*			
57	23 rd Street, south of Q Street, NW	036	5/18/05	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	5/11/05	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	5/11/05	*			

		American AMPDES		Condition			
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
60	Connecticut Ave, east of Rock Creek, NW	039	5/11/05	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	5/11/05	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	5/25/05	*			
63	Harvard Street and Rock Creek Parkway, NW	042	5/25/05	*			
64	Adams Mill Road, south of Irving Street, NW	043	5/25/05	*			
65	Kenyon Street and Adams Mill Road, NW	044	5/25/05	*			
65a	Kenyon Street and Adams Mill Road, NW	044	5/25/05	*			
66	Adams Mill Road and Lamont Street, NW	045	5/25/05	*			
67	Park Rd , South of Piney Branch Pkwy, NW	046	5/25/05	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	5/25/05	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	5/25/05	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	5/25/05	*			
70i	5 th and Quackenbos Streets, NW	049	5/05/05	*			
71	28th Street, west of Rock Creek Parkway, NW	050	5/24/05	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	5/18/05	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	5/18/05	*			
73	O Street Extended and Rock Creek Parkway, NW	052	5/18/05	*			
74	Q Street, west of Rock Creek, NW	053	5/18/05	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	5/26/05	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	5/02/05	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	5/02/05	*			
78	28th Street Extended, west of Rock Creek, NW	057	5/26/05	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	5/05/05	*			
84	26 th and P Streets, NW	060	5/18/05	*			
84a	26 th and P Streets, NW	060	5/18/05	*			

- 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

					Tide	Gate	Tide	Gate			
			Outfo	all Condition	Pres	ent?	Conc	dition		CSO Sign	
NPDES Outfall	Location	Date Inspected	OIZ	N. 1 W. 1	37	NT.	OIZ	Needs	OIZ	NT 1 337 1	Notes, Work Needed or Performed
Ouijuii		Dute Inspecteu	OK	Needs Work	Yes	No	OK	Work	OK	Needs Work	Tvotes, work weeded of 1 erjormed
003	Bolling Air Force Base, at Giavanolli and Chanute, SW	5/24/05	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	5/12/05	*		*		*		*		
006	Good Hope Road and Welsh Memorial Bridge	5/12/05	*		*		*		*		
007	Between 11 th St. and Anacostia Bridges, SE	5/12/05	*		*		*		*		
009	O St. Sewage Pumping Station, SE	5/04/05	*		*		*		*		
010	O St. Sewage Pumping Station, SE	5/17/05	*			*			*		
011	Main Sewage Pumping Station, SE	5/17/05	*			*			*		
011(a)	Main Sewage Pumping Station, SE	5/17/05	*		*		*		*		
012	Main Sewage Pumping Station, SE	5/17/05	*		*		*		*		
013	Southeast Federal Center, aligned with 4 th St.	5/26/05	*		*		*		*		
014	Navy Yard, aligned with 6 th St., SE	5/26/05	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	5/26/05	*			*			*		
016	12th and O Streets, SE	5/12/05	*		*		*		*		
017	M and Water Street, SE	5/12/05	*		*		*		*		
018	East of Barney Circle and South of Pennsylvania Avenue Bridge, SE	5/12/05	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility and D.C. General Hospital	5/11/05	*			*			*		
020	Rock Creek Parkway and Independence, NW	5/26/05	*		*		*		*		
021	Rock Creek Parkway and C St., NW	5/26/05	*			*			*		
022	Rock Creek Parkway and G St., NW		*		*		*		*		

					Tide			Gate			
NPDES			Outf	all Condition	Pres	ent?	Cone	dition		CSO Sign	
Outfall	Location	Date Inspected	OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	Notes, Work Needed or Performed
	South of 30 th and K Streets, NW										WASA has developed a capitol project to design and construct a replacement gate for improved
024		5/26/05	*		*			*	*		performance.
025	South of 31st and K Streets, NW	5/26/05	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	5/26/05	*		*		*		*		
027	33 rd and Water Sts., NW	5/26/05	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	5/26/05	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	5/26/05	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	5/05/05	*			*			*		
032	26th and M Street, NW.	5/05/05	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	5/05/05	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	5/18/05	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	5/18/05	*		*		*		*		
036	22nd Street, South of Q Street NW.	5/26/05	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	5/11/05	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	5/11/05	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	5/11/05	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	5/11/05	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	5/12/05	*		*		*		*		
042	Harvard St. and Beach Dr NW.	5/12/05	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	5/12/05	*		*		*		*		

					Tide			Gate			
NPDES			Outf	all Condition	Pres	ent?	Cond	dition		CSO Sign	
Outfall	Location	Date Inspected	OK	Needs Work	Yes	No	OK	Needs Work	OK	Needs Work	Notes, Work Needed or Performed
044	Kenyon Street and Beach Dr., NW.	5/12/05	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	5/12/05	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	5/25/05	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	5/25/05	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	5/25/05	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	5/25/05	*		*		*		*		
050	Rock Creek Parkway and L St., NW	5/24/05	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	5/05/05	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	5/05/05	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	5/24/05	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	5/26/05	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	5/26/05	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	5/26/05	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	5/05/05	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	5/24/05	*		*		*		*		

1. Outfall is submerged and not visible. CSO is performing acceptably as evidenced by lack of capacity/flooding issues associated with pipe.

