# QUARTERLY OPERATIONS REPORT

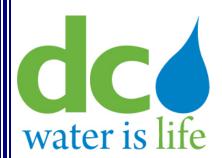
# DISTRICT OF COLUMBIA

# COMBINED SEWER OVERFLOW FACILITIES

# THIRD QUARTER, 2014

Prepared By:

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



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

# Monthly Operations Report For Combined Sewer System Month: July 2014

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

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

### Monthly Operations Report for Combined Sewer System Month: July 2014

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### 1. INTRODUCTION

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

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

Structure Number	Location	Associated NPDES Outfall			ondition Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/14/14	*	Treeds WOIK	Work Weeded	work perjormed
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	07/14/14	*			
5	Poplar Point Pumping Station	004	07/07/14	*			
6	Chicago Street and Railroad Ave, SE	005	07/07/14	*			
7	W Street and Railroad Ave, SE	005	07/07/14	*			
$8^{1}$	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE	007	07/07/14	*			
11	"O" Street Pumping Station	011(a)	07/31/14	*			
12	Storm Pump Discharge at Main Pumping Station	011	07/31/14	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	07/08/14	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	07/08/14	*			
15	South Capitol and E Streets	010	07/31/14	*			
15a	Half and L Streets, SE	010	07/31/14	*			
15b	South Capitol and I Streets	010	07/18/14	*			
15c	South Capitol and I Streets	010	07/18/14	*			

# Table 2-1Regulator Structures

Structure		Associated NPDES	Date	C	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	07/31/14	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	N/A				Construction for Clean Rivers Project
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	07/31/14	*			
18	6 <sup>th</sup> and M Streets, SE	014	07/08/14	*			
19	9 <sup>th</sup> and M Streets, SE	015	N/A				Construction for Clean Rivers Project
19a	9 <sup>th</sup> and M Streets, SE	015	N/A				Construction for Clean Rivers Project
20	12 <sup>th</sup> and M Streets, SE	016	N/A				Construction for Clean Rivers Project
20a	12 <sup>th</sup> and M Streets, SE	016	07/24/14	*			
21	14 <sup>th</sup> and M Streets, SE	017	N/A				Construction for Clean Rivers Projec
22a	Barney Circle and Pennsylvania Ave, SE	018	07/07/14	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	07/07/14	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	07/07/14	*			
22d	Kentucky Ave and Potomac Street, SE	018	07/07/14	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	07/07/14	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	07/16/14	*			
24a	East Capitol St, west of RFK stadium	019	07/16/14	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	07/08/14	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	07/08/14	*			
30	17 <sup>th</sup> and D Streets, NW	020	07/07/14	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	07/31/14	*			
33	10 <sup>th</sup> and F Streets, NW	020	07/08/14	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	07/31/14	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	07/08/14	*			
35	Northeast of Roosevelt Bridge, NW	021	07/08/14	*			
36	27 <sup>th</sup> and I Streets, NW	022	07/08/14	*			
36a	New Hampshire Ave and Eye Street, NW	022	07/07/14	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	07/07/14	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	07/07/14	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	07/07/14	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	07/07/14	*			

Structure		Associated NPDES	Date	C	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
37	27 <sup>th</sup> and Eye Streets, NW	022	07/08/14	*			
38	29 <sup>th</sup> and K Streets, NW	024	07/01/14	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	07/01/14	*			
39a	30 <sup>th</sup> and K Streets, NW	024	07/01/14	*			
39b	30 <sup>th</sup> and K Streets, NW	024	07/01/14	*			
41b	31 <sup>st</sup> and K Streets, NW	025	07/01/14	*			
41c	31 <sup>st</sup> and K Streets, NW	025	07/01/14	*			
42	Wisconsin Ave and K Street, NW	026	07/01/14	*			
43	Potomac and Water Streets, NW	027	07/03/14	*			
43a	Potomac and Water Streets, NW	027	07/03/14	*			
44	Water Street, west of Potomac St, NW	027	07/03/14	*			
45	36 <sup>th</sup> and M Streets, NW	028	07/03/14	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	07/03/14	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	07/03/14	*			
47a	37 <sup>th</sup> and T Streets, NW	029	07/03/14	*			
47b	37 <sup>th</sup> and T Streets, NW	029	07/03/14	*			
47c	38 <sup>th</sup> and W Streets, NW	029	07/03/14	*			
49 <sup>1</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	07/14/14	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	07/14/14	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	07/31/14	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	07/31/14	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	07/31/14	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	07/31/14	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	07/14/14	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	07/14/14	*			
54	23 <sup>rd</sup> and O Streets, NW	034	07/11/14	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	07/11/14	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	07/11/14	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	07/11/14	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	07/11/14	*			
$58^{1}$	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	07/07/14	*			
60	Connecticut Ave, east of Rock Creek, NW	039	07/07/14	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	07/07/14	*			

Structure		Associated NPDES	Date	С	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	07/18/14	*			
63	Harvard Street and Rock Creek Parkway, NW	042	07/18/14	*			
64	Adams Mill Road, south of Irving Street, NW	043	07/18/14	*			
65	Kenyon Street and Adams Mill Road, NW	044	07/18/14	*			
65a	Kenyon Street and Adams Mill Road, NW	044	07/18/14	*			
66	Adams Mill Road and Lamont Street, NW	045	07/18/14	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	07/18/14	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	07/18/14	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	07/18/14	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	07/18/14	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	07/08/14	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	07/16/14	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	07/11/14	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	07/11/14	*			
73	O Street Extended and Rock Creek Parkway, NW	052	07/11/14	*			
$74^{1}$	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	07/24/14	*			
$77^{1}$	Normanstone Dr Extended, west of Rock Creek, NW	056	N/A				
77a <sup>1</sup>	Normanstone Dr and Normanstone Lane, NW	056	N/A				
$78^{1}$	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>1</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	07/11/14	*			
84a	26 <sup>th</sup> and P Streets, NW	060	07/11/14	*			

1. Structure no longer functions as a combined sewer overflow regulator structure.

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.

	0	utfalls and	d Tid	le Gate	S						
				utfall	Tide			e Gate	~~		
			Con	ndition	Pres	ent?	Con	ndition	CS	O Sign	-
NPDES		Date		Needs			~ **	Needs		Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and Chanute, SW	07/04/14	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	07/17/14	*		*		*		*		
	Good Hope Road and Welsh Memorial Bridge	N/A									
	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	07/17/14	*		*		*		*		
009	O St. Sewage Pumping Station, SE	07/02/14	*		*		*		*		
010	O St. Sewage Pumping Station, SE	07/02/14	*			*			*		
011	Main Sewage Pumping Station, SE	07/02/14	*			*			*		
011(a)	Main Sewage Pumping Station, SE	07/02/14	*		*		*		*		
012	Main Sewage Pumping Station, SE	07/02/14	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	N/A									Construction for Clean Rivers Project
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	07/02/14	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	07/02/14	*			*			*		
016	12th and O Streets, SE	07/02/14	*		*		*		*		
017	M and Water Street, SE	07/02/14	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	07/02/14	*		*		*		*		
	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	07/02/14	*			*			*		
020	Rock Creek Parkway and Independence, NW	07/10/14	*		*		*		*		
021	Rock Creek Parkway and C St., NW	07/10/14	*			*			*		
-	Rock Creek Parkway and G St., NW	07/10/14	*		*		*		*		
	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	07/10/14	*		*		*		*		
025	South of 31st and K Streets, NW	07/10/14	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	07/10/14	*		*			*	*		Need DMS to weld part of the gate.
	33 <sup>rd</sup> and Water Sts., NW	07/10/14	*			*			*		
	Key Bridge and Whitehurst Freeway, NW	07/10/14	*			*			*		
	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	07/10/14	*		*		*		*		

Table 2-2Outfalls and Tide Gates

				utfall	Tide			e Gate			
			Con	dition	Pres	ent?	Con	dition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	
Outfall	Location	Inspected	OK	Work	Yes	No	OK	Work	OK	Work	Notes, Work Needed or Performed
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	07/14/14	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.		*		*		*		*		
	Just west of St. Francis Jr. High and north of N St., NW	07/11/14	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	07/11/14	*			*			*		
	22nd Street, South of Q Street NW.	07/16/14	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	07/07/14	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	07/07/14	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	07/07/14	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	07/17/14	*		*		*		*		
042	Harvard St. and Beach Dr NW.	07/17/14	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	07/17/14	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	07/17/14	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	07/17/14	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	07/18/14	*		*		*		*		
047	Piney Branch Parkway and Ingleside Terrace	07/18/14	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	07/18/14	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	07/18/14	*		*		*		*		
050	Rock Creek Parkway and L St., NW	07/16/14	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	07/24/14	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	07/24/14	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	07/24/14	*		*		*		*		
056 <sup>1</sup>	Normanstone Dr. and Rock Creek Parkway, NW.	N/A									
$057^{1}$	28th Street and Rock Creek Parkway, NW	N/A									
$058^{1}$	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	07/161/4	*		*		*		*		

1. Outfall no longer functions as a combined sewer outfall.

### 2.3 **Pumping Stations**

Pumping station operations are summarized in the table below.

	Pumping Stations – Inspections and Equipment in Service									
Pumping	No. of	No.	No.	Screens or Pumps						
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service <sup>1</sup>			
Main	31	4	10	#4 Screen	July 1-31	Screen being rehabbed	September 2014			
Eastside	25	2	4	#1 Screen	July 1-31	Screen being rehabbed	September 2014			
Poplar Point	25	2	3	#1 Screen	July 1-31	Screen being rehabbed	September 2014			
Potomac	31	4	5	None						

 Table 2-3

 Pumping Stations – Inspections and Equipment in Service

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.

Tumping Stations – Treventive Maintenance									
		Type of Preventive Maintenance							
Pumping Station	Date Performed	$Performed^{l}$	Comments						
Main	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
O St	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
Eastside	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
Poplar Point	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
Potomac	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
Rock Creek	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
Upper Anacostia	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						
Earle Place	7/2/14	Group A	Add oil, grease bearings and replace packing if needed.						

