QUARTERLY OPERATIONS REPORT

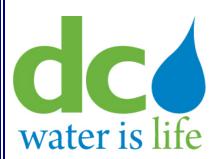
DISTRICT OF COLUMBIA

COMBINED SEWER OVERFLOW FACILITIES

THIRD QUARTER, 2012

Prepared By:

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



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For Combined Sewer System Month: July 2012

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

Monthly Operations Report for Combined Sewer System Month: July 2012

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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 operations of the combined sewer system for the month indicated.

2. OPERATION AND MAINTENACE

2.1 Regulators

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

Table 2-1 Regulator Structures

| | | | | (| Condition | | |
|------------|--|------------------|------------------|---|------------|-------------|----------------|
| a | | Associated NPDES | | | Needs Work | | |
| Struct No. | Location | Outfall | Inspected | | | Work Needed | Work performed |
| 2 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 07/09/12 | * | | | |
| 4 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 07/09/12 | * | | | |
| 5 | Poplar Point Pumping Station | 004 | 07/27/12 | * | | | |
| 6 | Chicago Street and Railroad Ave, SE | 005 | 07/27/12 | * | | | |
| 7 | W Street and Railroad Ave, SE | 005 | 07/25/12 | * | | | |
| 8 | Good Hope Rd, west of Nichols Ave, SE | 006 | N/A ³ | | | | |
| 9 | 13 th Street and Ridge Place, SE | 007 | 07/09/12 | * | | | |
| 11 | "O" Street Pumping Station | 011(a) | 07/26/12 | * | | | |
| 12 | Storm Pump Discharge at Main Pumping Station | 011 | 07/26/12 | * | | | |
| 13 | 2 nd Street, 300 ft. north of N Place, SE | 009 | 07/26/12 | * | | | |
| 14 | 2 nd Street, 250 ft. north of N Place, SE | 011(a) | 07/19/12 | * | | | |
| 15 | South Capitol and E Streets | 010 | 07/19/12 | * | | | |
| 15a | Half and L Streets, SE | 010 | 07/19/12 | * | | | |
| 15b | South Capitol and I Streets | 010 | 07/16/12 | * | | | |
| 15c | South Capitol and I Streets | 010 | 07/19/12 | * | | | |
| 16 | North of Main Sewage Pumping Station | 012 | 07/02/12 | * | | | |
| 17 | 4 th and N Streets, SE, Both Extended | 013 | 07/16/12 | * | | | |
| 17a | K Street between 6 th Street and 7 th Street, SE | 013 | 07/02/12 | * | | | |
| 18 | 6 th and M Streets, SE | 014 | 07/02/12 | * | | | |
| 19 | 9 th and M Streets, SE | 015 | 07/02/12 | * | | | |
| 19a | 9 th and M Streets, SE | 015 | 07/02/12 | * | | | |
| 20 | 12 th and M Streets, SE | 016 | 07/02/12 | * | | | |
| 20a | 12 th and M Streets, SE | 016 | 07/28/12 | * | | | |
| 21 | 14 th and M Streets, SE | 017 | 07/24/12 | * | | | |
| 22a | Barney Circle and Pennsylvania Ave, SE | 018 | 07/24/12 | * | | | |
| 22b | Barney Circle and Pennsylvania Ave, SE | 018 | 07/24/12 | * | | | |
| 22c | Barney Circle and Pennsylvania Ave, SE | 018 | 07/24/12 | * | | | |
| 22d | Kentucky Ave and Potomac Street, SE | 018 | 07/24/12 | * | | | |

| | | | | (| Condition | | |
|------------|--|------------------|-----------|------|------------|-------------|----------------|
| <i>a</i> | | Associated NPDES | | | Needs Work | | |
| Struct No. | Location | Outfall | Inspected | Good | | Work Needed | Work performed |
| 22e | 14 th Street and Kentucky Ave, SE | 018 | 07/24/12 | * | | | |
| 23 | Independence Ave, 21st Street, SE, Extended | 019 | 07/24/12 | * | | | |
| 24a | East Capitol St, west of RFK stadium | 019 | 07/24/12 | * | | | |
| 28 | 21st and Constitution Ave, NW | 020 | 07/16/12 | * | | | |
| 29 | 22 nd Street, between Constitution Ave and C St, NW | 020 | 07/16/12 | * | | | |
| 30 | 17 th and D Streets, NW | 020 | 07/09/12 | * | | | |
| 31 | 15 th Street and Pennsylvania Ave, NW | 020 | 07/09/12 | * | | | |
| 33 | 10 th and F Streets, NW | 020 | 07/09/12 | * | | | |
| 34 | 23 rd Street, north of Constitution Ave, NW | 020 | 07/19/12 | * | | | |
| 34a | 23 rd Street near C Street, NW | 020 | 07/16/12 | * | | | |
| 35 | Northeast of Roosevelt Bridge, NW | 021 | 07/19/12 | * | | | |
| 36 | 27 th and I Streets, NW | 022 | 07/09/12 | * | | | |
| 36a | New Hampshire Ave and Eye Street, NW | 022 | 07/09/12 | * | | | |
| 36b | 19 th and L Streets, NW | 022, 034 | 07/05/12 | * | | | |
| 36d | 17 th and L Streets, NW | 022, 034 | 07/05/12 | * | | | |
| 36g | 18 th and M Streets, NW | 022, 034 | 07/05/12 | * | | | |
| 36h | 18 th and M Streets, NW | 022, 034 | 07/05/12 | * | | | |
| 37 | 27 th and Eye Streets, NW | 022 | 07/09/12 | * | | | |
| 38 | 29 th and K Streets, NW | 024 | 07/09/12 | * | | | |
| 38a | 30 th Street, south of K Street, NW | 024 | 07/09/12 | * | | | |
| 39a | 30 th and K Streets, NW | 024 | 07/09/12 | * | | | |
| 39b | 30 th and K Streets, NW | 024 | 07/09/12 | * | | | |
| 41b | 31st and K Streets, NW | 025 | 07/09/12 | * | | | |
| 41c | 31st and K Streets, NW | 025 | 07/09/12 | * | | | |
| 42 | Wisconsin Ave and K Street, NW | 026 | 07/16/12 | * | | | |
| 43 | Potomac and Water Streets, NW | 027 | 07/16/12 | * | | | |
| 43a | Potomac and Water Streets, NW | 027 | 07/16/12 | * | | | |
| 44 | Water Street, west of Potomac St, NW | 027 | 07/16/12 | * | | | |
| 45 | 36 th and M Streets, NW | 028 | 07/02/12 | * | | | |
| 46 | Canal Rd, 1000ft. east of Foxhall Rd, NW | 029 | 07/02/12 | * | | | |
| 47 | 38 th Street and Reservoir Road, NW | 029 | 07/02/12 | * | | | |

| l | | | | (| Condition | | |
|------------|--|------------------|------------------|------|------------|-------------|----------------|
| | | Associated NPDES | | | Needs Work | 1 | |
| Struct No. | Location | Outfall | Inspected | Good | | Work Needed | Work performed |
| | 37 th and T Streets, NW | 029 | 07/02/12 | * | | | |
| | 37 th and T Streets, NW | 029 | 07/02/12 | * | | | |
| 47c | 38 th and W Streets, NW | 029 | 07/02/12 | * | | | |
| | Pennsylvania Ave, east side of Rock Creek, NW | 031 | N/A ³ | | | | |
| 50 | 26 and M Streets, NW | 032 | 07/23/12 | * | | | |
| | N Street Extended, west of 25 th Street, NW | 033 | 07/23/12 | * | | | |
| 52 | 22 nd Street between M and N Streets, NW | 034 | 07/19/12 | * | | | |
| 52a | N Street between 22 nd and 23 rd Streets, NW | 034 | 07/19/12 | * | | | |
| 53 | 22 nd and M Streets, NW | 022, 034 | 07/23/12 | * | | | |
| | 22 nd and M Streets, NW | 022, 034 | 07/13/12 | * | | | |
| | L Street between 21st Street and New Hampshire Ave, NW | 022, 034 | 07/13/12 | * | | | |
| 53c | L and 22 nd Streets, NW | 022 | 07/13/12 | * | | | |
| 54 | 23 rd and O Streets, NW | 034 | 07/13/12 | * | | | |
| 55 | 22 nd Street, south of Q Street, NW | 035 | 07/13/12 | * | | | |
| 55a | 22 nd Street, south of Q Street, NW | 035 | 07/13/12 | * | | | |
| 56 | 23 rd and Massachusetts Ave, NW | 036 | 07/13/12 | * | | | |
| 57 | 23 rd Street, south of Q Street, NW | 036 | 07/13/12 | * | | | |
| 58 | Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW | 037 | N/A ³ | | | | |
| 59 | North of Belmont Rd, east of Kalorama Cir, NW | 038 | 07/09/12 | * | | | |
| 60 | Connecticut Ave, east of Rock Creek, NW | 039 | 07/03/12 | * | | | |
| 61 | Biltmore St, Extended, east of Rock Creek, NW | 040 | 07/03/12 | * | | | |
| 62 | Ontario Rd, Extended, and Rock Creek Pkwy, NW | 041 | 07/11/12 | * | | | |
| 63 | Harvard Street and Rock Creek Parkway, NW | 042 | 07/11/12 | * | | | |
| 64 | Adams Mill Road, south of Irving Street, NW | 043 | 07/11/12 | * | | | |
| 65 | Kenyon Street and Adams Mill Road, NW | 044 | 07/11/12 | * | | | |
| 65a | Kenyon Street and Adams Mill Road, NW | 044 | 07/11/12 | * | | | |
| 66 | Adams Mill Road and Lamont Street, NW | 045 | 07/11/12 | * | | | |
| 67 | Park Rd, south of Piney Branch Pkwy, NW | 046 | 07/11/12 | * | | | |
| | Ingleside Terrance, Extended and Piney Branch Parkway, NW | 047 | 07/11/12 | * | | | |
| | Mt. Pleasant Street, Extended and Piney Branch Parkway, NW | 048 | 07/11/12 | * | | | |
| | Piney Branch Parkway, west of 16 th Street, NW | 049 | 07/09/12 | * | | | |
| | 5 th and Quackenbos Streets, NW | 049 | 07/17/12 | * | | | |