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

				1 0		<u> </u>	
Pumping	No. of	No.	No.	Screens or Pumps			
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	12				
				None			
Eastside	31	2	4	None			
Poplar Point	31	2 1	3	Screen # 1	03/18/05	Rake misaligned	07/31/05
Potomac	31	4	5	None			

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

Page 1		Tumping Stations Treventi	, 0 1.1.
Pumping Station	Date Performed	<i>Type of Preventive Maintenance Performed</i> ¹	Comments
1 0		1 erjornieu	
Main	31 days	Group A	Add oil, grease bearings and replace packing if needed.
O St	31 days	Group A	Add oil, grease bearings and replace packing if needed.
Eastside	31 days	Group A	Add oil, grease bearings and replace packing if needed.
Poplar Point	31 days	Group A	Add oil, grease bearings and replace packing if needed.
Potomac	31 days	Group A	Add oil, grease bearings and replace packing if needed.
Rock Creek	31 days	Group A	Add oil, grease bearings and replace packing if needed.
Upper Anacostia	31 days	Group A	Add oil, grease bearings and replace packing if needed.
Earle Place	31 days	Group A	Add oil, grease bearings and replace packing if needed.

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

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

Check all safety equipment

Issue work order requests as required

Table 2-5
Pumping Stations – Pumpage

		Tumping State	1 0		
	Sanitary .	Pumpage	Storm Wo	iter/CSO Pumped To A	lnacostia River
	Total	Daily Average			Screenings
Pumping Station	Wastewater (mg)	Wastewater (mg)	Date	Volume (mg)	Collected (units)
Main	2,411.70	77.80	N/A	N/A	N/A
O St ¹	162.90	5.25			
			5/14/05	32.76	Normal
			5/20/05	10.6	
Eastside	116.40	3.75	N/A	N/A	N/A
Poplar Point	604.90	19.51	N/A	N/A	N/A
Potomac	4,425.30	142.75	N/A	N/A	N/A
Rock Creek	339.20	10.94	N/A	N/A	N/A
Upper Anacostia	65.10	2.10	N/A	N/A	N/A
Earle Place	1.921	0.062	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.

2-6 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
05/27/05	1,2 & 3	1,2 & 3	None	N/a	N/a	N/a

Note

May 1, 2005 event was an extension of the April 30, 2005 event; composite sample was collected and reported on April 30, 2005.

Table 2-7

Northeast Boundary Swirl Facility - Preventive Maintenance

Date Performed	Type of Preventive Maintenance Performed ¹	Comments
05/27/05	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

			•		
	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)
5/1/05	6.00	8.46	3.6	4.86	0.50(40)
5/14/05	3.00	1.73	1.73	0	1.70(136)
5/20/05	5.50	28.09	6.66	21.43	1.30(104)
5/20/05	8.00	53.59	5.81	47.78	1.0(80)
5/20/05	5.00	1.0	1.0	0	0.50(40)
5/24/05	0.40	2.92	2.92	0	0.10(8)
5/24/05	5.00	4.74	4.74	0	0.25(20)

Chlorination/Dechlorination Systems.

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

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

Table 2-9 Northeast Boundary Swirl Facility - Disinfection Performance

	Chlor/			Residual Chlori	ine Test				
	Dechl	Dosages		Results		Enterococcus Tes	st 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
5/1/05	Yes	5	2	Mix Chamber	0.3	Mix Chamber	130,000	Mix Chamber	250,000
5/1/05	Yes	5	2	Anacostia River	0.0	Anacostia River	80,000	Anacostia River	52,000
5/20/05	Yes	5	2	Mix Chamber	0.7	Mix Chamber	991	Mix Chamber	250
5/20/05	Yes	5	2	Anacostia River	0.0	Anacostia River	11,800	Anacostia River	3,700
5/20/05	Yes	5	2	Mix Chamber	0.3	Mix Chamber	11,800	Mix Chamber	27,000
5/20/05	Yes	5	2	Anacostia River	0.0	Anacostia River	25,000	Anacostia River	38,000

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

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

	Flow Composited Sample Results									
		Nitrite	Nitrate	Total Kjeldahl		Total	Carbonaceous			
	Total suspended solids	(NO2-N)	(NO3-N))	Nitrogen	Total Nitrogen	Phosphorus	Biological Oxygen			
Date	(mg/L)	mg/L	mg/L	(mg/L as N)	(mg/L)	(mg/L)	Demand (mg/L)			
5/20/05	71.0	< 0.05	0.60	1.77	2.37	0.63	63.6			

^{1.} The May 1, 2005 event was a continuation of the April 30, 2005 event. Samples were collected for this event and are reported in the April 2005 monthly report.

2.10 Inflatable Dams

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

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

Inflatable Dam		Was Dam Out of Service			Schedule to Restore to
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	5/26/05	No	N/A	N/A	N/A
14 - West	5/26/05	No	N/A	N/A	N/A
15	5/26/05	No	N/A	N/A	N/A
15A	5/26/05	No	N/A	N/A	N/A
16 - East	5/26/05	No	N/A	N/A	N/A
16 - West	5/26/05	No	N/A	N/A	N/A
24 - North	5/26/05	No	N/A	N/A	N/A
24 - Middle	5/26/05	No	N/A	N/A	N/A
24 - South	5/26/05	No	N/A	N/A	N/A
34	5/26/05	No	N/A	N/A	N/A
35	5/26/05	No	N/A	N/A	N/A
52	5/26/05	No	N/A	N/A	N/A

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

innutuate builts & Scribit Sites Wet Weather Operations										
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)								
14 (E & W)	None	N/A								
15	5/14/05	3hr 33mins								
	5/20/05	9hrs 08mins								
15A	None	N/A								
16 (E & W)	5/14/05	33mins								
	5/15/05	5mins								
	5/20/05	3hrs 44mins								
24	None	N/A								
34	None	N/A								
35	None	N/A								
52	None	N/A								
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow (hrs)								
Outfall Structure 1	None	This structure has been bulk Headed. Overflows are no longer possible.								
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.								
Outfall Structure 2(E & W)	None	None								
Outfall Sewer Control Gates	Operational Status	Position								
Outfall Sewer Control Gate No. 1	Operational	Open								
Outfall Sewer Control Gate No.2	Operational	Open								

3. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

Table 3-1
Dry Weather Overflows

Location: Cause	
Date/ Time Discovered	
Action Taken	NONE
Date/Time Discharge Ceased	NONE
Estimated Volume (mg)	
Did Overflow Reach Receiving water?	
Action taken to prevent reoccurrence	

4. SOLIDS AND FLOATABLES CONTROL

4.1 Catch Basin CleaningThe following tables summarize catch basin cleaning in the Anacostia CSO area and in the entire sewer system:

Table 4-1 Catch Basin Summaries

				Inspe	ections			Clea	eaning			
			CBs in Anacostia	Total CBs Inspected Once this	Total CBs Inspected Twice this	CBs Cleaned Thru Last Month		CB's Cleaned this Month		Total CBs Cleaned This Year to Date		
Ward	Total CBs	CBs in CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS	
1	1,591	1,568	734	734	734	2377	2327	11	11	2388	2338	
2	4,714	4,112	2,316	725	0	1631	1336	101	101	1732	1437	
3	3,555	461	-	0	0	4263	1054	419	250	4682	1304	
4	2,782	1,985	159	159	63	131	66	1777	720	1908	786	
5	2,167	1,035	1,035	119	0	204	119	0	0	204	119	
6	1,783	1,594	1,594	149	0	220	149	0	0	220	149	
7	2,313	-	-	0	0	414	0	0	0	414	0	
8	1,278	116	116	65	0	416	65	0	0	416	65	
WASA Subtotal	20,183	10,871	5,954	1951	797	9,656	5,116	2,308	1,082	11,964	6,198	
DDOT (via VMS) Subtotal				0	0	0	0	0	0	0	0	
Grand Total	20,183	10,871	5,954	1951	797	9,656	5,116	2,308	1,082	11,964	6,198	
% Cleaned/Inspected to Date				33%	13%					59%	57%	

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	5/2/05	Good	None	Nets emptied.	160 lbs.
	5/10/05				
Bar Rack CSO 040	5/11/05	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	5/12/05	Good	None	Routine Cleaning	(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

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

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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	4
Reason not Operating	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	10 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:5/14/05 Inspector's Initials: TC

	Dato10/14/00								-		414	pootor o minuor re	
		Ove	rflow		bserv			antity		Quantity of			
		Obse	rved	Ove	rflow	Rate	Fle	oatabl	es	Man-	-Made		
	Time of												
	Observa												
000		v		١.		***	١.	3.4			3.6		DEMARKO/OTHER
CSO	tion	Υ	N	L	M	H	L	M	Н	L	M	Н	REMARKS/OTHER
	7:00 am	Х		Х			Х			Х			
	9:00 am	X		X			X			Χ			
009	11:00 am		Χ										
	7:00 am	Х		Х			Х			Х			
	9·00 am	v		v			v			x			
010	11:00 am	^	v	^			Ŷ			×			
	1 1 1/1/2 2/1111		^				^			^			
011													
011a													
042													
012													

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

Date: 4/2/05 Inspector's Initials: CD

			rflow erved		bserv rflow			uantity oatab		Quantity of Man-Made			
	Time of Observati												
CSO	on	Υ	N	L	M	H	L	M	Н	L	M	Н	REMARKS/OTHER
	9:00 am		Х	х			Х			х			
009													
	10:00 am		Х	Х			Х			Х			
010													
	11:00 am		х	х			χ			х			
011													
011a													
VII.u													
	12:00 am		х	Х			х			х			
012													

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

5.2 Rain Data

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

Table 5-2 Rainfall Data (inches)

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS	National Airport
5/1/2005	0.02	0.02	0.02	0.02	0.11
5/2/2005	0.02	0.02	0.03	0.01	0.01
5/3/2005	0	0	0	0	Т
5/4/2005	0	0	0	0	Т
5/5/2005	0	0	0	0	0
5/6/2005	0	0	0	0	0
5/7/2005	0	0	0	0	0
5/8/2005	0	0	0	0	0
5/9/2005	0	0	0	0	0
5/10/2005	0	0	0	0	0
5/11/2005	0	0	0	0	0
5/12/2005	0	0	0	0	Ţ
5/13/2005	0	0	0	0	0
5/14/2005	0.67	1.05	1.05	0.74	1.13
5/15/2005	0	0	0	0	Т
5/16/2005	0	0	0	0	T
5/17/2005	0	0	0	0	0
5/18/2005	0	0	0	0	0
5/19/2005	0.02	0.01	0.01	0.01	0.24
5/20/2005	2.72	1.98	2.77	1.98	2.63
5/21/2005	0	0.01	0	0.01	0
5/22/2005	0	0	0	0	0.02
5/23/2005	0.01	0.02	0.01	0.02	0.01
5/24/2005	0.62	0.46	0.53	0.46	0.44
5/25/2005	0	0	0	0	Т
5/26/2005	0	0	0	0	0
5/27/2005	0	0	0	0	0
5/28/2005	0	0	0	0	Т
5/29/2005	0	0	0	0	0
5/30/2005	0	0	0	0	0.02
5/31/2005	0	0	0.0001	0	Т



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For Combined Sewer System Month: June, 2005