 Table 2-4

 Pumping Stations – Preventive Maintenance

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	
<b>Pumping Stations – Pumpage</b>	

	Sanitary Pı	umpage		Vater/CSO Pumped To	Anacostia River
	Total Wastewater	Daily Average			Screenings Collected
Pumping Station	(mg)	Wastewater (mg)	Date	Volume (mg)	$(units)^{l}$
Main	1,595.29	51.46	N/A	N/A	N/A
O St	144.50	4.66	7/10/2014	21.42	Normal
			7/14/2014	8.0	Normal
			7/15/2014	45.4	Normal
Eastside	229.13	7.39	N/A	N/A	N/A
Poplar Point	706.32	22.78	N/A	N/A	N/A
Potomac	3,911.10	126.16	N/A	N/A	N/A
Rock Creek	170.83	5.51	N/A	N/A	N/A
Upper Anacostia	164.79	5.32	N/A	N/A	N/A
Earle Place	0.31	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:

Tormeuse Boundary Switt Fuenty Inspections and Equipment in Service									
Date	# of	# of	Screens or Swirls						
Inspected	Screens	Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service			
7/9/14	1, 2 & 3	1, 2 & 3	N/A	N/A					

	Table	2-6	
Northeast Boundary	y Swirl Facility – In	spections and Ec	uipment in Service

Table 2-7			
Northeast Boundary	<b>Swirl Facility</b>	– Preventive Maintenance	

Date Performed	<i>Type of Preventive Maintenance Performed</i> <sup>1</sup>	Comments
7/10/14	Group A	

#### Notes:

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

		Doundary Dwn		ventiler Operation	-10
	Approx. Storm	Total Influent	Total Foul Sewer	Total Effluent	Approx. Screenings
Date	$Duration(hrs)^{l}$	Volume (mg)	Volume (mg)	Volume $(mg)^2$	Volume (Cu. ft)
7/3/2014	5.5	3.9	3.9	0.0	80.0
7/8/2014	5	6.5	6.5	0.0	60.0
7/9/2014	4	6.3	6.3	0.0	12.0
7/10/2014	4.5	9.8	9.8	0.0	12.0
7/14/2014	4.5	9.6	9.6	0.0	12.0
7/15/2014	8	17.8	17.8	0.0	20.0
7/16/2014	2.5	2.1	2.1	0.0	12.0

 Table 2-8

 Northeast Boundary Swirl Facility – Wet Weather Operations

- 1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
- 2. Volume approximated due malfunction of ESIRS meter.

### 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.

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

Table 2-9
Northeast Boundary Swirl Facility – Disinfection Performance

Notes:

1. River: River Outfall

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

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

### 2.5 Inflatable Dams

DC WATER 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:

Inflatable Dam		Was Dam Out of Service			Schedule to Restore t
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service
14 - East	7/31	No	N/A	N/A	N/A
14 - West	7/31	No	N/A	N/A	N/A
15	7/31	No	N/A	N/A	N/A
15A	7/31	No	N/A	N/A	N/A
16 - East	7/31	No	N/A	N/A	N/A
16 - West	7/31	No	N/A	N/A	N/A
24 - North	7/31	No	N/A	N/A	N/A
24 - Middle	7/31	No	N/A	N/A	N/A
24 - South	7/31	No	N/A	N/A	N/A
34	7/31	No	N/A	N/A	N/A
35	7/31	Yes	7/1-7/11, 7/23	Testing & Evaluation	Restored on July 11& 23, 2014
52	7/31	No	N/A	N/A	N/A

 Table 2-11

 Inflatable Dams – Inspections and Equipment in Service

Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow
14 (E & W)	None	N/A
15	7/8	2 mins
15	7/10	4 mins
	7/14	3 mins
15A	7/8	36 mins
154	7/10	2 hrs, 58 mins
	7/11	29 mins
	7/14	1 hr ,42 mins
	7/15	2 hrs, 45 mins
	7/16	1 hr, 56 mins
16 (E & W)	7/8	2 mins
10 (2 & (1))	7/10	26 mins
	7/14	15 mins
	7/15	1 hr, 24 mins
24	7/3	2 mins
	7/4	2 mins
	7/8	5 mins
	7/9	4 mins
	7/10	11 mins
	7/14	14 mins
	7/15	13 mins
	7/16	2 mins
34	7/10	14 mins
	7/14	14 mins
35	7/8	9 mins
	7/10	30 mins
	7/14	6 mins
	7/15	19 mins
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
Outfall Sewer Control Gates	Operational Status	Position
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

 Table 2-12

 Inflatable Dams & SCADA Sites - Wet Weather Operations

# 3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflows during July 2014.

## SOLIDS AND FLOATABLES CONTROL

## 3.1 Catch Basin Cleaning

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

				Inspections	1			Clea	ning		
			CBs in	Total Anacostia CBs Inspected	Total Anacostia CBs Inspected	CBs Clea Last N			Cleaned Month	Total CB. This Yea	s Cleaned r to Date
		CBs in	Anacostia	Once this	Twice this						
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	231	0	383	286	363	208	746	494
2	4,714	4,112	2,316	1126	211	1880	1664	457	336	2337	2000
3	3,555	461	-	0	0	2895	690	1603	458	4498	1148
4	2,782	1,985	159	159	112	3190	1852	105	57	3295	1909
5	2,167	1,035	1,035	444	26	447	373	125	71	572	444
6	1,783	1,594	1,594	1175	428	1337	1147	88	28	1425	1175
7	2,313	-	-	0	0	915	0	190	0	1105	0
8	1,278	116	116	116	116	2315	591	149	46	2464	637
Subtotal	20,183	10,871	5,954	3,251	893	13,362	6,603	3,080	1,204	16,442	7,807
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954							16,442	7,807
% Cleaned/Inspected to Date				55%	15%					81%	72%

## **3.2 BMP Demonstration Projects**

DC WATER 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 3-2BMP Demonstration Projects – Report

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (CY)
Netting System CSO 018	7/22/2014	Good	Clean debris	Cleaned debris	None
			from grates	from grates	
Bar Rack CSO 040	7/7/2014	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	7/17/2014	Good	None	Routine Cleaning	(1)

Notes:

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

## 3.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 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 DC WATER, 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:

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	22
Days not Operating	8
Reason not Operating	Environmental (1). Offloading conveyor removed for repair (5).
	Fleet troubleshooting and maintenance (2).
# Skimmer in Fleet	3 Skimmers
# Skimmers Out of Service	2 Skimmers
Dates	B28: 7/16 - 7/17 B29: 7/1 - 7/31 B32: 7/16 - 7/31
Reason	B28: Wing screen jammed. AC condensation water leak.
	B29: Front assembly catching on hull.
	B32: Antenna replacement. AC under repair. Hydraulic leak.
Plan to Restore to Service	B28: Cleared by Fleet for operations 7/18.
	B29: At contractor for troubleshooting and repairs. ETR
	unknown.
	B32: Waiting for air-conditioning part. ETR unknown.
Volume Material Collected	40 Tons.
Nature of Material	Bottles, cans, natural debris and plastics.

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

### 3.4 CSS Litter Control

This section describes DC WATER'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.

## 4. MONITORING

### 4.1 Condition Report Bar Racks at Main and O Street Storm Pumps

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

# Table 4-1Bar Racks at Main & O Street Pumping Stations

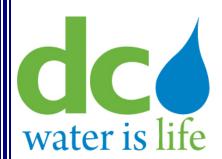
Inspector: Gregory Stephens

		Date	Conc	lition		Work Performed
Pumping Station	Inspector	Inspected	Good	Needs Work	Work Needed	or Schedule for Completion
Bar Racks at O						
Street Storm	GS	7/24	Х			
Pumps (CSO 010)						
Bar Racks at Main						
Storm Pumps	GS	7/24	Х			
(CSO 011)						

# 4.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station
7/1/2014	0.00	0	0	0
7/2/2014	0.01	0.01	0.02	0
7/3/2014	0.23	0.07	0.42	0.07
7/4/2014	0.09	0.03	0.03	0.08
7/5/2014	0.00	0	0	0
7/6/2014	0.00	0.01	0	0
7/7/2014	0.00	0	0	0
7/8/2014	0.41	0.04	0.66	0.25
7/9/2014	0.18	0	0.01	0.08
7/10/2014	0.53	0.01	0.7	0.37
7/11/2014	0.00	0	0	0
7/12/2014	0.00	0.57	0	0
7/13/2014	0.13	0.05	0.06	0.06
7/14/2014	0.75	0.6	0.25	0.45
7/15/2014	0.72	0.03	1.19	0.52
7/16/2014	0.00	0	0	0
7/17/2014	0.00	0.01	0	0
7/18/2014	0.00	0	0	0
7/19/2014	0.00	0	0	0
7/20/2014	0.00	0	0	0
7/21/2014	0.00	0	0	0
7/22/2014	0.00	0	0	0
7/23/2014	0.00	0	0	0
7/24/2014	0.01	0	0	0.01
7/25/2014	0.46	0	0	0
7/26/2014	0.00	0	0	0
7/27/2014	0.04	0.03	0.04	0.03
7/28/2014	0.00	0	0	0
7/29/2014	0.00	0	0	0
7/30/2014	0.00	0	0	0
7/31/2014	0.00	0	0	0
TOTAL	3.56	1.46	3.38	1.92



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

# Monthly Operations Report For Combined Sewer System Month: August 2014

# Prepared By: District of Columbia Water and Sewer Authority Department of Sewer Services

Washington, D.C. 20003

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

### Monthly Operations Report for Combined Sewer System Month: August 2014

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### 1. INTRODUCTION

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

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

Structure		Associated NPDES	Date	С	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/21/14	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	08/21/14	*			
5	Poplar Point Pumping Station	004	08/05/14	*			
6	Chicago Street and Railroad Ave, SE	005	08/20/14	*			
7	W Street and Railroad Ave, SE	005	08/20/14	*			
8 <sup>1</sup>	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE	007	08/20/14	*			
11	"O" Street Pumping Station	011(a)	08/05/14	*			
12	Storm Pump Discharge at Main Pumping Station	011	08/05/14	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	08/25/14	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	08/05/14	*			
15	South Capitol and E Streets	010	08/05/14	*			
15a	Half and L Streets, SE	010	08/05/14	*			
15b	South Capitol and I Streets	010	08/05/14	*			
15c	South Capitol and I Streets	010	08/25/14	*			