| | | | _ | (| Condition | | |
|------------|---|------------------|------------------|------|------------|-------------|----------------|
| | | Associated NPDES | Date | | Needs Work | | |
| Struct No. | Location | Outfall | Inspected | Good | | Work Needed | Work performed |
| 71 | 28 th Street, west of Rock Creek Parkway, NW | 050 | 07/17/12 | * | | | |
| 72 | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 07/13/12 | * | | | |
| 72a | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 07/13/12 | * | | | |
| 73 | O Street Extended and Rock Creek Parkway, NW | 052 | 07/12/12 | * | | | |
| 74 | Q Street, west of Rock Creek, NW | 053 | N/A ³ | | | | |
| 75 | West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW | 054 | 07/27/12 | * | | | |
| 77 | Normanstone Dr Extended, west of Rock Creek, NW | 056 | 07/27/12 | * | | | |
| 77a | Normanstone Dr and Normanstone Lane, NW | 056 | 07/12/12 | * | | | |
| 78 | 28th Street Extended, west of Rock Creek, NW | 057 | 07/26/12 | * | | | |
| 79 | Connecticut Ave and Rock Creek Parkway, NW | 058 | N/A ³ | | | | |
| 84 | 26 th and P Streets, NW | 060 | 07/13/12 | * | | | |
| 84a | 26 th and P Streets, NW | 060 | 07/13/12 | * | | | |

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

| | | | 1 | - Outian | 1 | | | | | | |
|---------|---|----------------------|----|----------|------|-------|--------|-----------|----|------------|---------------------------------|
| | | Outfall Condition | | | | Gate | Tide G | | | ~~ ~ ~. | |
| | | | Co | | Pres | sent? | Condit | Condition | | CSO Sign | |
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| 003 | Bolling Air Force Base, at Giavanolli and Chanute, SW | 07/25/12 | * | | * | | * | | * | | |
| 005 | Across from Navy Yard, aligned with Parsons Ave., SE | 07/25/12 | * | | * | | * | | * | | |
| 006 | Good Hope Road and Welsh Memorial Bridge ¹ | 07/25/12 | | | | | | | | | |
| 007 | Between 11 th St. and Anacostia Bridges, SE | 07/25/12 | * | | * | | * | | * | | |
| 009 | O St. Sewage Pumping Station, SE | 07/12/12 | * | | * | | * | | * | | |
| 010 | O St. Sewage Pumping Station, SE | 07/12/12 | * | | | * | | | * | | |
| 011 | Main Sewage Pumping Station, SE | 07/12/12 | * | | | * | | | * | | |
| 011(a) | Main Sewage Pumping Station, SE | 07/12/12 | * | | * | | * | | * | | |
| 012 | Main Sewage Pumping Station, SE | 07/12/12 | * | | * | | * | | * | | |
| 013 | Southeast Federal Center, aligned with 4 th St. | 07/12/12 | * | | * | | * | | * | | |
| 014 | Navy Yard, aligned with 6 th St., SE | 07/12/12 | * | | * | | * | | * | | |
| 015 | Navy Yard, aligned with 9th Street, SE | 07/12/12 | * | | | * | | | * | | |
| 016 | 12th and O Streets, SE | 07/26/12 | * | | * | | * | | * | | |
| 017 | M and Water Street, SE | 07/26/12 | * | | * | | * | | * | | |
| 018 | East of Barney Circle and South of Pennsylvania Avenue Bridge, SE | 07/26/12 | * | | * | | * | | * | | |
| 019 | Adjacent to Service Drive behind swirl facility and D.C. General Hospital | 07/26/12 | * | | | * | | | * | | |
| 020 | Rock Creek Parkway and Independence, NW | 07/05/12 | * | | * | | * | | * | | |
| 021 | Rock Creek Parkway and C St., NW | 07/05/12 | * | | | * | | | * | | |
| 022 | Rock Creek Parkway and G St., NW | 07/05/12 | * | | * | | * | | * | | |
| 024 | South of 30 th and K Streets, NW ¹ | 07/05/12 | * | | * | | * | | * | | |
| 025 | South of 31st and K Streets, NW | 07/05/12 | * | | * | | * | | * | | |
| 026 | Wisconsin Avenue and Water Street, NW | 07/05/12 | * | | * | | * | | * | | |
| 027 | 33 rd and Water Sts., NW | 07/05/12 | * | | | * | | | * | | |
| 028 | Key Bridge and Whitehurst Freeway, NW | 07/05/12 | * | | | * | | | * | | |

| | | | | Outfall ondition | | Gate sent? | Tide G Condi | | | CSO Sign | |
|---------|---|-----------|----|---------------------|------|---------------|-----------------|-------|----------|------------|---------------------------------|
| NPDES | | Date | | Needs | 1700 | crii. | Condi | Needs | <u> </u> | CBO Bign | |
| Outfall | Location | Inspected | ОК | Work | Yes | No | OK | Work | ОК | Needs Work | Notes, Work Needed or Performed |
| 029 | Adjacent to C&O Canal, aligned with 38 th St. NW | 07/05/12 | * | | * | | * | | * | | , |
| 031 | Rock Creek Pkwy & Pennsylvania Avenue, NW ¹ | N/A | | | | | | | | | |
| 032 | 26th and M Street, NW. | 07/25/12 | * | | | * | | | * | | |
| 033 | Across street from St. Francis Jr. High and aligned with N St., NW. | 07/25/12 | * | | * | | * | | * | | |
| 034 | Just west of St. Francis Jr. High and north of N St., NW | 07/13/12 | * | | * | | * | | * | | |
| 035 | P St. Bridge and Rock Creek Parkway | 07/13/12 | * | | * | | * | | * | | |
| 036 | 22nd Street, South of Q Street NW. | 07/26/12 | * | | * | | * | | * | | |
| 037 | Waterside Dr. and Rock Creek Parkway ¹ | N/A | | | * | | * | | | | |
| 038 | Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW. | 07/09/12 | * | | * | | * | | * | | |
| 039 | Connecticut Avenue Bridge and Rock Creek Parkway, NW. | 07/03/12 | * | | * | | * | | * | | |
| 040 | Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge. | 07/03/12 | * | | * | | * | | * | | |
| 041 | Beach Dr. and Ontario Pl., NW | 07/12/12 | * | | * | | * | | * | | |
| 042 | Harvard St. and Beach Dr NW. | 07/12/12 | * | | * | | * | | * | | |
| 043 | Upstream of Harvard St. and Beach Dr NW. | 07/12/12 | * | | * | | * | | * | | |
| 044 | Kenyon Street and Beach Dr., NW. | 07/12/12 | * | | * | | * | | * | | |
| 045 | North of Beach Dr. and Walbridge Pl, NW. | 07/12/12 | * | | * | | * | | * | | |
| 046 | Piney Branch Parkway and Park Road, NW. | 07/11/12 | * | | | * | | | * | | |
| 047 | Piney Branch Parkway and Ingleside Terrace | 07/11/12 | * | | * | | * | | * | | |
| 048 | South of Piney Branch Parkway and 17th St. | 07/11/12 | * | | * | | * | | * | | |
| 049 | North of Piney Branch Parkway and 17 th St. | 07/11/12 | * | | * | | * | | * | | |
| 050 | Rock Creek Parkway and L St., NW | 07/17/12 | * | | * | | * | | * | | |
| 051 | Across Rock Creek Pkwy, aligned with Olive St., NW. | 07/26/12 | * | | * | | * | | * | | |
| 052 | Between P & Penna. Ave Bridges, aligned with O Street, NW. | 07/26/12 | * | | * | | * | | * | | |
| 053 | Q St. Bridge and Rock Creek Parkway, NW. ¹ | 07/26/12 | | | | | | | | | |
| 054 | Massachusetts Ave & Rock Creek Parkway, NW. | 07/26/12 | * | | * | | * | | * | | |

| | | | | Outfall ondition | | Gate sent? | Tide G Condii | | | CSO Sign | |
|---------|--|-----------|----|---------------------|-----|---------------|------------------|-------|----|------------|---------------------------------|
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| 056 | Normanstone Dr. and Rock Creek Parkway, NW. | 07/26/12 | * | | * | | * | | * | | |
| 057 | 28th Street and Rock Creek Parkway, NW | 07/26/12 | * | | * | | * | | * | | |
| 058 | Connecticut Ave & Rock Creek Parkway, NW. ¹ | 07/26/12 | | | | * | | | | | |
| 060 | North of P St. Bridge & Rock Creek Pkwy, NW | 07/26/12 | * | | * | | * | | * | | |