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: June, 2005

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1. INTRODUCTION

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

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

2. OPERATION AND MAINTENACE

2.1 Regulators

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

Table 2-1 Regulator Structures

		Associated NPDES	Date	(Condition		
Struct No.	Location	Associated NPDES Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	06/16/05	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	06/16/05	*			
5	Poplar Point Pumping Station	004	06/14/05	*			
6	Chicago Street and Railroad Ave, SE	005	06/07/05	*			
7	W Street and Railroad Ave, SE	005	06/06/05	*			
8	Good Hope Rd, west of Nichols Ave, SE	006	06/06/05	*			
9	13 th Street and Ridge Place, SE	007	06/01/05	*			
11	"O" Street Pumping Station	011(a)	06/14/05	*			
12	Storm Pump Discharge at Main Pumping Station	011	06/14/05	*			
13	2 nd Street, 300 ft. north of N Place, SE	009	06/01/05	*			
14	2 nd Street, 250 ft. north of N Place, SE	011(a)	06/14/05	*			
15	South Capitol and E Streets	010	06/09/05	*			
15a	Half and L Streets, SE	010	06/09/05	*			
15b	South Capitol and I Streets	010	06/14/05	*			
15c	South Capitol and I Streets	010	06/14/05	*			
16	North of Main Sewage Pumping Station	012	06/14/05	*			
17	4 th and N Streets, SE, Both Extended	013	06/08/05	*			
17a	K Street between 6 th Street and 7 th Street, SE	013	06/23/05	*			
18	6 th and M Streets, SE	014	06/01/05	*			
19	9 th and M Streets, SE	015	06/03/05	*			
19a	9 th and M Streets, SE	015	06/03/05	*			
20	12 th and M Streets, SE	016	06/03/05	*			
20a	12 th and M Streets, SE	016	06/03/05	*			
21	14 th and M Streets, SE	017	06/03/05	*			
22a	Barney Circle and Pennsylvania Ave, SE	018	06/22/05	*			

		A AND EG	D.	(Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Good	Needs Work	Work Needed	Work performed
22b	Barney Circle and Pennsylvania Ave, SE	018	06/22/05	*		77 0770 11000000	,, or a perjormen
22c	Barney Circle and Pennsylvania Ave, SE	018	06/20/05	*			
22d	Kentucky Ave and Potomac Street, SE	018	06/08/05	*			
22e	14 th Street and Kentucky Ave, SE	018	06/08/05	*			
23	Independence Ave, 21 st Street, SE, Extended	019	06/08/05	*			
24a	East Capitol St, west of RFK stadium	019	06/08/05	*			
28	21 st and Constitution Ave, NW	020	06/23/05	*			
29	22 nd Street, between Constitution Ave and C St, NW	020	06/23/05	*			
30	17 th and D Streets, NW	020	06/20/05	*			
31	15 th Street and Pennsylvania Ave, NW	020	06/20/05	*			
33	10 th and F Streets, NW	020	06/03/05	*			
34	23 rd Street, north of Constitution Ave, NW	020	06/09/05	*			
34a	23 rd Street near C Street, NW	020	06/09/05	*			
35	Northeast of Roosevelt Bridge, NW	021	06/09/05	*			
36	27 th and I Streets, NW	022	06/23/05	*			
36a	New Hampshire Ave and Eye Street, NW	022	06/23/05	*			
36b	19 th and L Streets, NW	022, 034	06/07/05	*			
36d	17 th and L Streets, NW	022, 034	06/07/05	*			
36g	18 th and M Streets, NW	022, 034	06/07/05	*			
36h	18 th and M Streets, NW	022, 034	06/07/05	*			
37	27 th and Eye Streets, NW	022	06/22/05	*			
38	29 th and K Streets, NW	024	06/01/05	*			
38a	30 th Street, south of K Street, NW	024	06/01/05	*			
39a	30 th and K Streets, NW	024	06/01/05	*			
39b	30 th and K Streets, NW	024	06/01/05	*			
41b	31st and K Streets, NW	025	06/20/05	*			
41c	31st and K Streets, NW	025	06/20/05	*			
42	Wisconsin Ave and K Street, NW	026	06/03/05	*			

		Anna sintad NDDES	D	(Condition		
Struct No.	Location	Associated NPDES Outfall	Date Inspected	Caad	Needs Work	Work Needed	Work performed
43	Potomac and Water Streets, NW	027	06/03/05	*		Work recaed	rr or a perjor med
43a	Potomac and Water Streets, NW	027	06/03/05	*			
44	Water Street, west of Potomac St, NW	027	06/03/05	*			
45	36 th and M Streets, NW	027	06/08/05	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	028	06/01/05	*			
47	38 th Street and Reservoir Road, NW	029	06/01/05	*			
47a	37 th and T Streets, NW	029	06/01/05	*			
47a 47b	37 th and T Streets, NW	029	06/01/05	*			
470 47c	38 th and W Streets, NW	029	06/01/05	*			
49	Pennsylvania Ave, east side of Rock Creek, NW	029	06/06/05	*			
50	26 and M Streets, NW	031	06/06/05	*			
51	N Street Extended, west of 25 th Street, NW	032	06/06/05	*			
52	22 nd Street between M and N Streets, NW	033	06/09/05	*			
52a	N Street between 22 nd and 23 rd Streets, NW	034	06/10/05	*			
53	22 nd and M Streets, NW	022, 034	06/13/05	*			
53a	22 nd and M Streets, NW	022, 034	06/13/05	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	06/13/05	*			
53c	L and 22 nd Streets, NW	022, 031	06/13/05	*			
54	23 rd and O Streets, NW	034	06/10/05	*			
55	22 nd Street, south of Q Street, NW	035	06/20/05	*			
55a	22 nd Street, south of Q Street, NW	035	06/20/05	*			
56	23 rd and Massachusetts Ave, NW	036	06/20/05	*			
57	23 rd Street, south of Q Street, NW	036	06/20/05	*			
58	Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW	037	06/08/05	*			
59	North of Belmont Rd, east of Kalorama Cir, NW	038	06/08/05	*			
60	Connecticut Ave, east of Rock Creek, NW	039	06/07/05	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	06/07/05	*			
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	06/10/05	*			