# Table 2-1Regulator Structures

Structure		Associated NPDES	Date	C	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	08/25/14	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	N/A				Construction for Clean Rivers Project
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	08/01/14	*			
18	6 <sup>th</sup> and M Streets, SE	014	08/19/14	*			
19	9 <sup>th</sup> and M Streets, SE	015	N/A				Construction for Clean Rivers Projec
19a	9 <sup>th</sup> and M Streets, SE	015	N/A				Construction for Clean Rivers Project
20	12 <sup>th</sup> and M Streets, SE	016	N/A				Construction for Clean Rivers Project
20a	12 <sup>th</sup> and M Streets, SE	016	08/01/14	*			
21	14 <sup>th</sup> and M Streets, SE	017	N/A				Construction for Clean Rivers Projec
22a	Barney Circle and Pennsylvania Ave, SE	018	08/26/14	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	08/26/14	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	08/26/14	*			
22d	Kentucky Ave and Potomac Street, SE	018	08/26/14	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	08/26/14	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	08/26/14	*			
24a	East Capitol St, west of RFK stadium	019	08/26/14	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	08/26/14	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	08/26/14	*			
30	17 <sup>th</sup> and D Streets, NW	020	08/20/14	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	08/20/14	*			
33	10 <sup>th</sup> and F Streets, NW	020	08/2014	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	08/29/14	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	08/29/14	*			
35	Northeast of Roosevelt Bridge, NW	021	08/19/14	*			
36	27 <sup>th</sup> and I Streets, NW	022	08/29/14	*			
36a	New Hampshire Ave and Eye Street, NW	022	08/29/14	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	08/29/14	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	08/29/14	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	08/29/14	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	08/29/14	*			

Structure		Associated NPDES	Date	С	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
37	27 <sup>th</sup> and Eye Streets, NW	022	08/29/14	*			
38	29 <sup>th</sup> and K Streets, NW	024	08/29/14	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	08/19/14	*			
39a	30 <sup>th</sup> and K Streets, NW	024	08/19/14	*			
39b	30 <sup>th</sup> and K Streets, NW	024	08/19/14	*			
41b	31 <sup>st</sup> and K Streets, NW	025	08/19/14	*			
41c	31 <sup>st</sup> and K Streets, NW	025	08/19/14	*			
42	Wisconsin Ave and K Street, NW	026	08/19/14	*			
43	Potomac and Water Streets, NW	027	08/19/14	*			
43a	Potomac and Water Streets, NW	027	08/19/14	*			
44	Water Street, west of Potomac St, NW	027	08/19/14	*			
45	36 <sup>th</sup> and M Streets, NW	028	08/01/14	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	08/01/14	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	08/01/14	*			
47a	37 <sup>th</sup> and T Streets, NW	029	08/01/14	*			
47b	37 <sup>th</sup> and T Streets, NW	029	08/01/14	*			
47c	38 <sup>th</sup> and W Streets, NW	029	08/01/14	*			
49 <sup>1</sup>	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	08/15/14	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	08/15/14	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	08/01/14	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	08/25/14	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	08/25/14	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	08/26/14	*			
53b	L Street between 21 <sup>st</sup> Street and New Hampshire Ave, NW	022, 034	08/25/14	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	08/26/14	*			
54	23 <sup>rd</sup> and O Streets, NW	034	08/26/14	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	08/26/14	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	08/27/14	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	08/27/14	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	08/271/4	*			
58 <sup>1</sup>	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	08/27/14	*			
60	Connecticut Ave, east of Rock Creek, NW	039	08/27/14	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	08/27/14	*			

Structure		Associated NPDES	Date	С	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	08/20/14	*			
63	Harvard Street and Rock Creek Parkway, NW	042	08/20/14	*			
64	Adams Mill Road, south of Irving Street, NW	043	08/20/14	*			
65	Kenyon Street and Adams Mill Road, NW	044	08/20/14	*			
65a	Kenyon Street and Adams Mill Road, NW	044	08/20/14	*			
66	Adams Mill Road and Lamont Street, NW	045	08/20/14	*			
67	Park Rd , south of Piney Branch Pkwy, NW	046	08/20/14	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	08/20/14	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	08/20/14	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	08/20/14	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	08/20/14	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	08/25/14	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	08/25/14	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	08/25/14	*			
73	O Street Extended and Rock Creek Parkway, NW	052	08/25/14	*			
74 <sup>1</sup>	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	08/26/14	*			
$77^{1}$	Normanstone Dr Extended, west of Rock Creek, NW	056	N/A				
77a <sup>1</sup>	Normanstone Dr and Normanstone Lane, NW	056	N/A				
$78^{1}$	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>1</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	08/25/14	*			
84a	26 <sup>th</sup> and P Streets, NW	060	08/25/14	*			

1. Structure no longer functions as a combined sewer overflow regulator structure.

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.

	0	utfalls and		le Gale	5						
				utfall				e Gate		0.01	
		_	Cor	ndition	Pres	ent?	Condition		CSO Sign		-
NPDES	• ·	Date	0.17	Needs	• •		0.17	Needs	0.17	Needs	
Outfall	Location	Inspected	OK	Work		No	OK	Work	OK	Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and Chanute, SW	08/26/14	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	08/21/14	*		*		*		*		
-	Good Hope Road and Welsh Memorial Bridge	N/A	*		*		*		*		
	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	08/21/14	*		*		*		*		
009	O St. Sewage Pumping Station, SE	08/05/14	*		*		*		*		
010	O St. Sewage Pumping Station, SE	08/05/14	*			*			*		
011	Main Sewage Pumping Station, SE	08/05/14	*			*			*		
011(a)	Main Sewage Pumping Station, SE	08/05/14	*		*		*		*		
012	Main Sewage Pumping Station, SE	08/05/14	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	N/A									Construction for Clean Rivers Project
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	08/05/14	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	08/05/14	*			*			*		
016	12th and O Streets, SE	08/05/14	*		*		*		*		
017	M and Water Street, SE	08/05/14	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	08/05/14	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	08/05/14	*			*			*		
020	Rock Creek Parkway and Independence, NW	08/22/14	*		*		*		*		
021	Rock Creek Parkway and C St., NW	08/22/14	*			*			*		
022	Rock Creek Parkway and G St., NW	08/22/14	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	08/22/14	*		*			*	*		
025	South of 31st and K Streets, NW	08/22/14	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	08/22/14	*		*		*		*		Need DMS to weld part of the gate.
027	33 <sup>rd</sup> and Water Sts., NW	08/22/14	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	08/22/14	*			*			*		

Table 2-2Outfalls and Tide Gates

				utfall	Tide			e Gate			
			Con	dition	Pres	ent?	Cor	dition	CS	O Sign	
NPDES		Date		Needs				Needs		Needs	
Outfall	Location	Inspected		Work		No	OK	Work		Work	Notes, Work Needed or Performed
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	08/22/14	*		*		*		*		
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	08/22/14	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.		*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	08/22/14	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	08/22/14	*			*			*		
036	22nd Street, South of Q Street NW.	08/22/14	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
	Between arch footbridge and Connecticut Ave., north of Kalorama										
038	Circle, NW.	08/25/14	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	08/21/14	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	08/21/14	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	08/21/14	*		*		*		*		
042	Harvard St. and Beach Dr NW.	08/21/14	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	08/21/14	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	08/21/14	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	08/21/14	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	08/21/14	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	08/20/14	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	08/20/14	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	08/20/14	*		*		*		*		
050	Rock Creek Parkway and L St., NW	08/20/14	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	08/25/14	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	08/21/14	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	08/21/14	*		*		*		*		
056 <sup>1</sup>	Normanstone Dr. and Rock Creek Parkway, NW.	N/A									
$057^{1}$	28th Street and Rock Creek Parkway, NW	N/A									
058 <sup>1</sup>	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	08/25/14	*		*		*		*		

1. Outfall no longer functions as a combined sewer outfall.

### 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

	Pumping Stations – Inspections and Equipment in Service										
Pumping	No. of	No.	No.	Screens or Pumps							
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service <sup>1</sup>				
Main	31	4	10	#4 Screen	August 1-31	Screen being rehabbed	September 2014				
Eastside	22	2	4	#1 Screen	August 1-31	Screen being rehabbed	September 2014				
Poplar Point	22	2	3	#1 Screen	August 1-31	Screen being rehabbed	September 2014				
Potomac	31	4	5	None							

Table 2-3

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.

	T uniping Stations – Treventive Maintenance											
		Type of Preventive Maintenance										
Pumping Station	Date Performed	Performed <sup>1</sup>	Comments									
Main	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
O St	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
Eastside	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
Poplar Point	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
Potomac	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
Rock Creek	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
Upper Anacostia	8/8	Group A	Add oil, grease bearings and replace packing if needed.									
Earle Place	8/8	Group A	Add oil, grease bearings and replace packing if needed.									

 Table 2-4

 Pumping Stations – Preventive Maintenance

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

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

Check all safety equipment

Issue work order requests as required

Table 2-5	
Pumping Stations – Pumpage	

	Sanitary Pi	ımpage	Storm Water/CSO Pumped To Anacostia River				
	Total Wastewater	Daily Average			Screenings Collected		
Pumping Station	( <i>mg</i> )	Wastewater (mg)	Date	Volume (mg)	$(units)^{I}$		
Main	1,410.00	45.48	N/A	N/A	N/A		
O St	131.10	4.23	8/12	103.23	Normal		
Eastside	223.56	7.21	N/A	N/A	N/A		
Poplar Point	665.55	21.47	N/A	N/A	N/A		
Potomac	3,807.30	122.82	N/A	N/A	N/A		
Rock Creek	168.33	5.43	N/A	N/A	N/A		
Upper Anacostia	154.38	4.98	N/A	N/A	N/A		
Earle Place	0.16	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:

	Northeast Boundary Swirl Facility – Inspections and Equipment in Service									
ſ										
	Date	# of	# of	Screens or Swirls						
	Inspected	Screens	Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service			
	8/11	1, 2 & 3	1, 2 & 3	N/A	N/A					

 Table 2-6

 Northeast Boundary Swirl Facility – Inspections and Equipment in Service

Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance

Date Performed	<i>Type of Preventive Maintenance Performed<sup>1</sup></i>	Comments
8/15	Group A	

Notes:

 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

	Date	Approx. Storm Duration (hrs) <sup>1</sup>	Total Influent Volume (mg)	Total Foul Sewer Volume (mg)	Total Effluent Volume (mg) <sup>2</sup>	Approx. Screenings Volume (Cu. ft)			
	Dule	Duranon (ms)	volume (mg)	volume (mg)	voiume (mg)	volume (Cu. ji)			
	8/3/2014	4.5	7.6	7.6	0.0	10			
	8/6/2014	4	2.7	2.7	0.0	10			
Γ	8/12/2014	5.25	34.2	34.2	0.0	100			
	8/12/2014	4	4.2	4.2	0.0	10			

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

Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
 Volume approximated due malfunction of ESIRS meter.