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

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

| | | | | 1 0 | | <u> </u> | |
|--------------|-------------|---------|-------|------------------|------------|-----------------------|--------------------------------|
| Pumping | No. of | No. | No. | Screens or Pumps | | | |
| Station | Inspections | Screens | Pumps | Out of Service | Dates | Reason | Schedule to Restore to Service |
| Main | 31 | 4 | 10 | #3 Sanitary Pump | July 1-31 | Pump being rehabbed | December 2012 |
| Eastside | 31 | 2 | 4 | #2 Screen | July 28-31 | Screen being rehabbed | December 2012 |
| Poplar Point | 31 | 2 | 3 | #1 Screen | July 1-31 | Screen being rehabbed | December 2012 |
| Potomac | 31 | 4 | 5 | #2 Sanitary Pump | July 23-31 | Pump being rehabbed | September 2012 |
| | | | | #4 Screen | July 1-31 | Screen being rehabbed | December 2012 |

Notes:

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

Table 2-4
Pumping Stations – Preventive Maintenance

| | | Tumping Stations Treventer | |
|-----------------|----------------|--------------------------------|---|
| | | Type of Preventive Maintenance | |
| Pumping Station | Date Performed | Performed ¹ | Comments |
| Main | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| O St | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Eastside | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Poplar Point | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Potomac | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Rock Creek | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Upper Anacostia | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Earle Place | 7/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

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

Check all safety equipment

Issue work order requests as required

Table 2-5 Pumping Stations – Pumpage

| | | T dimping but | mons rumpus | 9* | |
|-----------------|------------------|-----------------|-------------|--------------------|----------------------|
| | Sanitary Pı | ımpage | Storm W | ater/CSO Pumped To | Anacostia River |
| | Total Wastewater | Daily Average | | | Screenings Collected |
| Pumping Station | (mg) | Wastewater (mg) | Date | Volume (mg) | (units) ¹ |
| Main | 1,574.80 | 50.80 | N/A | N/A | N/A |
| O St | 171.00 | 5.52 | 7/25/2012 | 196.60 | Normal |
| Eastside | 283.25 | 9.14 | N/A | N/A | N/A |
| Poplar Point | 670.59 | 21.63 | N/A | N/A | N/A |
| Potomac | 3,527.60 | 113.79 | N/A | N/A | N/A |
| Rock Creek | 193.33 | 6.24 | N/A | N/A | N/A |
| Upper Anacostia | 152.08 | 4.91 | N/A | N/A | N/A |
| Earle Place | 0.16 | 0.01 | N/A | N/A | N/A |

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

2-4 Northeast Boundary Swirl Facility

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

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

| Date | # of | # of | Screens or Swirls | | | |
|-----------|----------|----------|-------------------|-------|--------|--------------------------------|
| Inspected | Screens | Swirls | Out of Service | Dates | Reason | Schedule to Restore to Service |
| 7/26/12 | 1, 2 & 3 | 1, 2 & 3 | None | N/A | N/A | N/A |

Table 2-7 Northeast Boundary Swirl Facility – Preventive Maintenance

| Date Performed | Type of Preventive Maintenance Performed ¹ | Comments |
|----------------|---|----------|
| 7/27/12 | Group A | |

Notes:

1. Group A consists of:

Exercise bar screens

Exercise wash down system

Exercise knife gates full travel both directions

Check depth of grit in grit channel and schedule Vactor truck as required

Change chart paper on strip chart recorders at the end of each month

Thoroughly clean each Swirl tank and channels

Issue work order requests as required

Drain condensation from air compress

Check all safety equipment

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

| | | Approx. Storm | Total Influent | Total Foul Sewer | Total Effluent | Approx. Screenings |
|---|-----------|----------------|----------------|------------------|----------------|--------------------|
| | Date | Duration (hrs) | Volume (mg) | Volume (mg) | Volume (mg) | Volume (Cu. ft) |
| | 7/9/2012 | 5 | 6.45 | 6.450 | 0.000 | 220 |
| | 7/10/2012 | 4 | 13.88 | 13.880 | 0.000 | 40 |
| | 7/11/2012 | 4 | 1.92 | 1.920 | 0.000 | 20 |
| ı | 7/18/2012 | 7 | 22.86 | 22.860 | 0.000 | 100 |
| ı | 7/19/2012 | 1.5 | 11.63 | 11.630 | 0.000 | 40 |
| ı | 7/20/2012 | 6.5 | 6.09 | 1.477 | 4.613 | 40 |
| | 7/21/2012 | 4 | 5.76 | 5.760 | 0.000 | 40 |
| | 7/31/2012 | 5 | 23.23 | 23.230 | 0.000 | 91.2 |

Chlorination/Dechlorination Systems.

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

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

Table 2-9 Northeast Boundary Swirl Facility – Disinfection Performance

| | Chlor/ | Do | sages | Residual Chlorin Results | ne Test | E. Coli Test R | esults |
|------|---------|--------|-----------|------------------------------|-----------------|------------------------------|--------|
| | Dechlor | | | | | | Count |
| | System | NaOCl | $NaHSO_3$ | | Conc. | | Per |
| Date | Used? | (mg/l) | (mg/l) | Location | (<i>mg/l</i>) | Site | 100ml |
| 7/20 | Yes | 5 | 2 | Mix Chamber | 0.2 | Mix Chamber | <10 |
| 7720 | 105 | 3 | 2 | Anacostia River ¹ | 0.0 | Anacostia River ¹ | <10 |

Notes:

1. River: River Outfall

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

| Ī | | 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) | | |
| | 7/20/12 | 70.0 | 0.00 | 0.90 | 2.29 | 3.19 | 0.63 | 6.0 | | |

2.5 Inflatable Dams

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

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

| Inflatable Dam | | Was Dam Out of Service | | | Schedule to Restore to |
|----------------|----------------|------------------------|----------------------|--------|------------------------|
| Structure No | Date Inspected | During the Month? | Dates out of Service | Reason | Service |
| 14 - East | 7/20/2012 | No | N/A | N/A | N/A |
| 14 - West | 7/20/2012 | No | N/A | N/A | N/A |
| 15 | 7/20/2012 | No | N/A | N/A | N/A |
| 15A | 7/20/2012 | No | N/A | N/A | N/A |
| 16 - East | 7/20/2012 | No | N/A | N/A | N/A |
| 16 - West | 7/20/2012 | No | N/A | N/A | N/A |
| 24 - North | 7/20/2012 | No | N/A | N/A | N/A |
| 24 - Middle | 7/20/2012 | No | N/A | N/A | N/A |
| 24 - South | 7/20/2012 | No | N/A | N/A | N/A |
| 34 | 7/20/2012 | No | N/A | N/A | N/A |
| 35 | 7/20/2012 | No | N/A | N/A | N/A |
| 52 | 7/20/2012 | No | N/A | N/A | N/A |

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

| Inflatable Dams & SCADA Sites - Wet Weather Operations | | | | | | | |
|--|----------------|--|--|--|--|--|--|
| Inflatable Dam Structure No. | Overflow Dates | Estimated Duration of Overflow | | | | | |
| 14 (E & W) | None | N/A | | | | | |
| 15 | 7/9 | 2 mins | | | | | |
| | 7/10 | 1 hr, 18 mins | | | | | |
| | 7/19 | 92 secs | | | | | |
| | 7/20 | 2 mins | | | | | |
| | 7/31 | 3 mins | | | | | |
| 15A | 7/9 | 2 hrs, 11 mins | | | | | |
| | 7/10 | 35 mins | | | | | |
| | 7/11 | 2 mins | | | | | |
| | 7/18 | 2 mins | | | | | |
| | 7/19 | 18 mins | | | | | |
| | 7/20 | 1 hr, 54 mins | | | | | |
| | 7/31 | 31 mins | | | | | |
| 16 (E & W) | 7/9 | 75 secs | | | | | |
| ` , | 7/10 | 52 mins | | | | | |
| | 7/18 | 91 secs | | | | | |
| | 7/19 | 24 mins | | | | | |
| | 7/20 | 100 secs | | | | | |
| 24 | 7/11 | 98 secs | | | | | |
| | 7/18 | 15 mins | | | | | |
| | 7/19 | 12 mins | | | | | |
| | 7/20 | 6 mins | | | | | |
| | 7/21 | 2 mins | | | | | |
| | 7/24 | 11 mins | | | | | |
| | 7/31 | 3 mins | | | | | |
| 34 | 7/10 | 15 mins | | | | | |
| | 7/18 | 17 mins | | | | | |
| | 7/19 | 15 mins | | | | | |
| 35 | 7/9 | 19 secs | | | | | |
| | 7/10 | 12 mins | | | | | |
| | 7/18 | 32 mins | | | | | |
| | 7/19 | 31 mins | | | | | |
| | 7/21 | 4 mins | | | | | |
| | 7/31 | 15 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 | | | | |

3. DRY WEATHER OVERFLOWS

There was no dry weather combined sewer overflow during July 2012.