		Associated NPDES	Date	(Condition		
Struct No.	Location	Associated NFDES Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
63	Harvard Street and Rock Creek Parkway, NW	042	06/10/05	*			1 3
64	Adams Mill Road, south of Irving Street, NW	043	06/13/05	*			
65	Kenyon Street and Adams Mill Road, NW	044	06/13/05	*			
65a	Kenyon Street and Adams Mill Road, NW	044	06/13/05	*			
66	Adams Mill Road and Lamont Street, NW	045	06/13/05	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	06/13/05	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	06/13/05	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	06/13/05	*			
70	Piney Branch Parkway, west of 16 th Street, NW	049	06/13/05	*			
70i	5 th and Quackenbos Streets, NW	049	06/10/05	*			
71	28th Street, west of Rock Creek Parkway, NW	050	06/01/05	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	06/21/05	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	06/21/05	*			
73	O Street Extended and Rock Creek Parkway, NW	052	06/21/05	*			
74	Q Street, west of Rock Creek, NW	053	06/20/05	*			
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	06/23/05	*			
77	Normanstone Dr Extended, west of Rock Creek, NW	056	06/23/05	*			
77a	Normanstone Dr and Normanstone Lane, NW	056	06/07/05	*			
78	28th Street Extended, west of Rock Creek, NW	057	06/23/05	*			
79	Connecticut Ave and Rock Creek Parkway, NW	058	06/07/05	*			
84	26 th and P Streets, NW	060	06/21/05	*			
84a	26 th and P Streets, NW	060	06/21/05	*			

- 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

	Table 2 - Outlans and Tide Gates											
				Outfall		Gate		Tide Gate				
		_	Co	ondition	Pres	sent?	Condit	ion		CSO Sign		
NPDES		Date		Needs				Needs				
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed	
	Bolling Air Force Base, at Giavanolli and											
003	Chanute, SW	06/16/05	*		*		*		*			
	Across from Navy Yard, aligned with Parsons											
005	Ave., SE	06/21/05	*		*		*		*			
006	Good Hope Road and Welsh Memorial Bridge	06/02/05	*		*		*		*			
007	Between 11 th St. and Anacostia Bridges, SE	06/02/05	*		*		*		*			
009	O St. Sewage Pumping Station, SE	06/01/05	*		*		*		*			
010	O St. Sewage Pumping Station, SE	06/09/05	*			*			*			
011	Main Sewage Pumping Station, SE	06/09/05	*			*			*			
011(a)	Main Sewage Pumping Station, SE	06/09/05	*		*		*		*			
	M : G D : G (; GE											
012	Main Sewage Pumping Station, SE	06/09/05	*		*		*		*			
013	Southeast Federal Center, aligned with 4 th St.	06/27/05	*		*		*		*			
014	Navy Yard, aligned with 6 th St., SE	06/27/05	*		*		*		*			
015	Navy Yard, aligned with 9th Street, SE	06/27/05	*			*			*			
016	12th and O Streets, SE	06/10/05	*		*		*		*			
017	M and Water Street, SE	06/10/05	*		*		*		*			
	East of Barney Circle and South of											
018	Pennsylvania Avenue Bridge, SE	06/10/05	*		*		*		*			
	Adjacent to Service Drive behind swirl facility											
019	and D.C. General Hospital	06/24/05	*			*			*			
020	Rock Creek Parkway and Independence, NW	06/23/05	*	·	*		*		*			
021	Rock Creek Parkway and C St., NW	06/23/05	*			*			*			
022	Rock Creek Parkway and G St., NW	06/23/05	*		*		*		*			

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				Outfall ondition		Gate sent?	Tide Gate Condition			CSO Sign	
NPDES		Date		Needs	1765	ent:	Conan	Needs		CSO Sign	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work		Needs Work	Notes, Work Needed or Performed
024	South of 30 th and K Streets, NW	06/21/05	*		*			*	*		WASA has developed a capitol project to design and construct a replacement gate for improved performance.
025	South of 31st and K Streets, NW	06/21/05	*		*		*		*		performance.
026	Wisconsin Avenue and Water Street, NW	06/21/05	*		*		*		*		
027	33 rd and Water Sts., NW	06/21/05	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	06/21/05	*			*			*		
029	Adjacent to C&O Canal, aligned with 38 th St. NW	06/21/05	*		*		*		*		
031	Rock Creek Pkwy and Pennsylvania Avenue, NW.	06/06/05	*			*			*		
032	26th and M Street, NW.	06/06/05	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.	06/06/05	*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	06/10/05	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	06/24/05	*		*		*		*		
036	22nd Street, South of Q Street NW.	06/22/05	*		*		*		*		
037	Waterside Dr. and Rock Creek Parkway	06/08/05	*		*		*		*		
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	06/08/05	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	06/07/05	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	06/07/05	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	06/24/05	*		*		*		*		
042	Harvard St. and Beach Dr NW.	06/22/05	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	06/22/05	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	06/22/05	*		*		*		*		

				Outfall ondition	Tide Pres	Gate sent?		Tide Gate Condition		CSO Sign	
NPDES		Date		Needs				Needs		2.2.2.3.1	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Needs Work	Notes, Work Needed or Performed
045	North of Beach Dr. and Walbridge Pl, NW.	06/22/05	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	06/13/05	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	06/13/05	*		*		*		*		
048	South of Piney Branch Parkway and 17 th St.	06/13/05	*		*		*		*		
049	North of Piney Branch Parkway and 17 th St.	06/13/05	*		*		*		*		
050	Rock Creek Parkway and L St., NW	06/13/05	*		*		*		*		
051	Across Rock Creek Parkway, aligned with Olive St., NW.	06/13/05	*		*		*		*		
052	Between P and Penna. Ave Bridges, aligned with O Street, NW.	06/13/05	*		*		*		*		
053	Q St. Bridge and Rock Creek Parkway, NW.	06/22/05	*		*		*		*		
054	Massachusetts Avenue and Rock Creek Parkway, NW.	06/23/05	*		*		*		*		
056	Normanstone Dr. and Rock Creek Parkway, NW.	06/23/05	*		*		*		*		
057	28th Street and Rock Creek Parkway, NW	06/23/05	*		*		*		*		
058	Connecticut Avenue and Rock Creek Parkway, NW.	06/10/05	*			*			*		
060	North of P Street Bridge and Rock Creek Pkwy, NW	06/22/05	*		*		*		*		

1. Outfall is submerged and not visible. CSO is performing acceptably as evidenced by lack of capacity/flooding issues associated with pipe.