### Chlorination/De-chlorination 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.

	Chlor/	Do	sages	Residual Chlorin Results	ne Test	E. Coli Test R	esults
	Dechlor						Count
	System	NaOCl	NaHSO <sub>3</sub>		Conc.		Per
Date	Used?	(mg/l)	(mg/l)	Location	( <i>mg/l</i> )	Site	100ml
N/A				Mix Chamber		Mix Chamber	
				Anacostia River <sup>1</sup>		Anacostia River <sup>1</sup>	

 Table 2-9

 Northeast Boundary Swirl Facility – Disinfection Performance

Notes:

1. River: River Outfall

 Table 2-10

 Northeast Boundary Swirl Facility – Effluent Sampling Results

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

#### 2.5 Inflatable Dams

DC WATER 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:

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	8/27	No	N/A	N/A	N/A
14 - West	8/27	No	N/A	N/A	N/A
$15^{1}$	8/27	No	N/A	N/A	N/A
15A	8/27	No	N/A	N/A	N/A
16 - East	8/27	No	N/A	N/A	N/A
16 - West	8/27	No	N/A	N/A	N/A
24 - North	8/27	No	N/A	N/A	N/A
24 - Middle	8/27	No	N/A	N/A	N/A
24 - South	8/27	No	N/A	N/A	N/A
34	8/27	No	N/A	N/A	N/A
35	8/27	No	N/A	N/A	N/A
52	8/27	No	N/A	N/A	N/A

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

#### Notes:

1. On or about August 13<sup>th</sup>, DC Water observed that Dam 15 was deflating for a minute or so every 8 hours. These occurrences did not result in an environmental event however, we are reporting this malfunction out of an abundance of caution. The issue was caused by valve being open that should have been closed. It was closed on August 27<sup>th</sup> and the crews verified by replicating the condition on September 24, 2014.

militable Danis & SCADA Sites - Wet Weather Operations									
Inflatable Dam Structure No.	<b>Overflow Dates</b>	Estimated Duration of Overflow							
14 (E & W)	None	N/A							
15	8/12	1 hrs, 8 mins							
15A	8/12	6 hrs, 22 mins							
16 (E & W)	8/12	29 mins							
24	8/3	7 mins							
	8/6	2 mins							
	8/12	44 mins							
34	8/12	22 mins							
35	8/12	2 hrs, 53 mins							
52	None	N/A							
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow							
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.							
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.							
Outfall Structure 2	None	None							
Outfall Sewer Control Gates	<b>Operational Status</b>	Position							
Outfall Sewer Control Gate No. 1	Operational	Open							
Outfall Sewer Control Gate No.2	Operational	Open							

 Table 2-12

 Inflatable Dams & SCADA Sites - Wet Weather Operations

### 3. DRY WEATHER OVERFLOWS

Location	CSO Outfall #040 – Rock Creek near Biltmore Street extension NW
	During their routine monthly outfall inspections, a District of Columbia Water and Sewer Authority (DC
	Water) sewer maintenance crew observed a dry weather discharge through CSO #040. Later, further
	investigations found that the base of the upstream manhole riser at Structure #61 had collapsed due to
Cause	severe mortar deterioration causing debris to enter the structure and clog the 14-inch diversion pipe.
Date/ Time Discovered	August 26, 2014 at approximately 11:30 AM
	The crew was unable to clear the blockage in the pipe by power jetting. Anchor Contracting Inc. was
Action Taken	directed to set up a by-pass pumping system to divert the flow away from the pipe.
Date/Time Discharge Ceased	August 27, 2014 at approximately 8:30 AM
Estimated Volume	1,200 gallons
Did Overflow Reach Receiving water?	Yes. Rock Creek.
	Anchor is continuing to clear the pipe for an additional CCTV inspection and will rebuild the manhole to
	secure the structure. We will coordinate with our Engineering Department to develop long term plans for
Action taken to prevent reoccurrence	permanent sewer rehabilitation of the line that will extend the service life of the pipe.

## Sanitary Sewer Overflows:

Location	Pope Branch Creek, Fort Davis Park near Nash Pl, SE
	The District of Columbia Water and Sewer Authority (DC Water) and the District Department of the
	Environment (DDOE) investigating a possible leak on a 12-inch sanitary sewer observed seepage from the
	pipe. At the time, our sewer repair contractor Corinthian Contractors was onsite removing concrete
	encasement around a 12-inch sewer to eliminate a deep sag in the pipe and prepare it for re-lining later in
Cause	the week. Sewage leaked from several joints and flowed into the creek at the bottom of the slope.
Date/ Time Discovered	August 20, 2014 at approximately 2:00 PM
	Corinthian Contractors applied quick setting concrete at the joints and set up a by-pass pumping system to
Action Taken	prevent the waste from entering the creek.
Date/Time Discharge Ceased	August 20, 2014 at approximately 7:30 PM
Estimated Volume	2,000 gallons
Did Overflow Reach Receiving water?	Yes. Pope Branch Creek.
	In the coming weeks a subcontractor for Corinthian Contractors will re-line the entire two mile stretch of
Action taken to prevent reoccurrence	the sewer in the heavily wooded area of Fort Davis Park to extend the service life of the pipe.

Pope Branch Creek, Fort Davis Park near Nash Pl, SE
The District of Columbia Water and Sewer Authority (DC Water) received notice from the the District
Department of the Environment (DDOE) concerning a sewer leak on a12-inch sanitary sewer. DC Water
investigation found that our sewer repair contractor Corinthian Contractors recently completed high
pressure cleaning on the pipe in preparation for re-lining the sewer. That action caused seepage at several
joints which flowed into the creek at the bottom of the slope.
August 22, 2014 at 3:54 PM
Corinthian Contractors modified the by-pass pumping system to prevent any waste from entering the
creek.
August 22, 2014 at approximately 7:00 PM
500 gallons
Yes. Pope Branch Creek.
In the coming weeks a subcontractor for Corinthian Contractors will re-line the entire two mile stretch of the sewer in the heavily wooded area of Fort Davis Park to extend the service life of the pipe.

### SOLIDS AND FLOATABLES CONTROL

### 3.1 Catch Basin Cleaning

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

				Inspections	1	Cleaning						
			CBs in	Total Anacostia CBs Inspected	Total Anacostia CBs Inspected	CBs Clea Last N			Cleaned Month		s Cleaned r to Date	
		CBs in	Anacostia	Once this	Twice this							
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS	
1	1,591	1,568	734	365	56	746	494	435	285	1181	779	
2	4,714	4,112	2,316	2316	428	2337	2000	402	377	2739	2377	
3	3,555	461	-	0	0	4498	1148	53	0	4551	1148	
4	2,782	1,985	159	159	159	3295	1909	388	223	3683	2132	
5	2,167	1,035	1,035	1035	233	572	444	1064	824	1636	1268	
6	1,783	1,594	1,594	1189	525	1425	1175	53	14	1478	1189	
7	2,313	-	-	0	0	1105	0	8	0	1113	0	
8	1,278	116	116	116	116	2464	637	70	70	2534	707	
Subtotal	20,183	10,871	5,954	5,180	1,517	16,442	7,807	2,473	1,793	18,915	9600	
DDOT (via VMS) Subtotal												
Grand Total	20,183	10,871	5,954							18,915	9,600	
% Cleaned/Inspected to Date				87%	25%					94%	88%	

### **3.2 BMP Demonstration Projects**

DC WATER 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 3-2BMP Demonstration Projects – Report

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (CY)
Netting System CSO 018	8/26/2014	Good	Clean debris	Cleaned debris	None
			from grates	from grates	
Bar Rack CSO 040	8/21/2014	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	8/21/2014	Good	None	Routine Cleaning	(1)

Notes:

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

#### 3.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 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 DC WATER, 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:

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	5
Reason not Operating	Thunderstorms and Fleet troubleshooting and maintenance.
# Skimmer in Fleet	3 skimmers
# Skimmers Out of Service	1 Skimmers
Dates	B28: 8/5 - 8/8 B29: 8/1 - 8/31 B32: 8/1 - 8/14
Reason	B28: Hydraulic ram leaking oil.
	B29: Front assembly catching on hull.
	B32: Waiting for air-conditioning part and hydraulic oil leak.
Plan to Restore to Service	B28: Cleared by Fleet for operations on 8/9.
	B29: At contractors for repairs. ETR unknown.
	B32: Cleared by Fleet for operations on 8/15.
Volume Material Collected	70 ton.
Nature of Material	Bottles, cans, natural debris and plastics.

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

#### 3.4 CSS Litter Control

This section describes DC WATER'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.

### 4. MONITORING

#### 4.1 Condition Report Bar Racks at Main and O Street Storm Pumps

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

# Table 4-1Bar Racks at Main & O Street Pumping Stations

Inspector: Gregory Stephens

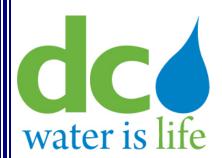
		Date	Conc	lition		Work Performed
Pumping Station	Inspector	Inspected	Good	Needs Work	Work Needed	or Schedule for Completion
Bar Racks at O Street Storm Pumps (CSO 010)	GS	8/11	Х			
Bar Racks at Main Storm Pumps (CSO 011)	GS	8/11	X			

### 4.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station
8/1/2014	0.02	0.01	0.03	0.01
8/2/2014	0.12	0.08	0.13	0.05
8/3/2014	0.48	0.33	0.12	0.2
8/4/2014	0.02	0.02	0.02	0.01
8/5/2014	0.00	0	0	0.05
8/6/2014	0.21	0.17	0.21	0.1
8/7/2014	0.00	0	0	0
8/8/2014	0.00	0	0	0
8/9/2014	0.00	0	0	0
8/10/2014	0.00	0	0	0
8/11/2014	0.01	0.01	0.01	0.01
8/12/2014	1.25	1.34	0.9	1.32
8/13/2014	0.00	0	0	0
8/14/2014	0.00	0	0	0
8/15/2014	0.00	0	0	0
8/16/2014	0.00	0	0	0
8/17/2014	0.00	0	0	0
8/18/2014	0.00	0	0	0
8/19/2014	0.01	0	0	0
8/20/2014	0.10	0.09	0.09	0.07
8/21/2014	0.00	0	0.01	0
8/22/2014	0.00	0.01	0	0.01
8/23/2014	0.27	0.22	0.18	0.1
8/24/2014	0.00	0	0	0
8/25/2014	0.00	0	0	0
8/26/2014	0.00	0	0	0
8/27/2014	0.00	0	0	0
8/28/2014	0.00	0	0	0
8/29/2014	0.00	0	0	0
8/30/2014	0.00	0	0	0
8/31/2014	0.26	0.16	0.23	0.19
TOTAL	2.75	2.44	1.93	2.12

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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: September 2014