3.1 Sanitary Sewer Overflows

| Location | Wheeler Road and Varney Street NE. |
|------------------------------|---|
| | A sewer maintenance crew from the District of Columbia Water and Sewer Authority was dispatched to investigate a service call regarding a sewer odor at Wheeler Rd and Varney St, SE. The crew found that sewage was seeping through the pick holes of a manhole cover in the roadway in front of 900 Varney Street, SE. There was a buildup of grease in a 10 inch sanitary sewer causing the problem. The flow through the pick holes entered |
| Cause | a nearby 27 inch storm sewer. |
| Date/ Time Discovered | July 27, 2012 at 11:00 am |
| Action Taken | The DC Water crew removed the grease blockage from the 10 inch sanitary sewer at approximately 1:00 pm. |
| Date/Time Discharge Ceased | July 27, 2012 at 1:00 pm |
| Estimated Volume | 600 gallons |
| Did Overflow Reach Receiving | Yes. Oxon Run Creek. |
| water? | |
| | On July 30, 2012, DC Water crews used the close circuit television camera (CCTV) to assess the condition of the |
| Action taken to prevent | 10 inch sewer. The pipe is structurally sound, but the crew removed a wooden plank across the pipe channel that |
| reoccurrence | contributed to the grease build up in the line. |

SOLIDS AND FLOATABLES CONTROL

3.2 Catch Basin Cleaning

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

Table 4-1 Catch Basin Summaries

| | | | | Inspections Cleaning | | | | | | | |
|-----------------------------|-----------|---------------|----------------------------|--------------------------------|---------------------------------|----------|--------|----------|------------|--------|-------------------------|
| | | | CP | Total Anacostia CBs | Total Anacostia CBs | CBs Clea | | CB's Cle | eaned this | | s Cleaned er to Date |
| Ward | Total CBs | CBs in CSS | CBs in Anacostia CSS | Inspected Once this Year | Inspected Twice this Year | Total | In CSS | Total | In CSS | Total | In CSS |
| 1 | 1,591 | 1,568 | 734 | 734 | 230 | 1871 | 1684 | 357 | 352 | 2228 | 2036 |
| 2 | 4,714 | 4,112 | 2,316 | 1234 | 51 | 1637 | 1421 | 885 | 771 | 2522 | 2192 |
| 3 | 3,555 | 461 | - | 0 | 0 | 3944 | 674 | 1143 | 55 | 5087 | 729 |
| 4 | 2,782 | 1,985 | 159 | 159 | 159 | 4250 | 3044 | 181 | 80 | 4431 | 3124 |
| 5 | 2,167 | 1,035 | 1,035 | 1035 | 596 | 2416 | 1378 | 436 | 253 | 2852 | 1631 |
| 6 | 1,783 | 1,594 | 1,594 | 1047 | 84 | 1109 | 1004 | 48 | 43 | 1157 | 1047 |
| 7 | 2,313 | - | - | 0 | 0 | 601 | 0 | 73 | 0 | 674 | 0 |
| 8 | 1,278 | 116 | 116 | 116 | 31 | 1533 | 147 | 22 | 0 | 1555 | 147 |
| WASA Subtotal | 20,183 | 10,871 | 5,954 | 4,325 | 1,151 | 17,361 | 9,352 | 3,145 | 1,554 | 20,506 | 10,906 |
| DDOT (via VMS) Subtotal | | | | | | | | | | | |
| Grand Total | 20,183 | 10,871 | | | | | | | | 20,506 | 10,906 |
| % Cleaned/Inspected to Date | | , | | 73% | 19% | | | | | >100% | >100% |

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3.3 BMP Demonstration Projects

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

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

Table 4-2 BMP Demonstration Projects – Report

| Facility | Date Inspected | Condition | Work Needed | Work performed | Material Removed (CY) |
|------------------------|-------------------|-------------------------|-------------|------------------|--------------------------|
| Netting System CSO 018 | 7/3/2012 | Netting platform has | Boom and | None. Seeking | None collected |
| | | dropped under the water | flotation | bids to perform | |
| | | level. | replacement | repair work. | |
| Bar Rack CSO 040 | 7/3/2012 | Good | None | Routine Cleaning | (1) |
| Bar Rack CSO 041 | 7/12/2012 | Good | None | Routine Cleaning | (1) |

Notes:

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

3.4 Anacostia River Floating Debris Removal Program

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

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

| Duo angus On angti an | 5 day work work avaluding holidays worther normitting |
|----------------------------|--|
| Program Operation | 5-day work week, excluding holidays, weather permitting |
| Work Days this month: | 21 |
| Days not Operating | 13 |
| Reason not Operating | PM service and repairs. |
| # Skimmer in Fleet | 2 skimmers |
| # Skimmers Out of Service | 2 |
| Dates | B28: 7/3, 7/9, 7/16-17, 7/19 through 7/31 |
| | B29: 7/1 through 7/31 |
| Reason | B28: Broken loading screen chain, damaged loading screen, |
| | hydraulic oil leak port prop ram, broken starboard prop pod. |
| | B29: Damaged front loading screen roller. |
| Plan to Restore to Service | B28: ETR unknown. B29: ETR 15 August 2012. |
| Volume Material Collected | 40 tons. |
| Nature of Material | Bottles, cans, natural debris and plastics. |

3.5 CSS Litter Control

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

Status: no activities this month.

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.

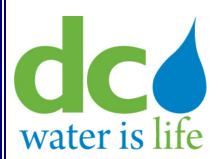
Table 5.1 Bar Racks at Main & O Street Pumping Stations

Inspector: Claude Price

| | | Date | Condition | | | Work Performed |
|------------------------|-----------|-----------|-----------|---------------|-------------|-------------------------------|
| Pumping Station | Inspector | Inspected | Good | Needs Work | Work Needed | or Schedule for Completion |
| Bar Racks at O | | | | | | |
| Street Storm | CP | 7/11/12 | X | | | |
| Pumps (CSO 010) | | | | | | |
| Bar Racks at Main | | | | | | |
| Storm Pumps | CP | 7/11/12 | X | | | |
| (CSO 011) | | | | | | |

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

| Date | Brentwood Reservoir | Bryant St PS | Main PS | Rock Creek PS |
|-----------|---------------------|--------------|---------|---------------|
| 7/1/2012 | 0 | 0 | 0 | 0 |
| 7/2/2012 | 0 | 0 | 0 | 0 |
| 7/3/2012 | 0 | 0.04 | 0.01 | 0 |
| 7/4/2012 | 0.01 | 0 | 0 | 0 |
| 7/5/2012 | 0 | 0 | 0 | 0 |
| 7/6/2012 | 0 | 0 | 0 | 0 |
| 7/7/2012 | 0 | 0 | 0 | 0 |
| 7/8/2012 | 0 | 0 | 0.45 | 0.05 |
| 7/9/2012 | 0.01 | 0.27 | 0.24 | 0.37 |
| 7/10/2012 | 0.01 | 2.04 | 0.67 | 2.19 |
| 7/11/2012 | 0 | 0 | 0.06 | 0 |
| 7/12/2012 | 0 | 0 | 0 | 0 |
| 7/13/2012 | 0 | 0 | 0 | 0 |
| 7/14/2012 | 0.03 | 0.1 | 0.08 | 0.06 |
| 7/15/2012 | 0.01 | 0.05 | 0.03 | 0.04 |
| 7/16/2012 | 2.21 | 0 | 0.01 | 0 |
| 7/17/2012 | 0 | 0 | 0 | 0 |
| 7/18/2012 | 0.01 | 1.51 | 0 | 0.46 |
| 7/19/2012 | 0.1 | 1.23 | 0.55 | 1.01 |
| 7/20/2012 | 0.05 | 0.03 | 0.06 | 0.18 |
| 7/21/2012 | 0.4 | 0.53 | 0.03 | 0.16 |
| 7/22/2012 | 0 | 0 | 0.06 | 0 |
| 7/23/2012 | 0 | 0 | 0.01 | 0 |
| 7/24/2012 | 0 | 0.17 | 0 | 0 |
| 7/25/2012 | 0 | 0.11 | 0 | 0 |
| 7/26/2012 | 0 | 0 | 0 | 0 |
| 7/27/2012 | 0 | 0 | 0 | 0 |
| 7/28/2012 | 0 | 0 | 0.14 | 0 |
| 7/29/2012 | 0.01 | 0 | 0 | 0 |
| 7/30/2012 | 0 | 0 | 0 | 0 |
| 7/31/2012 | 0.15 | 0.02 | 0.03 | 0.04 |
| TOTAL | 3 | 6.1 | 2.43 | 4.56 |



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For

Combined Sewer System
Month: August 2012

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 2012

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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 operations of the combined sewer system for the month indicated.

2. OPERATION AND MAINTENACE

2.1 Regulators

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

Table 2-1 Regulator Structures

| | | | | (| Condition | | |
|------------|--|------------------|------------------|---|------------|-------------|----------------|
| | | Associated NPDES | | | Needs Work | | |
| Struct No. | Location | Outfall | Inspected | | | Work Needed | Work performed |
| 2 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 08/30/12 | * | | | |
| 4 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 08/30/12 | * | | | |
| 5 | Poplar Point Pumping Station | 004 | 08/28/12 | * | | | |
| 6 | Chicago Street and Railroad Ave, SE | 005 | 08/28/12 | * | | | |
| 7 | W Street and Railroad Ave, SE | 005 | 08/29/12 | * | | | |
| 8 | Good Hope Rd, west of Nichols Ave, SE | 006 | N/A ³ | | | | |
| 9 | 13 th Street and Ridge Place, SE | 007 | 08/28/12 | * | | | |
| 11 | "O" Street Pumping Station | 011(a) | 08/23/12 | * | | | |
| 12 | Storm Pump Discharge at Main Pumping Station | 011 | 08/17/12 | * | | | |
| 13 | 2 nd Street, 300 ft. north of N Place, SE | 009 | 08/17/12 | * | | | |
| 14 | 2 nd Street, 250 ft. north of N Place, SE | 011(a) | 08/17/12 | * | | | |
| 15 | South Capitol and E Streets | 010 | 08/23/12 | * | | | |
| 15a | Half and L Streets, SE | 010 | 08/23/12 | * | | | |
| 15b | South Capitol and I Streets | 010 | 08/23/12 | * | | | |
| 15c | South Capitol and I Streets | 010 | 08/23/12 | * | | | |
| 16 | North of Main Sewage Pumping Station | 012 | 08/23/12 | * | | | |
| 17 | 4 th and N Streets, SE, Both Extended | 013 | 08/22/12 | * | | | |
| 17a | K Street between 6 th Street and 7 th Street, SE | 013 | 08/06/12 | * | | | |
| 18 | 6 th and M Streets, SE | 014 | 08/17/12 | * | | | |
| 19 | 9 th and M Streets, SE | 015 | 08/17/12 | * | | | |
| 19a | 9 th and M Streets, SE | 015 | 08/07/12 | * | | | |
| 20 | 12 th and M Streets, SE | 016 | 08/07/12 | * | | | |
| 20a | 12 th and M Streets, SE | 016 | 08/17/12 | * | | | |
| 21 | 14 th and M Streets, SE | 017 | 08/17/12 | * | | | |
| 22a | Barney Circle and Pennsylvania Ave, SE | 018 | 08/20/12 | * | | | |
| 22b | Barney Circle and Pennsylvania Ave, SE | 018 | 08/20/12 | * | | | |
| 22c | Barney Circle and Pennsylvania Ave, SE | 018 | 08/20/12 | * | | | |
| 22d | Kentucky Ave and Potomac Street, SE | 018 | 08/20/12 | * | | | |