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

				I umping Station	11150	ections and Equipment in Service	
Pumping	No. of	No.	No.	Screens or Pumps			
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service
Main	31	4	12		6/18/05	#2 Screen jammed	7/31/05
				Screen # 2		-	
Eastside	31	2	4	None			
Poplar Point	31	2 1	3	Screen # 1	03/18/05	Rake misaligned	07/31/05
Potomac	31	4	5	None			

Notes:

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

Table 2-4
Pumping Stations – Preventive Maintenance

Tumping Stations Treventive Frantiene									
		Type of Preventive Maintenance							
Pumping Station	Date Performed	Performed ¹	Comments						
Main	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
O St	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
Eastside	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
Poplar Point	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
Potomac	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
Rock Creek	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
Upper Anacostia	30 days	Group A	Add oil, grease bearings and replace packing if needed.						
Earle Place	30 days	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

		T umping Sta	tions rumpag	, -				
	Sanitary .	Pumpage	Storm W	Storm Water/CSO Pumped To Anacostia				
	Total	Daily Average			Screenings Collected			
Pumping Station	Wastewater (mg)	Wastewater (mg)	Date	Volume (mg)	(units)			
Main	2,169.40	72.31	N/A	N/A	N/A			
O St ¹	162.40	5.41	N/A	None	Normal			
Eastside	88.80	2.96	N/A	N/A	N/A			
Poplar Point	513.70	17.12	N/A	N/A	N/A			
Potomac	3,866.30	128.88	N/A	N/A	N/A			
Rock Creek	308.80	10.29	N/A	N/A	N/A			
Upper Anacostia	61.50	2.05	N/A	N/A	N/A			
Earle Place	3.17	0.11	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.

2-6 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
06/22/05	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
06/22/05	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

		•	•		
	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)
6/3/05	3.83	9.72	4.96	4.75	1.0(80)
6/6/05	3.50	3.33	2.68	0.63	0.75(60)
6/7/05	7.50	6.4	4.15	2.25	0.85(68)
6/29/05	3.25	9.12	7.29	1.82	2.0(160)
6/30/05	2.0	0.49	0.49	0	0.20(16)

Chlorination/Dechlorination Systems.

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

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

Table 2-9 Northeast Boundary Swirl Facility - Disinfection Performance

	Chlor/			Residual Chlori	ne Test				
	Dechl	Do	sages	Results		Enterococcus Test Results		Fecal Coliform Test Results	
	or								
	Syste						Count		Count
	m	NaOCl	NaHSO3		Conc.		Per		Per
Date	Used?	(mg/l)	(mg/l)	Location	(mg/l)	Site	100ml	Site	100ml
6/3/05	Yes	5	2	Mix Chamber	0.2	Mix Chamber	54,000	Mix Chamber	180,000
6/3/05	Yes	5	2	Anacostia River	0.0	Anacostia River	58,000	Anacostia River	160,000
6/6/05	Yes	5	2	Mix Chamber	0.3	Mix Chamber	24,000	Mix Chamber	34,000
6/6/05	Yes	5	2	Anacostia River	0.0	Anacostia River	44,000	Anacostia River	60,000
6/29/05	Yes	5	2	Mix Chamber	0.1	Mix Chamber	120,000	Mix Chamber	110,000
6/29/05	Yes	5	2	Anacostia River	0.0	Anacostia River	150,000	Anacostia River	140,000

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

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

		Flow Composited Sample Results											
Date	Total suspended solids (mg/L)	Nitrite (NO2-N) mg/L	Nitrate (NO3-N)) mg/L	Total Nitrogen (mg/L)	Total Phosphorus (mg/L)	Carbonaceous Biological Oxygen Demand (mg/L)							
6/03/05	84.0	0.05	0.38	3.58	4.01	0.51	25.5						
6/06/05	182	0.07	0.41	1.84	2.32	0.58	109						
6/29/05	72.0	0.070	0.63	2.89	3.59	0.65	31.0						

2.10 Inflatable Dams

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

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

Inflatable Dam		Was Dam Out of Service			Schedule to Restore to
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	06/21/05	No	N/A	N/A	N/A
14 - West	06/21/05	No	N/A	N/A	N/A
15	06/21/05	No	N/A	N/A	N/A
15A	06/21/05	No	N/A	N/A	N/A
16 - East	06/21/05	No	N/A	N/A	N/A
16 - West	06/21/05	No	N/A	N/A	N/A
24 - North	06/21/05	No	N/A	N/A	N/A
24 - Middle	06/21/05	No	N/A	N/A	N/A
24 - South	06/21/05	No	N/A	N/A	N/A
34	06/21/05	No	N/A	N/A	N/A
35	06/21/05	No	N/A	N/A	N/A
52	06/21/05	No	N/A	N/A	N/A

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

	atable Dams & SC.	ABAT Sites Wet Weather Operations
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow (hrs)
14 (E & W)	None	N/A
15	None	N/A
15A	None	N/A
16 (E & W)	None	N/A
24	None	N/A
34	None	N/A
35	None	N/A
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow (hrs)
Outfall Structure 1	None	This structure has been bulk Headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2(E & W)	None	None
Outfall Sewer Control Gates	Operational Status	Position
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

3. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

Table 3-1 Dry Weather Overflows

Location:	
Cause	
Date/ Time Discovered	
Action Taken	NONE
Date/Time Discharge Ceased	TOTAL
Estimated Volume (mg)	
Did Overflow Reach Receiving water?	
Action taken to prevent reoccurrence	