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

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

#### Monthly Operations Report for Combined Sewer System Month: September 2014

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### 1. INTRODUCTION

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

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

Structure Number	Location	Associated NPDES Outfall			ondition Needs Work	Work Needed	Work performed
2	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/03/14	*			
4	Bolling AFB, 2250 ft. north of the south line of the Base, SW	003	09/03/14	*			
5	Poplar Point Pumping Station	004	09/03/14	*			
6	Chicago Street and Railroad Ave, SE	005	09/09/14	*			
7	W Street and Railroad Ave, SE	005	09/09/14	*			
$8^1$	Good Hope Rd, west of Nichols Ave, SE	006	N/A				
9	13 <sup>th</sup> Street and Ridge Place, SE	007	09/03/14	*			
11	"O" Street Pumping Station	011(a)	09/03/14	*			
12	Storm Pump Discharge at Main Pumping Station	011	09/03/14	*			
13	2 <sup>nd</sup> Street, 300 ft. north of N Place, SE	009	09/02/14	*			
14	2 <sup>nd</sup> Street, 250 ft. north of N Place, SE	011(a)	09/03/14	*			
15	South Capitol and E Streets	010	09/02/14	*			
15a	Half and L Streets, SE	010	09/02/14	*			
15b	South Capitol and I Streets	010	09/02/14	*			
15c	South Capitol and I Streets	010	09/02/14	*			

# Table 2-1Regulator Structures

Structure		Associated NPDES	Date	Condition			
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
16	North of Main Sewage Pumping Station	012	09/03/14	*			
17	4 <sup>th</sup> and N Streets, SE, Both Extended	013	N/A				Construction for Clean Rivers Project
17a	K Street between 6 <sup>th</sup> Street and 7 <sup>th</sup> Street, SE	013	09/29/14	*			
18	6 <sup>th</sup> and M Streets, SE	014	09/02/14	*			
19	9 <sup>th</sup> and M Streets, SE	015	N/A				Construction for Clean Rivers Project
19a	9 <sup>th</sup> and M Streets, SE	015	N/A				Construction for Clean Rivers Project
20	12 <sup>th</sup> and M Streets, SE	016	N/A				Construction for Clean Rivers Project
20a	12 <sup>th</sup> and M Streets, SE	016	09/24/14	*			
21	14 <sup>th</sup> and M Streets, SE	017	N/A				Construction for Clean Rivers Projec
22a	Barney Circle and Pennsylvania Ave, SE	018	09/24/14	*			
22b	Barney Circle and Pennsylvania Ave, SE	018	09/24/14	*			
22c	Barney Circle and Pennsylvania Ave, SE	018	09/24/14	*			
22d	Kentucky Ave and Potomac Street, SE	018	09/24/14	*			
22e	14 <sup>th</sup> Street and Kentucky Ave, SE	018	09/24/14	*			
23	Independence Ave, 21 <sup>st</sup> Street, SE, Extended	019	09/24/14	*			
24a	East Capitol St, west of RFK stadium	019	09/24/14	*			
28	21 <sup>st</sup> and Constitution Ave, NW	020	09/17/14	*			
29	22 <sup>nd</sup> Street, between Constitution Ave and C St, NW	020	09/17/14	*			
30	17 <sup>th</sup> and D Streets, NW	020	09/16/14	*			
31	15 <sup>th</sup> Street and Pennsylvania Ave, NW	020	09/16/14	*			
33	10 <sup>th</sup> and F Streets, NW	020	09/16/14	*			
34	23 <sup>rd</sup> Street, north of Constitution Ave, NW	020	09/16/14	*			
34a	23 <sup>rd</sup> Street near C Street, NW	020	09/17/14	*			
35	Northeast of Roosevelt Bridge, NW	021	09/30/14	*			
36	27 <sup>th</sup> and I Streets, NW	022	09/16/14	*			
36a	New Hampshire Ave and Eye Street, NW	022	09/16/14	*			
36b	19 <sup>th</sup> and L Streets, NW	022, 034	09/04/14	*			
36d	17 <sup>th</sup> and L Streets, NW	022, 034	09/04/14	*			
36g	18 <sup>th</sup> and M Streets, NW	022, 034	09/04/14	*			
36h	18 <sup>th</sup> and M Streets, NW	022, 034	09/04/14	*			

Structure		Associated NPDES	Date	С	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
37	27 <sup>th</sup> and Eye Streets, NW	022	09/16/14	*			• ¥
38	29 <sup>th</sup> and K Streets, NW	024	09/15/14	*			
38a	30 <sup>th</sup> Street, south of K Street, NW	024	09/15/14	*			
39a	30 <sup>th</sup> and K Streets, NW	024	09/15/14	*			
39b	30 <sup>th</sup> and K Streets, NW	024	09/15/14	*			
41b	31 <sup>st</sup> and K Streets, NW	025	09/15/14	*			
41c	31 <sup>st</sup> and K Streets, NW	025	09/15/14	*			
42	Wisconsin Ave and K Street, NW	026	09/15/14	*			
43	Potomac and Water Streets, NW	027	09/15/14	*			
43a	Potomac and Water Streets, NW	027	09/15/14	*			
44	Water Street, west of Potomac St, NW	027	09/15/14	*			
45	36 <sup>th</sup> and M Streets, NW	028	09/29/14	*			
46	Canal Rd, 1000ft. east of Foxhall Rd, NW	029	09/04/14	*			
47	38 <sup>th</sup> Street and Reservoir Road, NW	029	09/04/14	*			
47a	37 <sup>th</sup> and T Streets, NW	029	09/04/14	*			
47b	37 <sup>th</sup> and T Streets, NW	029	09/04/14	*			
47c	38 <sup>th</sup> and W Streets, NW	029	09/04/14	*			
$49^{1}$	Pennsylvania Ave, east side of Rock Creek, NW	031	N/A				
50	26 and M Streets, NW	032	09/16/14	*			
51	N Street Extended, west of 25 <sup>th</sup> Street, NW	033	09/16/14	*			
52	22 <sup>nd</sup> Street between M and N Streets, NW	034	09/30/14	*			
52a	N Street between 22 <sup>nd</sup> and 23 <sup>rd</sup> Streets, NW	034	09/30/14	*			
53	22 <sup>nd</sup> and M Streets, NW	022, 034	09/30/14	*			
53a	22 <sup>nd</sup> and M Streets, NW	022, 034	09/30/14	*			
53b	L Street between 21st Street and New Hampshire Ave, NW	022, 034	09/09/14	*			
53c	L and 22 <sup>nd</sup> Streets, NW	022	09/09/14	*			
54	23 <sup>rd</sup> and O Streets, NW	034	09/22/14	*			
55	22 <sup>nd</sup> Street, south of Q Street, NW	035	09/22/14	*			
55a	22 <sup>nd</sup> Street, south of Q Street, NW	035	09/22/14	*			
56	23 <sup>rd</sup> and Massachusetts Ave, NW	036	09/22/14	*			
57	23 <sup>rd</sup> Street, south of Q Street, NW	036	09/22/14	*			
58 <sup>1</sup>	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	09/24/14	*			
60	Connecticut Ave, east of Rock Creek, NW	039	09/15/14	*			
61	Biltmore St, Extended, east of Rock Creek, NW	040	09/15/14	*			

Structure		Associated NPDES	Date	С	ondition		
Number	Location	Outfall	Inspected	Good	Needs Work	Work Needed	Work performed
62	Ontario Rd, Extended, and Rock Creek Pkwy, NW	041	09/17/14	*			
63	Harvard Street and Rock Creek Parkway, NW	042	09/17/14	*			
64	Adams Mill Road, south of Irving Street, NW	043	09/17/14	*			
65	Kenyon Street and Adams Mill Road, NW	044	09/17/14	*			
65a	Kenyon Street and Adams Mill Road, NW	044	09/17/14	*			
66	Adams Mill Road and Lamont Street, NW	045	09/17/14	*			
67	Park Rd, south of Piney Branch Pkwy, NW	046	09/17/14	*			
68	Ingleside Terrance, Extended and Piney Branch Parkway, NW	047	09/17/14	*			
69	Mt. Pleasant Street, Extended and Piney Branch Parkway, NW	048	09/17/14	*			
70	Piney Branch Parkway, west of 16 <sup>th</sup> Street, NW	049	09/17/14	*			
70i	5 <sup>th</sup> and Quackenbos Streets, NW	049	09/09/14	*			
71	28 <sup>th</sup> Street, west of Rock Creek Parkway, NW	050	09/0914	*			
72	Olive Street Extended and Rock Creek Pkwy, NW	051	09/22/14	*			
72a	Olive Street Extended and Rock Creek Pkwy, NW	051	09/22/14	*			
73	O Street Extended and Rock Creek Parkway, NW	052	09/22/14	*			
74 <sup>1</sup>	Q Street, west of Rock Creek, NW	053	N/A				
75	West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW	054	09/28/14	*			
77 <sup>1</sup>	Normanstone Dr Extended, west of Rock Creek, NW	056	N/A				
77a <sup>1</sup>	Normanstone Dr and Normanstone Lane, NW	056	N/A				
78 <sup>1</sup>	28th Street Extended, west of Rock Creek, NW	057	N/A				
79 <sup>1</sup>	Connecticut Ave and Rock Creek Parkway, NW	058	N/A				
84	26 <sup>th</sup> and P Streets, NW	060	09/22/14	*			
84a	26 <sup>th</sup> and P Streets, NW	060	09/22/14	*			

Notes:

1. Structure no longer functions as a combined sewer overflow regulator structure.

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.