| | | | | Condition | | | |
|------------|--|------------------|-----------|-----------|------------|--------------|----------------|
| C. N | 7 | Associated NPDES | | G 1 | Needs Work | 117 1 27 1 1 | III. 1 C 1 |
| Struct No. | Location | Outfall | Inspected | Good * | | Work Needed | Work performed |
| 22e | 14 th Street and Kentucky Ave, SE | 018 | 08/20/12 | | | | |
| 23 | Independence Ave, 21 st Street, SE, Extended | 019 | 08/22/12 | * | | | |
| 24a | East Capitol St, west of RFK stadium | 019 | 08/24/12 | * | | | |
| 28 | 21 st and Constitution Ave, NW | 020 | 08/29/12 | * | | | |
| 29 | 22 nd Street, between Constitution Ave and C St, NW | 020 | 08/30/12 | * | | | |
| 30 | 17 th and D Streets, NW | 020 | 08/13/12 | * | | | |
| 31 | 15 th Street and Pennsylvania Ave, NW | 020 | 08/13/12 | * | | | |
| 33 | 10 th and F Streets, NW | 020 | 08/13/12 | * | | | |
| 34 | 23 rd Street, north of Constitution Ave, NW | 020 | 08/30/12 | * | | | |
| 34a | 23 rd Street near C Street, NW | 020 | 08/30/12 | * | | | |
| 35 | Northeast of Roosevelt Bridge, NW | 021 | 08/15/12 | * | | | |
| 36 | 27 th and I Streets, NW | 022 | 08/15/12 | * | | | |
| 36a | New Hampshire Ave and Eye Street, NW | 022 | 08/15/12 | * | | | |
| 36b | 19 th and L Streets, NW | 022, 034 | 08/15/12 | * | | | |
| 36d | 17 th and L Streets, NW | 022, 034 | 08/15/12 | * | | | |
| 36g | 18 th and M Streets, NW | 022, 034 | 08/15/12 | * | | | |
| 36h | 18 th and M Streets, NW | 022, 034 | 08/15/12 | * | | | |
| 37 | 27 th and Eye Streets, NW | 022 | 08/15/12 | * | | | |
| 38 | 29 th and K Streets, NW | 024 | 08/13/12 | * | | | |
| 38a | 30 th Street, south of K Street, NW | 024 | 08/13/12 | * | | | |
| 39a | 30 th and K Streets, NW | 024 | 08/13/12 | * | | | |
| 39b | 30 th and K Streets, NW | 024 | 08/13/12 | * | | | |
| 41b | 31st and K Streets, NW | 025 | 08/13/12 | * | | | |
| 41c | 31st and K Streets, NW | 025 | 08/13/12 | * | | | |
| 42 | Wisconsin Ave and K Street, NW | 026 | 08/01/12 | * | | | |
| 43 | Potomac and Water Streets, NW | 027 | 08/31/12 | * | | | |
| 43a | Potomac and Water Streets, NW | 027 | 08/31/12 | * | | | |
| 44 | Water Street, west of Potomac St, NW | 027 | 08/01/12 | * | | | |
| 45 | 36 th and M Streets, NW | 028 | 08/01/12 | * | | | |
| 46 | Canal Rd, 1000ft. east of Foxhall Rd, NW | 029 | 08/10/12 | * | | | |
| 47 | 38 th Street and Reservoir Road, NW | 029 | 08/01/12 | * | | | |

| | | | | (| Condition | | |
|------------|--|------------------|------------------|------|------------|-------------|----------------|
| G | | Associated NPDES | | ~ . | Needs Work | | W. 1 C 1 |
| Struct No. | Location | Outfall | Inspected | Good | | Work Needed | Work performed |
| 47a | 37 th and T Streets, NW | 029 | 08/17/12 | * | | | |
| 47b | 37 th and T Streets, NW | 029 | 08/17/12 | * | | | |
| 47c | 38 th and W Streets, NW | 029 | 08/17/12 | * | | | |
| 49 | Pennsylvania Ave, east side of Rock Creek, NW | 031 | N/A ³ | | | | |
| 50 | 26 and M Streets, NW | 032 | 08/28/12 | * | | | |
| 51 | N Street Extended, west of 25 th Street, NW | 033 | 08/28/12 | * | | | |
| 52 | 22 nd Street between M and N Streets, NW | 034 | 08/30/12 | * | | | |
| 52a | N Street between 22 nd and 23 rd Streets, NW | 034 | 08/30/12 | * | | | |
| 53 | 22 nd and M Streets, NW | 022, 034 | 08/17/12 | * | | | |
| 53a | 22 nd and M Streets, NW | 022, 034 | 08/17/12 | * | | | |
| 53b | L Street between 21st Street and New Hampshire Ave, NW | 022, 034 | 08/28/12 | * | | | |
| 53c | L and 22 nd Streets, NW | 022 | 08/28/12 | * | | | |
| 54 | 23 rd and O Streets, NW | 034 | 08/20/12 | * | | | |
| 55 | 22 nd Street, south of Q Street, NW | 035 | 08/20/12 | * | | | |
| 55a | 22 nd Street, south of Q Street, NW | 035 | 08/20/12 | * | | | |
| 56 | 23 rd and Massachusetts Ave, NW | 036 | 08/20/12 | * | | | |
| 57 | 23 rd Street, south of Q Street, NW | 036 | 08/20/12 | * | | | |
| 58 | Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW | 037 | N/A ³ | | | | |
| 59 | North of Belmont Rd, east of Kalorama Cir, NW | 038 | 08/08/12 | * | | | |
| 60 | Connecticut Ave, east of Rock Creek, NW | 039 | 08/08/12 | * | | | |
| 61 | Biltmore St, Extended, east of Rock Creek, NW | 040 | 08/08/12 | * | | | |
| 62 | Ontario Rd, Extended, and Rock Creek Pkwy, NW | 041 | 08/08/12 | * | | | |
| 63 | Harvard Street and Rock Creek Parkway, NW | 042 | 08/08/12 | * | | | |
| 64 | Adams Mill Road, south of Irving Street, NW | 043 | 08/08/12 | * | | | |
| 65 | Kenyon Street and Adams Mill Road, NW | 044 | 08/08/12 | * | | | |
| 65a | Kenyon Street and Adams Mill Road, NW | 044 | 08/08/12 | * | | | |
| 66 | Adams Mill Road and Lamont Street, NW | 045 | 08/08/12 | * | | | |
| 67 | Park Rd, south of Piney Branch Pkwy, NW | 046 | 08/08/12 | * | | | |
| 68 | Ingleside Terrance, Extended and Piney Branch Parkway, NW | 047 | 08/08/12 | * | | | |
| 69 | Mt. Pleasant Street, Extended and Piney Branch Parkway, NW | 048 | 08/08/12 | * | | | |
| 70 | Piney Branch Parkway, west of 16 th Street, NW | 049 | 08/08/12 | * | | | |

| | | Associated NPDES | Date | (| Condition | | |
|------------|---|------------------|------------------|------|------------|-------------|----------------|
| Struct No. | Location | Outfall | Inspected | Good | Needs Work | Work Needed | Work performed |
| 70i | 5 th and Quackenbos Streets, NW | 049 | 08/13/12 | * | | | |
| 71 | 28 th Street, west of Rock Creek Parkway, NW | 050 | 08/13/12 | * | | | |
| 72 | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 08/20/12 | * | | | |
| 72a | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 08/20/12 | * | | | |
| 73 | O Street Extended and Rock Creek Parkway, NW | 052 | 08/20/12 | * | | | |
| 74 | Q Street, west of Rock Creek, NW | 053 | N/A ³ | | | | |
| 75 | West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW | 054 | 08/17/12 | * | | | |
| 77 | Normanstone Dr Extended, west of Rock Creek, NW | 056 | 08/17/12 | * | | | |
| 77a | Normanstone Dr and Normanstone Lane, NW | 056 | 08/17/12 | * | | | |
| 78 | 28th Street Extended, west of Rock Creek, NW | 057 | 08/17/12 | * | | | |
| 79 | Connecticut Ave and Rock Creek Parkway, NW | 058 | N/A ³ | | | | |
| 84 | 26 th and P Streets, NW | 060 | 08/31/12 | * | | | |
| 84a | 26 th and P Streets, NW | 060 | 08/31/12 | * | | | |