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

				Inspe	ections				ıning	1	
		CBs in	CBs in Anacostia	Total CBs Inspected Once this	Total CBs Inspected Twice this	CBs Clea Last N			eaned this		s Cleaned r to Date
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	734	734	2388	2338	46	38	2434	2376
2	4,714	4,112	2,316	974	223	1732	1437	289	249	2021	1686
3	3,555	461	-	0	0	4682	1304	157	0	4839	1304
4	2,782	1,985	159	159	159	1908	786	1704	1154	3612	1940
5	2,167	1,035	1,035	168	0	204	119	58	49	262	168
6	1,783	1,594	1,594	175	0	220	149	33	26	253	175
7	2,313	-	-	0	0	414	0	132	0	546	0
8	1,278	116	116	65	60	416	65	88	60	504	125
WASA Subtotal	20,183	10,871	5,954	2,275	1,176	11,964	6,198	2,507	1,576	14,471	7,774
DDOT (via VMS) Subtotal				0	0	0	0	0	0	0	0
Grand Total	20,183	10,871	5,954	2,275	1,176	11,964	6,198	2,507	1,576	14,471	7,774
% Cleaned/Inspected to Date				38%	20%					72%	71%

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 Netting System CSO 018	Date Inspected 6/10/05 6/24/05	Condition Good	Work Needed None	Work performed Nets emptied.	Material Removed (CY) 300 lbs.
Bar Rack CSO 040	6/7/05	Good	None	Routine Cleaning Routine Cleaning	(1)
Bar Rack CSO 041	6/24/05	Good	None		(1)

Notes:

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

4.3 Anacostia River Floating Debris Removal Program

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

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

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	5
Reason not Operating	Strong winds
# Skimmer in Fleet	2 skimmers
# Skimmers Out of Service	One
Dates	6/7/05 to present
Reason	To replace left wing motor.
Plan to Restore to Service	asap
Volume Material Collected	50 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 rved		bserv rflow			antity oatabl		Quantity of Man-Made			
cso	Time of Observa tion	Υ	N	L	М	Н	L	M	н	L	M	Н	REMARKS/OTHER
009													
				NO	INC	Ε							
010													
011													
011a													
040													
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)

Date	Brentwood Reservoir	Bryant St PS	Main PS	Rock Creek PS	National Airport
6/1/2005	0	0	0	0	0
6/2/2005	0.01	0.01	0.01	0.01	0.04
6/3/2005	0.66	0.87	0.63	0.51	0.64
6/4/2005	0	0	0	0	0
6/5/2005	0	0	0	0	0
6/6/2005	0.48	0.58	0.59	0.52	1
6/7/2005	0.64	1.47	0.44	0.67	0.01
6/8/2005	0	0	0	0	0
6/9/2005	0	0	0	0	T
6/10/2005	0	0	0	0	0
6/11/2005	0	0	0	0	0
6/12/2005	0	0	0	0	0
6/13/2005	0	0	0.01	0.02	0.05
6/14/2005	0	0	0	0	0
6/15/2005	0	0	0	0	0
6/16/2005	0	0	0	0	T
6/17/2005	0	0	0	0.01	0
6/18/2005	0	0	0	0	0
6/19/2005	0	0	0	0	0
6/20/2005	0	0	0	0	0
6/21/2005	0	0	0	0	0
6/22/2005	0.05	0.09	0.03	0.04	0.03
6/23/2005	0	0	0	0	0
6/24/2005	0	0	0	0	0
6/25/2005	0	0	0	0	0
6/26/2005	0	0	0	0	0
6/27/2005	0.11	0.11	0.08	0	0.06
6/28/2005	0.01	0.01	0	0.01	0.01
6/29/2005	0.34	0.34	1.01	0.68	1.03
6/30/2005	0	0	0.01	0.01	0
Total	2.3	3.48	2.81	2.48	2.87

Combined Sewer System Model Results Period: April, May, June 2005 SCENARIO: Q2_Y2005, 7-19-05