	0										
				OutfallTide GateTide GateConditionPresent?ConditionCSO Si					0.01		
		_	Cor	ndition	Pres	ent?	Con	ndition	CS	O Sign	-
NPDES	• ·	Date	0.17	Needs			0.W	Needs	0.17	Needs	
Outfall	Location	Inspected	OK	Work		No	OK	Work	OK	Work	Notes, Work Needed or Performed
	Bolling Air Force Base, at Giavanolli and Chanute, SW	09/30/14	*		*		*		*		
005	Across from Navy Yard, aligned with Parsons Ave., SE	09/29/14	*		*		*		*		
-	Good Hope Road and Welsh Memorial Bridge	N/A									
007	Between 11 <sup>th</sup> St. and Anacostia Bridges, SE	09/03/14	*		*		*		*		
009	O St. Sewage Pumping Station, SE	09/03/14	*		*		*		*		
010	O St. Sewage Pumping Station, SE	09/03/14	*			*			*		
011	Main Sewage Pumping Station, SE	09/03/14	*			*			*		
011(a)	Main Sewage Pumping Station, SE	09/03/14	*		*		*		*		
012	Main Sewage Pumping Station, SE	09/03/14	*		*		*		*		
013	Southeast Federal Center, aligned with 4 <sup>th</sup> St.	N/A									Construction for Clean Rivers Project
014	Navy Yard, aligned with 6 <sup>th</sup> St., SE	09/03/14	*		*		*		*		
015	Navy Yard, aligned with 9th Street, SE	09/03/14	*			*			*		
016	12th and O Streets, SE	09/03/14	*		*		*		*		
017	M and Water Street, SE	09/29/14	*		*		*		*		
018	East of Barney Circle & South of Pennsylvania Avenue Bridge, SE	09/02/14	*		*		*		*		
019	Adjacent to Service Drive behind swirl facility & D.C. General Hospital	09/02/14	*			*			*		
020	Rock Creek Parkway and Independence, NW	09/29/14	*		*		*		*		
021	Rock Creek Parkway and C St., NW	09/30/14	*			*			*		
022	Rock Creek Parkway and G St., NW	09/30/14	*		*		*		*		
024	South of 30 <sup>th</sup> and K Streets, NW <sup>1</sup>	09/30/14	*		*			*	*		
025	South of 31 <sup>st</sup> and K Streets, NW	09/30/14	*		*		*		*		
026	Wisconsin Avenue and Water Street, NW	09/30/14	*		*		*		*		Need DMS to weld part of the gate.
027	33 <sup>rd</sup> and Water Sts., NW	09/30/14	*			*			*		
028	Key Bridge and Whitehurst Freeway, NW	09/30/14	*			*			*		

Table 2-2Outfalls and Tide Gates

				utfall	Tide			e Gate			
			Con	dition	Pres	ent?	Con	dition	CS	O Sign	
NPDES				Needs				Needs		Needs	
Outfall	Location	Inspected		Work		No	OK	Work		Work	Notes, Work Needed or Performed
029	Adjacent to C&O Canal, aligned with 38 <sup>th</sup> St. NW	09/30/14	*		*		*		*		
031 <sup>1</sup>	Rock Creek Pkwy & Pennsylvania Avenue, NW	N/A									
032	26th and M Street, NW.	09/16/14	*			*			*		
033	Across street from St. Francis Jr. High and aligned with N St., NW.		*		*		*		*		
034	Just west of St. Francis Jr. High and north of N St., NW	09/22/14	*		*		*		*		
035	P St. Bridge and Rock Creek Parkway	09/22/14	*			*			*		
036	22nd Street, South of Q Street NW.	09/22/14	*		*		*		*		
037 <sup>1</sup>	Waterside Dr. and Rock Creek Parkway	N/A									
038	Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW.	09/30/14	*		*		*		*		
039	Connecticut Avenue Bridge and Rock Creek Parkway, NW.	09/24/14	*		*		*		*		
040	Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge.	09/15/14	*		*		*		*		
041	Beach Dr. and Ontario Pl., NW	09/15/14	*		*		*		*		
042	Harvard St. and Beach Dr NW.	09/18/14	*		*		*		*		
043	Upstream of Harvard St. and Beach Dr NW.	09/18/14	*		*		*		*		
044	Kenyon Street and Beach Dr., NW.	09/18/14	*		*		*		*		
045	North of Beach Dr. and Walbridge Pl, NW.	09/18/14	*		*		*		*		
046	Piney Branch Parkway and Park Road, NW.	09/17/14	*			*			*		
047	Piney Branch Parkway and Ingleside Terrace	09/17/14	*		*		*		*		
048	South of Piney Branch Parkway and 17 <sup>th</sup> St.	09/17/14	*		*		*		*		
049	North of Piney Branch Parkway and 17 <sup>th</sup> St.	09/17/14	*		*		*		*		
050	Rock Creek Parkway and L St., NW	09/09/14	*		*		*		*		
051	Across Rock Creek Pkwy, aligned with Olive St., NW.	09/18/14	*		*		*		*		
052	Between P & Penna. Ave Bridges, aligned with O Street, NW.	09/18/14	*		*		*		*		
053 <sup>1</sup>	Q St. Bridge and Rock Creek Parkway, NW.	N/A									
054	Massachusetts Ave & Rock Creek Parkway, NW.	09/24/14	*		*		*		*		
056 <sup>1</sup>	Normanstone Dr. and Rock Creek Parkway, NW.	N/A									
$057^{1}$	28th Street and Rock Creek Parkway, NW	N/A									
058 <sup>1</sup>	Connecticut Ave & Rock Creek Parkway, NW.	N/A									
060	North of P St. Bridge & Rock Creek Pkwy, NW	09/30/14	*		*		*		*		

### Notes:

1. Outfall no longer functions as a combined sewer outfall.

#### 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

	Pumping Stations – Inspections and Equipment in Service										
Pumping	No. of										
Station	Inspections	Screens	Pumps	Out of Service	Dates	Reason	Schedule to Restore to Service <sup>1</sup>				
Main	30	4	10	#4 Screen	September 1-20	Screen being rehabbed	September 21, 2014				
				#4 Pump	September 1-30	Pump being rehabbed	December 2014				
Eastside	21	2	4	#1 Screen	September 1-22	Screen being rehabbed	September 23, 2014				
Poplar Point	21	2	3	#1 Screen	September 1-25	Screen being rehabbed	September 26, 2014				
Potomac	30	4	5	None							

Table 2-3

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.

T umping Stations – Treventive Maintenance							
		Type of Preventive Maintenance					
Pumping Station	Date Performed	$Performed^{l}$	Comments				
Main	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
O St	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
Eastside	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
Poplar Point	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
Potomac	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
Rock Creek	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
Upper Anacostia	9/15	Group A	Add oil, grease bearings and replace packing if needed.				
Earle Place	9/15	Group A	Add oil, grease bearings and replace packing if needed.				

 Table 2-4

 Pumping Stations – Preventive Maintenance

Notes:

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

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

Check all safety equipment

Issue work order requests as required

Table 2-5	
<b>Pumping Stations – Pumpage</b>	

	Sanitary Pı	ımpage	Storm V	Storm Water/CSO Pumped To Anacostia River			
	Total Wastewater	Daily Average			Screenings Collected		
Pumping Station	(mg)	Wastewater (mg)	Date	Volume (mg)	$(units)^{l}$		
Main	1,318.40	43.95	N/A	N/A	N/A		
O St	120.80	4.03	9/25	58.0	Normal		
Eastside	225.69	7.52	N/A	N/A	N/A		
Poplar Point	621.99	20.73	N/A	N/A	N/A		
Potomac	3,654.80	121.83	N/A	N/A	N/A		
Rock Creek	145.00	4.83	N/A	N/A	N/A		
Upper Anacostia	149.58	4.99	N/A	N/A	N/A		
Earle Place	0.11	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:

	Northeast Boundary Swirl Facility – Inspections and Equipment in Service									
ľ										
	Date	# of	# of	Screens or Swirls						
	Inspected	Screens	Swirls	Out of Service	Dates	Reason	Schedule to Restore to Service			
	9/18	1, 2 & 3	1, 2 & 3	N/A	N/A					

 Table 2-6

 Northeast Boundary Swirl Facility – Inspections and Equipment in Service

Table 2-7
Northeast Boundary Swirl Facility – Preventive Maintenance

Date Performed	Type of Preventive Maintenance Performed <sup>1</sup>	Comments
9/19	Group A	

Notes:

 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

		-			
	Approx. Storm	Total Influent	Total Foul Sewer	Total Effluent	Approx. Screenings
Date	$Duration (hrs)^{l}$	Volume (mg)	Volume (mg)	$Volume (mg)^2$	Volume (Cu. ft)
9/2/2014	4.75	13.1	13.1	0.0	68
9/6/2014	4	4.2	4.2	0.0	164
9/25/2014	3	23.7	2.3	21.3	600
9/25/2014	8.5	3.5	3.5	0.0	120

 Table 2-8

 Northeast Boundary Swirl Facility – Wet Weather Operations

Notes:

- 1. Approx. length of time influent flow rate was above the 15 mgd threshold for allowing flow through the facility.
- 2. Volume approximated due malfunction of ESIRS meter.

#### 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.

	Chlor/	Do	sages	Residual Chlorin Results	ne Test	E. Coli Test R	esults
	Dechlor						Count
	System	NaOCl	NaHSO3		Conc.		Per
Date	Used?	( <i>mg/l</i> )	(mg/l)	Location	( <i>mg/l</i> )	Site	100ml
9/25	Yes	5	2	Mix Chamber	0.1	Mix Chamber	20,000
)123	105	5	2	Anacostia River <sup>1</sup>	0.0	Anacostia River <sup>1</sup>	36,000

Table 2-9
Northeast Boundary Swirl Facility – Disinfection Performance

Notes:

1. River: River Outfall

			Ū.	·			
		_	F	low Composited Sam	ple Results		
		Nitrite	Nitrate	Total Kjeldahl		Total	Carbonaceous
	Total suspended	(NO2-N)	(NO3-N))	Nitrogen	Total Nitrogen	Phosphorus	Biological Oxygen
Date	solids (mg/L)	mg/L	mg/L	(mg/L as N)	(mg/L)	(mg/L)	Demand (mg/L)
9/25	37.0	0.00	0.42	2.23	2.65	0.41	10.5

 Table 2-10

 Northeast Boundary Swirl Facility – Effluent Sampling Results

#### 2.5 Inflatable Dams

DC WATER 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:

Inflatable Dam		Was Dam Out of Service			Schedule to Restore	
Structure No	Date Inspected	During the Month?	Dates out of Service	Reason	Service	
14 - East	9/29	No	N/A	N/A	N/A	
14 - West	9/29	No	N/A	N/A	N/A	
15	9/29	No	N/A	N/A	N/A	
15A	9/29	No	N/A	N/A	N/A	
16 - East	9/29	No	N/A	N/A	N/A	
16 - West	9/29	No	N/A	N/A	N/A	
24 - North	9/29	No	N/A	N/A	N/A	
24 - Middle	9/29	No	N/A	N/A	N/A	
24 - South	9/29	No	N/A	N/A	N/A	
34	9/29	Yes	9/12/14	Equipment failure- Blower	9/12/14	
35	9/29	Yes	9/11/14	Equipment failure- Transducer	9/11/14	
52	9/29	No	N/A	N/A	N/A	

 Table 2-11

 Inflatable Dams – Inspections and Equipment in Service

		ADA Siles - Wei Weather Operations
Inflatable Dam Structure No.	Overflow Dates	Estimated Duration of Overflow
14 (E & W)	None	N/A
15	9/24	3 mins
	9/25	19 mins
15A	9/25	2 hrs, 38 mins
16 (E & W)	9/25	5 mins
24	9/1	2 mins
	9/2	2 mins
	9/6	2 mins
	9/25	25 mins
34	None	N/A
35	9/2	6 mins
	9/6	9 mins
	9/25	23 mins
52	None	N/A
Structures on Outfall Sewers	Overflow Dates	Estimated Duration of Overflow
Outfall Structure 1	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 1A	None	This structure has been bulk headed. Overflows are no longer possible.
Outfall Structure 2	None	None
Outfall Sewer Control Gates	<b>Operational Status</b>	Position
Outfall Sewer Control Gate No. 1	Operational	Open
Outfall Sewer Control Gate No.2	Operational	Open