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

| | I | 14 | 1 | - Outlan | 5 una | Tiuc (| | | | | |
|---------|---|-----------|----|----------|-------|--------|-----------|-------|----------|------------|---------------------------------|
| | | | | Outfall | | Gate | Tide Gate | | | | |
| | | | Co | ondition | Pres | sent? | Condition | | CSO Sign | | |
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| 002 | Bolling Air Force Base, at Giavanolli and | 00/01/10 | * | | * | | * | | * | | |
| 003 | Chanute, SW | 08/01/12 | * | | * | | * | | * | | |
| 005 | Across from Navy Yard, aligned with Parsons Ave., SE | 08/01/12 | * | | * | | * | | * | | |
| 006 | Good Hope Road and Welsh Memorial Bridge ¹ | 08/07/12 | | | | | | | | | |
| 007 | Between 11 th St. and Anacostia Bridges, SE | | * | | * | | * | | * | | |
| 009 | O St. Sewage Pumping Station, SE | 08/22/12 | * | | * | | * | | * | | |
| 010 | O St. Sewage Pumping Station, SE | 08/22/12 | * | | | * | | | * | | |
| 011 | Main Sewage Pumping Station, SE | 08/22/12 | * | | | * | | | * | | |
| 011(a) | Main Sewage Pumping Station, SE | 08/22/12 | * | | * | | * | | * | | |
| 012 | Main Sewage Pumping Station, SE | 08/31/12 | * | | * | | * | | * | | |
| 013 | Southeast Federal Center, aligned with 4 th St. | 08/10/12 | * | | * | | * | | * | | |
| 014 | Navy Yard, aligned with 6 th St., SE | 08/10/12 | * | | * | | * | | * | | |
| 015 | Navy Yard, aligned with 9th Street, SE | 08/10/12 | * | | | * | | | * | | |
| 016 | 12th and O Streets, SE | 08/23/12 | * | | * | | * | | * | | |
| 017 | M and Water Street, SE | 08/23/12 | * | | * | | * | | * | | |
| 018 | East of Barney Circle and South of Pennsylvania Avenue Bridge, SE | 08/23/12 | * | | * | | * | | * | | |
| 019 | Adjacent to Service Drive behind swirl facility and D.C. General Hospital | 08/14/12 | * | | | * | | | * | | |
| 020 | Rock Creek Parkway and Independence, NW | 08/22/12 | * | | * | | * | | * | | |
| 021 | Rock Creek Parkway and C St., NW | 08/22/12 | * | | | * | | | * | | |
| 022 | Rock Creek Parkway and G St., NW | 08/22/12 | * | | * | | * | | * | | |
| 024 | South of 30 th and K Streets, NW ¹ | 08/10/12 | * | | * | | * | | * | | |
| 025 | South of 31st and K Streets, NW | 08/10/12 | * | | * | | * | | * | | |
| 026 | Wisconsin Avenue and Water Street, NW | 08/10/12 | * | | * | | * | | * | | |
| 027 | 33 rd and Water Sts., NW | 08/10/12 | * | | | * | | | * | | |
| 028 | Key Bridge and Whitehurst Freeway, NW | 08/10/12 | * | | | * | | | * | | |

| | | | (| Outfall | Tide | Gate | Tide G | Gate | | | |
|---------|---|-----------|----|----------|------|-------|--------|-------|----|------------|---------------------------------|
| | | | Co | ondition | Pres | sent? | Condi | | | CSO Sign | |
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| 029 | Adjacent to C&O Canal, aligned with 38 th St. NW | 08/07/12 | * | | * | | * | | * | | |
| 031 | Rock Creek Pkwy & Pennsylvania Avenue, NW1 | N/A | | | | | | | | | |
| 032 | 26th and M Street, NW. | 08/23/12 | * | | | * | | | * | | |
| 033 | Across street from St. Francis Jr. High and aligned with N St., NW. | 08/23/12 | * | | * | | * | | * | | |
| 034 | Just west of St. Francis Jr. High and north of N St., NW | 08/20/12 | * | | * | | * | | * | | |
| 035 | P St. Bridge and Rock Creek Parkway | 08/20/12 | * | | * | | * | | * | | |
| 036 | 22nd Street, South of Q Street NW. | 08/01/12 | * | | * | | * | | * | | |
| 037 | Waterside Dr. and Rock Creek Parkway ¹ | N/A | | | * | | * | | | | |
| 038 | Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW. | 08/31/12 | * | | * | | * | | * | | |
| 039 | Connecticut Avenue Bridge and Rock Creek Parkway, NW. | 08/31/12 | * | | * | | * | | * | | |
| 040 | Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge. | 08/31/12 | * | | * | | * | | * | | |
| 041 | Beach Dr. and Ontario Pl., NW | 08/10/12 | * | | * | | * | | * | | |
| 042 | Harvard St. and Beach Dr NW. | 08/10/12 | * | | * | | * | | * | | |
| 043 | Upstream of Harvard St. and Beach Dr NW. | 08/10/12 | * | | * | | * | | * | | |
| 044 | Kenyon Street and Beach Dr., NW. | 08/10/12 | * | | * | | * | | * | | |
| 045 | North of Beach Dr. and Walbridge Pl, NW. | 08/10/12 | * | | * | | * | | * | | |
| 046 | Piney Branch Parkway and Park Road, NW. | 08/10/12 | * | | | * | | | * | | |
| 047 | Piney Branch Parkway and Ingleside Terrace | 08/10/12 | * | | * | | * | | * | | |
| 048 | South of Piney Branch Parkway and 17 th St. | 08/10/12 | * | | * | | * | | * | | |
| 049 | North of Piney Branch Parkway and 17 th St. | 08/10/12 | * | | * | | * | | * | | |
| 050 | Rock Creek Parkway and L St., NW | 08/10/12 | * | | * | | * | | * | | |
| 051 | Across Rock Creek Pkwy, aligned with Olive St., NW. | 08/10/12 | * | | * | | * | | * | | |
| | Between P & Penna. Ave Bridges, aligned with O Street, NW. | 08/22/12 | * | | * | | * | | * | | |
| 053 | Q St. Bridge and Rock Creek Parkway, NW. ¹ | 08/14/12 | | | | | | | | | |
| 054 | Massachusetts Ave & Rock Creek Parkway, NW. | 08/14/12 | * | | * | | * | | * | | |

| | | | | Outfall ondition | | Gate sent? | Tide G Condit | | | CSO Sign | |
|---------|--|-----------|----|---------------------|-----|---------------|------------------|-------|----|------------|---------------------------------|
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| 056 | Normanstone Dr. and Rock Creek Parkway, NW. | 08/14/12 | * | | * | | * | | * | | |
| 057 | 28th Street and Rock Creek Parkway, NW | 08/14/12 | * | | * | | * | | * | | |
| 058 | Connecticut Ave & Rock Creek Parkway, NW. ¹ | 08/10/12 | | | | * | | | | | |
| 060 | North of P St. Bridge & Rock Creek Pkwy, NW | 08/10/12 | * | | * | | * | | * | | |

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

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

| | | | | 1 0 | | <u> </u> | |
|--------------|-------------|---------|-------|------------------|-------------|-----------------------|--------------------------------|
| Pumping | No. of | No. | No. | Screens or Pumps | | | |
| Station | Inspections | Screens | Pumps | Out of Service | Dates | Reason | Schedule to Restore to Service |
| Main | 31 | 4 | 10 | #3 Sanitary Pump | August 1-31 | Pump being rehabbed | December 2012 |
| Eastside | 31 | 2 | 4 | #2 Screen | August 1-31 | Screen being rehabbed | December 2012 |
| Poplar Point | 31 | 2 | 3 | #1 Screen | August 1-31 | Screen being rehabbed | December 2012 |
| Potomac | 31 | 4 | 5 | #2 Pump | August 1-31 | Pump being rehabbed | September 2012 |
| | | | | #4 Screen | August 1-31 | Screen being rehabbed | December 2012 |

Notes:

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

Table 2-4
Pumping Stations – Preventive Maintenance

| | | Type of Preventive Maintenance | | | | | |
|-----------------|----------------|--------------------------------|---|--|--|--|--|
| Pumping Station | Date Performed | Performed ¹ | Comments | | | | |
| Main | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| O St | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| Eastside | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| Poplar Point | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| Potomac | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| Rock Creek | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| Upper Anacostia | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |
| Earle Place | 8/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. | | | | |

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

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

Check all safety equipment

Issue work order requests as required

Table 2-5 Pumping Stations – Pumpage

| | | T diliping bu | tions I umpu | • · | |
|-----------------|------------------|-----------------|--------------|---------------------|----------------------|
| | Sanitary Pı | ımpage | Storm V | Vater/CSO Pumped To | Anacostia River |
| | Total Wastewater | Daily Average | | | Screenings Collected |
| Pumping Station | (mg) | Wastewater (mg) | Date | Volume (mg) | (units) ¹ |
| Main | 1,531.80 | 49.41 | N/A | N/A | N/A |
| O St | 177.00 | 5.71 | 8/10/2012 | 20.20 | Normal |
| Eastside | 294.45 | 9.50 | N/A | N/A | N/A |
| Poplar Point | 662.67 | 21.38 | N/A | N/A | N/A |
| Potomac | 3,452.30 | 111.36 | N/A | N/A | N/A |
| Rock Creek | 194.17 | 6.26 | N/A | N/A | N/A |
| Upper Anacostia | 151.04 | 4.87 | N/A | N/A | N/A |
| Earle Place | 0.19 | 0.01 | N/A | N/A | N/A |