				Total		Maximum	Minimum
		Number of	CSO	Duration of	Avg Duration	Duration of	Duration of
		Overflows	Overflow	Overflow	of Overflow	Overflow	Overflow
NPDES No.	Description	(Occurrences)	Volume (mg)	(hrs)	(hrs)	(hrs)	(hrs)
	_						
Anacostia CSC		40	44.4	00.0	0.0	20.0	0.5
005	Chicago St and Railroad Station SE	12	11.4	96.3	8.0	20.8	0.5
006	Good Hope Road, West of Nichols Ave.,SE		0.1	2.0	0.0	10	0.5
	13 th Street and Ridge Place,SE	11	0.1	3.0	0.8 7.7	1.0	0.5
007	2nd Street, 300 feet North of N Place,	11	29.6	84.3	1.1	18.3	1.8
009	SE	10	9.0	47.0	4.7	12.8	1.3
009	O Street SewagePumping Station, SE	10	9.0	47.0	4.7	12.0	1.5
010	(pumped Overflow)	8	258.5	25.0	3.1	8.3	0.5
010	South of Main Sewage Pumping	-	200.0	20.0	0.1	0.0	0.0
011	Station, SE (pumped overflow)	0	0.0	0.0	0.0	0.0	0.0
	South of Main SewagePumping						
011a	Station, SE (gravity overflow)	0	0.0	0.0	0.0	0.0	0.0
	North of Main SewagePumping						
012	Station, SE (Tiber Creek)	4	19.8	3.8	0.9	1.5	0.5
013	4th and N Streets, SE	10	6.3	32.0	3.2	9.5	0.8
014	6th and M Streets, SE	11	26.3	67.3	6.1	17.3	1.3
015	9th and M Streets, SE	10	1.3	17.5	1.8	8.0	0.3
016	12th and M Streets, SE	10	11.4	24.8	2.5	8.5	8.0
017	14th and M Streets, SE	10	16.5	29.8	3.0	9.0	1.0
	Barney Circle andPennsylvania Ave,						
018	SE	10	5.2	37.0	3.7	10.3	1.0
019	Northeast Boundary - Swirl Effluent	10	467.7	79.3	7.9	21.0	1.8
019	Northeast Bound Swirl Bypass	6	108.3	16.5	2.8	7.8	0.8
	SUBTOTAL		971				
Datamas CCO	_						
Potomac CSO: 003	Bolling AFB	0	0.0	0.0	0.0		0.0
003	23rd Street, North ofConstitution Ave,	U	0.0	0.0	0.0	0.0	0.0
020	NW (Easby Point)	5	44.6	15.3	3.1	7.3	1.0
020	Northeast ofRoosevelt Bridge, NW	10	407.2	48.3	4.8	13.5	1.0
021	27th and K Streets, NW	10	43.4	43.5	4.4	11.8	0.5
024	30th and K Streets, NW	9	58.4	46.5	5.2	17.0	0.8
025	31st & K St NW	5	0.2	8.3	1.7	2.8	1.0
026	Wisconsin Avenue andK St., NW	0	0.0	0.0	0.0	0.0	0.0
027	Water Street West ofStreet, NW	11	32.5	102.0	9.3	22.5	2.5
028	36th and M Streets, NW	5	0.9	12.5	2.5	5.8	1.0
	Canal Road 1000 feet east of Rock						
029	Creek,NW	11	22.7	71.0	6.5	17.8	1.8
	SUBTOTAL		610				
Rock Creek	Demonstration Avenue 5 15 1		-				
004	Pennsylvania Avenue, East Rock	_	0.0	47.0	2.2	7.0	4.0
031 032	Creek, NW 26th and M Streets, NW	5	0.3	17.8 0.0	3.6 0.0	7.3 0.0	1.3 0.0
032	N Street extendedwest of 25th	U	0.0	0.0	0.0	0.0	0.0
033	Street extendedwest of 25th Street,NW	5	5.8	7.3	1.5	3.0	0.3
033	23rd and O Streets, SW	0	0.0	0.0	0.0	0.0	0.3
034	22nd Street south of Q Street, NW	1	0.0	0.0	0.0	0.0	0.0
036	22nd Street South of Q Street, NW	11	1.9	38.8	3.5	10.5	0.5
- 555	Northwest of Belmontand Rock Creek	11	1.0	55.5	0.0	10.0	0.0
037	and Potomac Parkway	3	0.1	3.3	1.1	1.5	0.8
<u> </u>	North of Belmont Road,east of	<u> </u>	<u> </u>	0.0		1.0	0.0
038	Kalorama Circle, NW	0	0.0	0.0	0.0	0.0	0.0
300	Connecticut Avenue east of Rock	Ĭ	0.0	0.0	0.0	0.0	0.0
039	Creek, NW	1	0.1	0.5	0.5	0.5	0.5
	Biltmore Street extended east of						
040	RockCreek, NW	2	0.1	1.0	0.5	0.8	0.3
	Ontario extended and Rock Creek						
041	Parkway	0	0.0	0.0	0.0	0.0	0.0

District of Columbia Water and Sewer Authority

Combined Sewer System Model Results Period: April, May, June 2005 SCENARIO: Q2_Y2005, 7-19-05

				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	1	0.0	0.3	0.3	0.3	0.3
	Adams Mill Road South of Irving						
043	Street, NW	2	0.6	1.0	0.5	8.0	0.3
	Kenyon Street and Adams Mill Road,						
044	NW	1	0.1	0.5	0.5	0.5	0.5
	Adams Mill Road and Lamont Street,						
045	NW	2	0.1	1.8	0.9	1.0	8.0
	Park Road south of Piney Branch						
046	Parkway, NW	1	0.0	1.0	1.0	1.0	1.0
	Ingleside Terrace extended and Piney	_					
047	Branch Parkway	2	0.6	1.8	0.9	1.0	8.0
	Mt. Pleasant Street extended and	_					
048	Piney Branch Parkway	2	0.3	1.8	0.9	1.0	8.0
040	Diagram Branch and Laurant Otan at NIM	40	54.0	00.0	2.0	0.0	0.0
049	Piney Branch and LamontStreet, NW	10	51.2	29.8	3.0	9.0	0.8
050	28th Street west of 16th Street, NW	0	0.0	0.0	0.0	0.0	0.0
051	Olive Street extended and Rock Creek	0	0.0	0.0	0.0	0.0	0.0
051	Parkway, NW O Street extended and Rock Creek	U	0.0	0.0	0.0	0.0	0.0
052	Parkway, NW	0	0.0	0.0	0.0	0.0	0.0
052	O Street west of Rock Creek Parkway,	U	0.0	0.0	0.0	0.0	0.0
053	NW	0	0.0	0.0	0.0	0.0	0.0
033	West Side of Rock Creek300 ft. south	0	0.0	0.0	0.0	0.0	0.0
054	of Mass. Ave. NW	0	0.0	0.0	0.0	0.0	0.0
004	Normanstone Drive extended west of	0	0.0	0.0	0.0	0.0	0.0
056	Rock Creek, NW	0	0.0	0.0	0.0	0.0	0.0
000	28th Street extended west of Rock		0.0	0.0	0.0	0.0	0.0
057	Creek. NW	5	3.2	12.3	2.5	5.5	1.0
	Connecticut Avenue and Rock Creek					0.0	
058	Parkway, NW	1	0.0	1.0	1.0	1.0	1.0
060	P St and 26 th St, NW	0	0.0	0.0	0.0	0.0	0.0
	SUBTOTAL	-	65				
	TOTAL		1,646				
	10 W Y 11 10 W YT		•				

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