 Table 2-12

 Inflatable Dams & SCADA Sites - Wet Weather Operations

### 3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow for the month of September 2014.

### SOLIDS AND FLOATABLES CONTROL

### 3.1 Catch Basin Cleaning

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

				Inspections	1	Cleaning					
			CBs in	Total Anacostia CBs Inspected	Total Anacostia CBs Inspected	CBs Clea Last N		CB's C This I	Cleaned Month	Total CB This Yea	s Cleaned r to Date
		CBs in	Anacostia	Once this	Twice this						
Ward	Total CBs	CSS	CSS	Year	Year	Total	In CSS	Total	In CSS	Total	In CSS
1	1,591	1,568	734	374	159	1181	779	32	22	1213	801
2	4,714	4,112	2,316	2316	1134	2739	2377	1407	706	4146	3083
3	3,555	461	-	0	0	4551	1148	126	0	4677	1148
4	2,782	1,985	159	159	159	3683	2132	243	243	3926	2375
5	2,167	1,035	1,035	1035	657	1636	1268	269	218	1905	1486
6	1,783	1,594	1,594	1203	846	1478	1189	14	14	1492	1203
7	2,313	-	-	0	0	1113	0	138	0	1251	0
8	1,278	116	116	116	116	2534	707	0	0	2534	707
Subtotal	20,183	10,871	5,954	5,203	3,071	18,915	9600	2,229	1,203	21,144	10,803
DDOT (via VMS) Subtotal											
Grand Total	20,183	10,871	5,954								
% Cleaned/Inspected to Date				87%	51%					>100%	99%

### **3.2 BMP Demonstration Projects**

DC WATER 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 3-2BMP Demonstration Projects – Report

Facility	Date Inspected	Condition	Work Needed	Work performed	Material Removed (CY)
Netting System CSO 018	9/3/2014	Good	Replace nets	Replaced nets	500 pounds
Bar Rack CSO 040	9/15/2014	Good	None	Routine Cleaning	(1)
Bar Rack CSO 041	9/15/2014	Good	None	Routine Cleaning	(1)

Notes:

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

#### 3.3 Anacostia River Floating Debris Removal Program

This program was initiated in October 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 DC WATER, 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:

Program Operation	5-day work week, excluding holidays, weather permitting
Work Days this month:	21
Days not Operating	8
Reason not Operating	High winds, Fleet troubleshooting and maintenance.
# Skimmer in Fleet	3 skimmers
# Skimmers Out of Service	3 skimmers
Dates	B28: 9/22 - 9/25, 9/25 - 9/30 B29: 9/1 - 9/30 B32: 9/30
Reason	B28: Loading screens moving slowly. STBD prop lost power.
	B29: Front assembly catching on hull.
	B32: Hydraulic oil leak.
Plan to Restore to Service	B28: STBD motor removed for troubleshooting. ETR unknown.
	B29: At contractors for repair. ETR unknown.
	B32: Fleet troubleshooting. ETR unknown.
Volume Material Collected	20 tons.
Nature of Material	Bottles, cans, natural debris and plastics.

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

#### 3.4 CSS Litter Control

This section describes DC WATER'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.

### 4. MONITORING

#### 4.1 Condition Report Bar Racks at Main and O Street Storm Pumps

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

# Table 4-1Bar Racks at Main & O Street Pumping Stations

Inspector: Gregory Stephens

		Date	Conc	lition		Work Performed
Pumping Station	Inspector	Inspected	Good	Needs Work	Work Needed	or Schedule for Completion
Bar Racks at O Street Storm	GS	9/18	Х			
Pumps (CSO 010) Bar Racks at Main						
Storm Pumps (CSO 011)	GS	9/18	Х			

#### 4.2 Rain Data

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

Date	Brentwood Pumping Station	Bryant Street Pumping Station	Main Pumping Station	Rock Creek Pumping Station
9/1/2014	0.15	0.19	0.2	0.17
9/2/2014	0.24	0.09	0.13	0.24
9/3/2014	0.00	0.02	0	0
9/4/2014	0.00	0	0	0
9/5/2014	0.00	0.01	0	0
9/6/2014	0.24	0.25	0.02	0.18
9/7/2014	0.00	0	0	0
9/8/2014	0.00	0	0	0
9/9/2014	0.00	0	0	0
9/10/2014	0.00	0	0	0
9/11/2014	0.00	0	0	0
9/12/2014	0.00	0	0	0
9/13/2014	0.11	0.08	0.2	0.07
9/14/2014	0.00	0	0	0
9/15/2014	0.00	0	0	0
9/16/2014	0.00	0	0	0
9/17/2014	0.00	0	0	0
9/18/2014	0.00	0.11	0	0
9/19/2014	0.00	0	0	0
9/20/2014	0.00	0	0	0
9/21/2014	0.01	0.01	0.02	0
9/22/2014	0.00	0	0	0
9/23/2014	0.00	0	0	0
9/24/2014	0.02	0.02	0.02	0.01
9/25/2014	1.01	0.92	0.78	0.78
9/26/2014	0.00	0	0	0
9/27/2014	0.00	0	0	0
9/28/2014	0.00	0	0	0
9/29/2014	0.00	0	0	0
9/30/2014	0.36	0.14	0	0.03
TOTAL	2.14	1.84	1.37	1.48

#### District of Columbia Water and Sewer Authority

#### Combined Sewer System Model Results Period: July, August, September 2014 SCENARIO: Y2014\_Q3, produced October 9, 2014

				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 CS							
005	Chicago St and Railroad Station SE	14	1.91	28.50	2.04	6.00	0.25
000	Good Hope Road, West of Nichols			sepa	rated		
006	Ave.,SE 13 <sup>th</sup> Street and Ridge Place,SE	0	0.00	0.00	0.00	0.00	0.00
	2nd Street, 300 feet North of N Place,						
009	SE O Street SewagePumping Station, SE	6	0.63	6.50	1.08	2.00	0.50
010	(pumped Overflow)	4	10.94	3.00	0.75	1.25	0.25
011	South of Main Sewage Pumping Station, SE (pumped overflow)	0	0.00	0.00	0.00	0.00	0.00
	South of Main SewagePumping						
011a	Station, SE (gravity overflow)	0	0.00	0.00	0.00	0.00	0.00
010	North of Main SewagePumping	0	0.00	0.00	0.00	0.00	0.00
012 013	Station, SE (Tiber Creek) 4th and N Streets. SE	0 8	0.00 0.53	0.00 8.50	0.00	0.00 3.25	0.00 0.25
013	6th and M Streets, SE	8	0.53	8.50	1.06	3.25 5.25	0.25
014	9th and M Streets, SE	8	0.12	7.50	0.94	2.25	0.25
015	12th and M Streets, SE	6	0.12	6.50	1.08	2.25	0.25
017	14th and M Streets, SE	8	4.19	21.75	2.72	6.00	0.25
017	Barney Circle and Pennsylvania Ave,	0	4.15	21.70	2.12	0.00	0.20
018	SE	6	1.89	12.25	2.04	5.25	0.50
019	Northeast Boundary - Swirl Effluent	4	63.11	28.25	7.06	8.25	5.50
019	Northeast Bound Swirl Bypass	1	7.24	0.75	0.75	0.75	0.75
	SUBTOTAL	-	92.79				
Potomac CSO	S						
003	Bolling AFB	0	0.00	0.00	0.00	0.00	0.00
	23rd Street, North of Constitution Ave,						
020	NW (Easby Point)	2	1.64	4.50	2.25	3.25	1.25
021	Northeast of Roosevelt Bridge, NW	2	27.22	7.00	3.50	4.75	2.25
022	27th and K Streets, NW	8	0.37	11.25	1.41	4.75	0.25
024	30th and K Streets, NW	4	1.30	7.25	1.81	5.75	0.25
025	31st & K St NW	3	0.02	0.75	0.25	0.25	0.25
026	Wisconsin Avenue and KSt., NW	0	0.00	0.00	0.00	0.00	0.00
027	Water Street West of Street, NW	12	4.10	33.75	2.81	6.75	0.75
028	36th and M Streets, NW	9	0.59	12.50	1.39	5.00	0.25
	Canal Road 1000 feet east of Rock					4 = 0	
029	Creek,NW SUBTOTAL	3	0.38 35.64	2.50	0.83	1.50	0.50
	GOBIOTAL		55.04				
Rock Creek	Pennsylvania Avenue, East Rock						
031	Creek, NW			sepa	rated		
032	26th and M Streets, NW	0	0.00	0.00	0.00	0.00	0.00
032	N Street extendedwest of 25th	0	0.00	0.00	0.00	0.00	0.00
033	Street,NW	0	0.00	0.00	0.00	0.00	0.00
034	23rd and O Streets, SW	0	0.00	0.00	0.00	0.00	0.00
035	22nd Street south of Q Street, NW	0	0.00	0.00	0.00	0.00	0.00
036	22nd Street South of Q Street, NW	3	0.043	4.50	1.50	2.75	0.50
	Northwest of Belmontand Rock Creek	0	0.010			20	0.00
037	and Potomac Parkway		•	sepa	rated		
	North of Belmont Road,east of						
038	Kalorama Circle, NW	0	0.00	0.00	0.00	0.00	0.00
	Connecticut Avenue east of Rock						
039	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
040	Ontario extended and Rock Creek	U	0.00	0.00	0.00	0.00	0.00
041	Parkway	0	0.00	0.00	0.00	0.00	0.00
		-					

#### District of Columbia Water and Sewer Authority

#### Combined Sewer System Model Results Period: July, August, September 2014 SCENARIO: Y2014\_Q3, produced October 9, 2014