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

2-4 Northeast Boundary Swirl Facility

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

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

| Date | # of | # of | Screens or Swirls | | | |
|-----------|----------|----------|-------------------|-------|--------|--------------------------------|
| Inspected | Screens | Swirls | Out of Service | Dates | Reason | Schedule to Restore to Service |
| 8/26/12 | 1, 2 & 3 | 1, 2 & 3 | None | N/A | N/A | N/A |

Table 2-7 Northeast Boundary Swirl Facility – Preventive Maintenance

| Date Performed | Type of Preventive Maintenance Performed ¹ | Comments |
|----------------|---|----------|
| 8/27/12 | Group A | |

1. Group A consists of:

Exercise bar screens

Exercise wash down system

Exercise knife gates full travel both directions

Check depth of grit in grit channel and schedule Vactor truck as required

Change chart paper on strip chart recorders at the end of each month

Thoroughly clean each Swirl tank and channels

Issue work order requests as required

Drain condensation from air compress

Check all safety equipment

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

| | Approx. Storm | Total Influent | Total Foul Sewer | Total Effluent | Approx. Screenings |
|-----------|----------------|----------------|------------------|----------------|--------------------|
| Date | Duration (hrs) | Volume (mg) | Volume (mg) | Volume (mg) | Volume (Cu. ft) |
| 8/10/2012 | 6.25 | 12.46 | 12.46 | 0.00 | 180.0 |
| 8/11/2012 | 5.5 | 14.02 | 14.02 | 0.00 | 60.0 |
| 8/19/2012 | 2.25 | 6.81 | 6.81 | 0.00 | 60.0 |
| 8/20/2012 | 4 | 2.32 | 2.32 | 0.00 | 60.0 |
| 8/22/2012 | 4 | 2.12 | 2.12 | 0.00 | 60.0 |
| 8/26/2012 | 4 | 2.88 | 2.88 | 0.00 | 60.0 |

15

Chlorination/Dechlorination Systems.

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

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

Table 2-9
Northeast Boundary Swirl Facility – Disinfection Performance

| | Chlor/ | Do | sages | Residual Chlorine Results | | E. Coli Test Results | |
|------|---------|--------|-----------|------------------------------|--------|------------------------------|-------|
| | Dechlor | | | | | | Count |
| | System | NaOCl | $NaHSO_3$ | | Conc. | | Per |
| Date | Used? | (mg/l) | (mg/l) | Location | (mg/l) | Site | 100ml |
| N/A | | | | Mix Chamber | | Mix Chamber | |
| 14/A | | | | Anacostia River ¹ | | Anacostia River ¹ | |

Notes:

1. River: River Outfall

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

| Ī | | 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) | |
| Γ | N/A | | | | | | | | |

2.5 Inflatable Dams

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

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

| Inflatable Dam | | Was Dam Out of Service | 2 | | Schedule to Restore to | |
|----------------|----------------|------------------------|----------------------|--------|------------------------|--|
| Structure No | Date Inspected | During the Month? | Dates out of Service | Reason | Service | |
| 14 - East | 8/20/2012 | No | N/A | N/A | N/A | |
| 14 - West | 8/20/2012 | No | N/A | N/A | N/A | |
| 15 | 8/20/2012 | No | N/A | N/A | N/A | |
| 15A | 8/20/2012 | No | N/A | N/A | N/A | |
| 16 - East | 8/20/2012 | No | N/A | N/A | N/A | |
| 16 - West | 8/20/2012 | No | N/A | N/A | N/A | |
| 24 - North | 8/20/2012 | No | N/A | N/A | N/A | |
| 24 - Middle | 8/20/2012 | No | N/A | N/A | N/A | |
| 24 - South | 8/20/2012 | No | N/A | N/A | N/A | |
| 34 | 8/20/2012 | No | N/A | N/A | N/A | |
| 35 | 8/20/2012 | No | N/A | N/A | N/A | |
| 52 | 8/20/2012 | No | N/A | N/A | N/A | |

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

| Inflatable Dam Structure No. | Overflow Dates | Estimated Duration of Overflow |
|----------------------------------|--------------------|--|
| 14 (E & W) | None | N/A |
| 15 | 8/10 | 3 mins |
| 15A | 8/10 | 5 mins |
| 16 (E & W) | 8/10 | 27 mins |
| 24 | 8/10 | 4 mins |
| | 8/11 | 3 mins |
| | 8/19 | 2 mins |
| | 8/20 | 2 mins |
| | 8/22 | 14 mins |
| 34 | 8/11 | 3 mins |
| 35 | 8/10 | 1 mins |
| | 8/11 | 1 min |
| | 8/19 | 15 mins |
| | 8/20 | 2 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 |

3. DRY WEATHER OVERFLOWS

There was one dry weather combined sewer overflow event during August 2012.

| Location | 27th Street and I Street NW. |
|------------------------------|--|
| | During their monthly scheduled structure inspection, a sewer maintenance crew observed sewage overflowing at diversion structure #036 at 27 th St. and I St. NW. Upon further investigation, the crew found a long wooden plank wedged across the 2.5ft x 3ft opening in the 4.5ft combined sewer causing a building of sticks and other debris that obstructed the flow through the diversion structure causing a back up and overflow into the Rock Creek |
| Cause | Diversion Sewer that flow into the Potomac River at the outfall (CSO #022). |
| Date/ Time Discovered | August 15, 2012 at 10:10 am |
| Action Taken | The DC Water crew removed the log and cleared the 4.5ft sewer at approximately 11:15 am. |
| Date/Time Discharge Ceased | August 15, 2012 at 11:15 am |
| Estimated Volume | 3300 gallons |
| Did Overflow Reach Receiving | Yes. Potomac River. |
| water? | |
| Action taken to prevent | On August 16, 2012, diversion structure #036 was re-inspected and was found to be in working condition. |
| reoccurrence | |

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:

Table 4-1 Catch Basin Summaries

| Inspections Cleaning | | | | | | | | | | | |
|---|-----------|---------------|------------------|--|--|--------------------|--------|-------|------------|--|-----------------|
| | | | | Inspections | | | | Clea | ining | T | |
| | | | CBs in | Total Anacostia CBs Inspected | Total Anacostia CBs Inspected | CBs Clea Last N | | | eaned this | Total CBs Cleaned This Year to Date | |
| Ward | Total CBs | CBs in CSS | Anacostia CSS | Once this Year | Twice this Year | Total | In CSS | Total | In CSS | Total | In CSS |
| 1 | 1,591 | 1,568 | 734 | 734 | 381 | 2228 | 2036 | 228 | 151 | 2456 | 2187 |
| 2 | 4,714 | 4,112 | 2,316 | 2002 | 162 | 2522 | 2192 | 1562 | 1362 | 4084 | 3554 |
| 3 | 3,555 | 461 | - | 0 | 0 | 5087 | 729 | 278 | 8 | 5365 | 737 |
| 4 | 2,782 | 1,985 | 159 | 159 | 159 | 4431 | 3124 | 128 | 24 | 4559 | 3148 |
| 5 | 2,167 | 1,035 | 1,035 | 1035 | 838 | 2852 | 1631 | 319 | 242 | 3171 | 1873 |
| 6 | 1,783 | 1,594 | 1,594 | 1157 | 216 | 1157 | 1047 | 187 | 110 | 1344 | 1157 |
| 7 | 2,313 | - | - | 0 | 0 | 674 | 0 | 76 | 0 | 750 | 0 |
| 8 | 1,278 | 116 | 116 | 116 | 31 | 1555 | 147 | 10 | 0 | 1565 | 147 |
| WASA Subtotal | 20,183 | 10,871 | 5,954 | 5,203 | 1,787 | 20,506 | 10,906 | 2,788 | 1,897 | 23,294 | 12,803 |
| DDOT (via VMS) Subtotal | | | | | | | | | | | |
| Grand Total % Cleaned/Inspected to Date | 20,183 | 10,871 | | 87% | 30% | | | | | 23,294 >100% | 12,803 >100% |

3.2 BMP Demonstration Projects

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

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

Table 4-2 BMP Demonstration Projects – Report

| Facility | Date Inspected | Condition | Work Needed | Work performed | Material Removed (CY) |
|------------------------|-------------------|-------------------------|-------------|------------------|--------------------------|
| Netting System CSO 018 | 8/6/2012 | Netting platform has | Boom and | None. Seeking | None collected |
| | | dropped under the water | flotation | bids to perform | |
| | | level. | replacement | repair work. | |
| Bar Rack CSO 040 | 8/10/12 | Good | None | Routine Cleaning | (1) |
| Bar Rack CSO 041 | 8/10/12 | 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 September 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

| Program Operation | 5-day work week, excluding holidays, weather permitting |
|----------------------------|---|
| Work Days this month: | 23 |
| Days not Operating | 4 |
| Reason not Operating | High winds, low tide, and PM service. |
| # Skimmer in Fleet | - |
| # Skimmers Out of Service | 2 skimmers |
| Dates | B28: 8/1 - 8/28 B29: 8/1 - 8/2 |
| Reason | B28: PORT prop pod weld rusted through. |
| | B29: Damaged front roller. |
| Plan to Restore to Service | B28: repaired 8/28 B29: repaired 8/2 |
| Volume Material Collected | 30 tons. |
| Nature of Material | Bottles, cans, natural debris and plastics. |

3.4 CSS Litter Control

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

Status: no activities this month.