Number of Overflows         CSO Overflows         Duration of Overflows         Avg Duration of Overflows         Avg Duration of Overflows         Overflows         Ove	um Minimum	Maximum		Total				
NPDES No.         Description         (Occurrences)         Volume (mg)         (hrs)         (hrs)         (hrs)           Harvard Street and RockCreek         0         0.00         0.00         0.00         0.00           Adams Mill Road South of Irving         0         0.00         0.00         0.00         0.00           043         Street, NW         0         0.00         0.00         0.00         0.00           Kenyon Street and Adams Mill Road,         0         0.00         0.00         0.00         0.00           Adams Mill Road and Lamont Street,         0         0.00         0.00         0.00         0.00           Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           445         NW         0         0.00         0.00         0.00         0.00         0.00           Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           MH Pleasant Street extended and Piney         0         0.00         0.00         0.00         0.00           Mt. Pleasant Street extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00         0.00         0.00	n of Duration of	Duration of	Avg Duration	Duration of	CSO	Number of		
Harvard Street and RockCreek         Image: Constraint of the second	ow Overflow	Overflow	of Overflow	Overflow	Overflow	Overflows		
042         Parkway, NW         0         0.00         0.00         0.00         0.00           Adams Mill Road South of Irving         0         0.00         0.00         0.00         0.00           043         Street, NW         0         0.00         0.00         0.00         0.00           643         Keryon Street and Adams Mill Road, NW         0         0.00         0.00         0.00         0.00           044         NW         0         0.00         0.00         0.00         0.00           Adams Mill Road and Lamont Street, NW         0         0.00         0.00         0.00         0.00           046         Park Road south of Piney Branch Parkay, NW         0         0.00         0.00         0.00         0.00           047         Branch Parkway         0         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00 <td>) (hrs)</td> <td>(hrs)</td> <td>(hrs)</td> <td>(hrs)</td> <td>Volume (mg)</td> <td>(Occurrences)</td> <td>Description</td> <td>NPDES No.</td>	) (hrs)	(hrs)	(hrs)	(hrs)	Volume (mg)	(Occurrences)	Description	NPDES No.
Adams Mill Road South of Irving         0         0.00         0.00         0.00         0.00           043         Street, NW         0         0.00         0.00         0.00         0.00         0.00           044         NW         0         0.00         0.00         0.00         0.00         0.00           045         NW         0         0.00         0.00         0.00         0.00         0.00           046         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           047         Branch Parkway         0         0.00         0.00         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00							Harvard Street and RockCreek	
043         Street, NW         0         0.00         0.00         0.00         0.00           Kenyon Street and Adams Mill Road, NW         0         0.00         0.00         0.00         0.00         0.00           Adams Mill Road and Lamont Street, NW         0         0.00         0.00         0.00         0.00         0.00           Park Road south of Piney Branch 046         0         0.00         0.00         0.00         0.00         0.00           Ingleside Terrace extended and Piney 047         Branch Parkway         0         0.00         0.00         0.00         0.00           Mt. Pleasant Street extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00           043         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           049         Piney Branch and LamontStreet, NW         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         <	0.00	0.00	0.00	0.00	0.00	0	Parkway, NW	042
Kenyon Street and Adams Mill Road, NW         0         0.00         0.00         0.00         0.00           Adams Mill Road and Lamont Street, NW         0         0.00         0.00         0.00         0.00         0.00           Park Road south of Piney Branch 046         Parkway, NW         0         0.00         0.00         0.00         0.00           Ingleside Terrace extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00           Mt. Pleasant Street extended and 048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           047         Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           050         28th Street extended and Rock Creek         0         0.00							Adams Mill Road South of Irving	
044         NW         0         0.00         0.00         0.00         0.00           Adams Mill Road and Lamont Street, NW         0         0.00         0.00         0.00         0.00         0.00           Park Road south of Piney Branch 046         Parkway, NW         0         0.00         0.00         0.00         0.00           Ingleside Terrace extended and Piney 047         Branch Parkway         0         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street extended and Rock Creek         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           053         NW         0         0.00	0.00	0.00	0.00	0.00	0.00	0	Street, NW	043
Adams Mill Road and Lamont Street, NW         0         0.00							Kenyon Street and Adams Mill Road,	
045         NW         0         0.00         0.00         0.00         0.00         0.00           046         Park Road south of Piney Branch Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           Ingleside Terrace extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           047         Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           054         of Rock Creek Jont	0.00	0.00	0.00	0.00	0.00	0		044
Park Road south of Piney Branch         0         0.00         <							Adams Mill Road and Lamont Street,	
046         Parkway, NW         0         0.00         0.00         0.00         0.00           047         Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           047         Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street vest of 16th Street, NW         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           054         of Mass. Ave, NW         0         0.00         0.00         0.00         0.00         0.00           0556         Rock Creek, NW         0         0.00	0.00	0.00	0.00	0.00	0.00	0		045
Ingleside Terrace extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00           Mt. Pleasant Street extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00           048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           054         of Mass. Ave, NW         0         0.00							Park Road south of Piney Branch	
047         Branch Parkway         0         0.00         0.00         0.00         0.00           Mt. Pleasant Street extended and 048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           054         of Mass. Ave, NW         0         0.00         0.00         0.00         0.00           055         Rock Creek, NW         0         0.00         0.00         0.00         0.00           056         Rock Creek, NW         0         0.00         0.00         0.00         0.00	0.00	0.00	0.00	0.00	0.00	0		046
Mt. Pleasant Street extended and Piney Branch Parkway         0         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00           054         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00         0.00           054         of Rock Creek300 ft. south         0         0.00         0.00         0.00         0.00         0.00 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
048         Piney Branch Parkway         0         0.00         0.00         0.00         0.00           049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00           01ve Street extended and Rock Creek         0         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00           053         NW         0         0.00         0.00         0.00         0.00           054         of Mass. Ave, NW         0         0.00         0.00         0.00         0.00           056         Rock Creek, NW         0         0.00         0.00         0.00         0.00           057         Creek, NW <td< td=""><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0</td><td></td><td>047</td></td<>	0.00	0.00	0.00	0.00	0.00	0		047
049         Piney Branch and LamontStreet, NW         2         2.617         7.50         3.75         5.00           050         28th Street west of 16th Street, NW         0         0.00         0.00         0.00         0.00         0.00           01ve Street extended and Rock Creek         0         0.00         0.00         0.00         0.00         0.00         0.00           051         Parkway, NW         0         0.00								
050         28th Street west of 16th Street, NW         0         0.00	0.00	0.00	0.00	0.00	0.00	0	Piney Branch Parkway	048
050         28th Street west of 16th Street, NW         0         0.00								
Olive Street extended and Rock Creek         0         0.00					-			
051         Parkway, NW         0         0.00         0.00         0.00         0.00           0 Street extended and Rock Creek         0         0.00         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           052         Parkway, NW         0         0.00         0.00         0.00         0.00         0.00           053         NW         Separated         Separated         Separated         0.00         0.00         0.00         0.00           053         NW         0         0.00	0.00	0.00	0.00	0.00	0.00	0		050
O Street extended and Rock Creek         0         0.00						_		
052         Parkway, NW         0         0.00         0.00         0.00         0.00           O Street west of Rock Creek Parkway, NW         West Side of Rock Creek300 ft. south of Mass. Ave, NW         Separated         Separated           054         of Mass. Ave, NW         0         0.00         0.00         0.00           Normanstone Drive extended west of 056         Normanstone Drive extended west of Rock Creek, NW         0         0.00         0.00         0.00           28th Street extended west of Rock 057         Creek, NW         2         0.21         3.25         1.63         2.75           Connecticut Avenue and Rock Creek 058         Parkway, NW         0         0.00         0.00         0.00         0.00           060         P St and 26 <sup>th</sup> St, NW         0         0.00         0.00         0.00         0.00	0.00	0.00	0.00	0.00	0.00	0		051
O Street west of Rock Creek Parkway, NWseparated053NWseparatedWest Side of Rock Creek300 ft. south of Mass. Ave, NW00.000.000.00Normanstone Drive extended west of 0560.000.000.000.000.0028th Street extended west of Rock 05700.000.000.000.0028th Street extended west of Rock 05700.213.251.632.75Connecticut Avenue and Rock Creek 058parkway, NW00.000.000.000.00060P St and 26th St, NW00.000.000.000.000.00								
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West Side of Rock Creek300 ft. south of Mass. Ave, NW         0         0.00         0.00         0.00         0.00           Normanstone Drive extended west of 056         Normanstone Drive extended west of Rock Creek, NW         0         0.00         0.00         0.00         0.00           28th Street extended west of Rock         0         0.21         3.25         1.63         2.75           Connecticut Avenue and Rock Creek 058         Parkway, NW         0         0.00         0.00         0.00           060         P St and 26 <sup>th</sup> St, NW         0         0.00         0.00         0.00         0.00			rated	sepai				050
054         of Mass. Ave, NW         0         0.00         0.00         0.00         0.00           Normanstone Drive extended west of 056         Normanstone Drive extended west of Rock Creek, NW         0         0.00         0.00         0.00         0.00           28th Street extended west of Rock         0         0.21         3.25         1.63         2.75           057         Creek, NW         2         0.21         3.25         1.63         2.75           Connecticut Avenue and Rock Creek 058         Parkway, NW         0         0.00         0.00         0.00		<del>ر</del>	1	-				053
Normanstone Drive extended west of 056         0         0         0.00         0.00         0.00         0.00           28th Street extended west of Rock         0         0.00         0.00         0.00         0.00         0.00           28th Street extended west of Rock         0         0.21         3.25         1.63         2.75           Connecticut Avenue and Rock Creek         0         0.00         0.00         0.00         0.00           058         Parkway, NW         0         0.00         0.00         0.00         0.00	0.00	0.00	0.00	0.00	0.00	0		054
056         Rock Creek, NW         0         0.00         0.00         0.00         0.00           28th Street extended west of Rock         2         0.21         3.25         1.63         2.75           057         Creek, NW         2         0.21         3.25         1.63         2.75           Connecticut Avenue and Rock Creek         Separated         Separated         5         5           060         P St and 26 <sup>th</sup> St, NW         0         0.00         0.00         0.00	0.00	0.00	0.00	0.00	0.00	0		054
28th Street extended west of Rock         000 <t< td=""><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0</td><td></td><td>056</td></t<>	0.00	0.00	0.00	0.00	0.00	0		056
057         Creek, NW         2         0.21         3.25         1.63         2.75           Connecticut Avenue and Rock Creek Parkway, NW           060         P St and 26 <sup>th</sup> St, NW         0         0.00         0.00         0.00         0.00	0.00	0.00	0.00	0.00	0.00	U		000
Connecticut Avenue and Rock Creek     separated       058     Parkway, NW     0     0.00     0.00     0.00       060     P St and 26 <sup>th</sup> St, NW     0     0.00     0.00     0.00	0.50	2 75	1.63	3 25	0.21	2		057
058         Parkway, NW         separated           060         P St and 26 <sup>th</sup> St, NW         0         0.00         0.00         0.00	0.50	2.15			0.21	۷.	/	007
060 P St and 26 <sup>th</sup> St, NW 0 0.00 0.00 0.00 0.00			rated	sepai				058
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Prepared by: Greeley and Hansen LLC and Limno-Tech, Inc.