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 5.1 Bar Racks at Main & O Street Pumping Stations

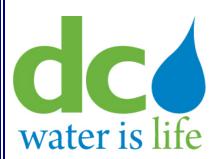
Inspector: Claude Price

| | | Date | Cond | lition | | Work Performed |
|---|-----------|-----------|------|---------------|-------------|-------------------------------|
| Pumping Station | Inspector | Inspected | Good | Needs Work | Work Needed | or Schedule for Completion |
| Bar Racks at O Street Storm | СР | 8/22/12 | X | VVOIN | | Complexion |
| Pumps (CSO 010) | | | | | | |
| Bar Racks at Main Storm Pumps (CSO 011) | СР | 8/22/12 | X | | | |

5.2 Rain Data

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

| Date | Brentwood Reservoir | Bryant St PS | Main PS | Rock Creek PS |
|-----------|---------------------|--------------|---------|---------------|
| 8/1/2012 | 0 | 0 | 0 | 0 |
| 8/2/2012 | 0 | 0 | 0 | 0 |
| 8/3/2012 | 0 | 0.01 | 0 | 0 |
| 8/4/2012 | 0 | 0 | 0 | 0 |
| 8/5/2012 | 0.01 | 0.05 | 0.02 | 0.05 |
| 8/6/2012 | 0 | 0 | 0.01 | 0 |
| 8/7/2012 | 0 | 0 | 0 | 0 |
| 8/8/2012 | 0 | 0 | 0 | 0 |
| 8/9/2012 | 0 | 0 | 0 | 0 |
| 8/10/2012 | 0.82 | 0.66 | 0.77 | 0.37 |
| 8/11/2012 | 0.27 | 0.81 | 0.05 | 0.31 |
| 8/12/2012 | 0 | 0 | 0 | 0 |
| 8/13/2012 | 0 | 0 | 0 | 0 |
| 8/14/2012 | 0.16 | 0.09 | 0.11 | 0.1 |
| 8/15/2012 | 0 | 0 | 0 | 0 |
| 8/16/2012 | 0 | 0 | 0 | 0 |
| 8/17/2012 | 0.01 | 0 | 0 | 0 |
| 8/18/2012 | 0.1 | 0.11 | 0.14 | 0.15 |
| 8/19/2012 | 0.14 | 0.22 | 0.12 | 0.66 |
| 8/20/2012 | 0 | 0.25 | 0 | 0.12 |
| 8/21/2012 | 0 | 0.57 | 0.27 | 0.07 |
| 8/22/2012 | 0 | 0.01 | 0.43 | 0.01 |
| 8/23/2012 | 0 | 0 | 0 | 0 |
| 8/24/2012 | 0 | 0 | 0 | 0 |
| 8/25/2012 | 0.01 | 0.02 | 0.02 | 0.02 |
| 8/26/2012 | 0 | 0.19 | 0.19 | 0.33 |
| 8/27/2012 | 0 | 0 | 0 | 0 |
| 8/28/2012 | 0 | 0 | 0.02 | 0.02 |
| 8/29/2012 | 0 | 0 | 0 | 0 |
| 8/30/2012 | 0 | 0 | 0 | 0 |
| 8/31/2012 | 0 | 0 | 0 | 0 |
| TOTAL | 1.52 | 2.99 | 2.15 | 2.21 |



DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY

Serving the Public • Protecting the Environment

Monthly Operations Report For

Combined Sewer System
Month: September 2012

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 2012

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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 operations of the combined sewer system for the month indicated.

2. OPERATION AND MAINTENACE

2.1 Regulators

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

Table 2-1 Regulator Structures

| | | | | (| Condition | | |
|------------|--|------------------|------------------|------|------------|-------------|--------------------|
| G | | Associated NPDES | | | Needs Work | 1 | TT7 1 C |
| Struct No. | Location CVV | Outfall | Inspected | Good | | Work Needed | Work performed |
| 2 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 09/27/12 | * | | | |
| 4 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 09/27/12 | * | | | |
| 5 | Poplar Point Pumping Station | 004 | 09/28/12 | | | | |
| 6 | Chicago Street and Railroad Ave, SE | 005 | 09/10/12 | * | | | |
| 7 | W Street and Railroad Ave, SE | 005 | 09/10/12 | * | | | |
| 8 | Good Hope Rd, west of Nichols Ave, SE | 006 | N/A ³ | | | | |
| 9 | 13 th Street and Ridge Place, SE | 007 | 09/10/12 | * | | | |
| 11 | "O" Street Pumping Station | 011(a) | 09/28/12 | * | | | |
| 12 | Storm Pump Discharge at Main Pumping Station | 011 | 09/28/12 | * | | | |
| 13 | 2 nd Street, 300 ft. north of N Place, SE | 009 | 09/28/12 | * | | | |
| 14 | 2 nd Street, 250 ft. north of N Place, SE | 011(a) | 09/28/12 | * | | | |
| 15 | South Capitol and E Streets | 010 | 09/28/12 | * | | | |
| 15a | Half and L Streets, SE | 010 | 09/28/12 | * | | | |
| 15b | South Capitol and I Streets | 010 | 09/05/12 | * | | | |
| 15c | South Capitol and I Streets | 010 | 09/05/12 | * | | | |
| 16 | North of Main Sewage Pumping Station | 012 | 09/28/12 | * | | | |
| 17 | 4 th and N Streets, SE, Both Extended | 013 | 09/17/12 | * | | | |
| 17a | K Street between 6 th Street and 7 th Street, SE | 013 | 09/13/12 | * | | | |
| 18 | 6 th and M Streets, SE | 014 | 09/20/12 | * | | | |
| 19 | 9 th and M Streets, SE | 015 | 09/20/12 | * | | | |
| 19a | 9 th and M Streets, SE | 015 | 09/04/12 | | | | Contractor at work |
| 20 | 12 th and M Streets, SE | 016 | 09/17/12 | * | | | |
| 20a | 12 th and M Streets, SE | 016 | 09/17/12 | * | | | |
| 21 | 14 th and M Streets, SE | 017 | 09/17/12 | * | | | |
| 22a | Barney Circle and Pennsylvania Ave, SE | 018 | 09/20/12 | * | | | |
| 22b | Barney Circle and Pennsylvania Ave, SE | 018 | 09/20/12 | * | | | |
| 22c | Barney Circle and Pennsylvania Ave, SE | 018 | 09/07/12 | * | | | |
| 22d | Kentucky Ave and Potomac Street, SE | 018 | 09/07/12 | * | | | |
| 22e | 14 th Street and Kentucky Ave, SE | 018 | 09/07/12 | * | | | |

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| | | | | (| Condition | | |
|------------|--|------------------|-----------|-----------|------------|--|----------------|
| G | T | Associated NPDES | | ~ . | Needs Work | **** * * * * * * * * * * * * * * * * * * | W 1 C 1 |
| Struct No. | Location | Outfall | Inspected | Good * | | Work Needed | Work performed |
| 23 | Independence Ave, 21 st Street, SE, Extended | 019 | 09/14/12 | * | | | |
| 24a | East Capitol St, west of RFK stadium | 019 | 09/14/12 | | | | |
| 28 | 21st and Constitution Ave, NW | 020 | 09/27/12 | * | | | |
| 29 | 22 nd Street, between Constitution Ave and C St, NW | 020 | 09/27/12 | * | | | |
| 30 | 17 th and D Streets, NW | 020 | 09/10/12 | * | | | |
| 31 | 15 th Street and Pennsylvania Ave, NW | 020 | 09/10/12 | * | | | |
| 33 | 10 th and F Streets, NW | 020 | 09/10/12 | * | | | |
| 34 | 23 rd Street, north of Constitution Ave, NW | 020 | 09/28/12 | * | | | |
| 34a | 23 rd Street near C Street, NW | 020 | 09/27/12 | * | | | |
| 35 | Northeast of Roosevelt Bridge, NW | 021 | 09/28/12 | * | | | |
| 36 | 27 th and I Streets, NW | 022 | 09/04/12 | * | | | |
| 36a | New Hampshire Ave and Eye Street, NW | 022 | 09/04/12 | * | | | |
| 36b | 19 th and L Streets, NW | 022, 034 | 09/26/12 | * | | | |
| 36d | 17 th and L Streets, NW | 022, 034 | 09/26/12 | * | | | |
| 36g | 18 th and M Streets, NW | 022, 034 | 09/26/12 | * | | | |
| 36h | 18 th and M Streets, NW | 022, 034 | 09/26/12 | * | | | |
| 37 | 27 th and Eye Streets, NW | 022 | 09/04/12 | * | | | |
| 38 | 29 th and K Streets, NW | 024 | 09/13/12 | * | | | |
| 38a | 30 th Street, south of K Street, NW | 024 | 09/13/12 | * | | | |
| 39a | 30 th and K Streets, NW | 024 | 09/13/12 | * | | | |
| 39b | 30 th and K Streets, NW | 024 | 09/13/12 | * | | | |
| 41b | 31st and K Streets, NW | 025 | 09/13/12 | * | | | |
| 41c | 31st and K Streets, NW | 025 | 09/13/12 | * | | | |
| 42 | Wisconsin Ave and K Street, NW | 026 | 09/13/12 | * | | | |
| 43 | Potomac and Water Streets, NW | 027 | 09/13/12 | * | | | |
| 43a | Potomac and Water Streets, NW | 027 | 09/13/12 | * | | | |
| 44 | Water Street, west of Potomac St, NW | 027 | 09/13/12 | * | | | |
| 45 | 36 th and M Streets, NW | 028 | 09/07/12 | * | | | |
| 46 | Canal Rd, 1000ft. east of Foxhall Rd, NW | 029 | 09/07/12 | * | | | |
| 47 | 38 th Street and Reservoir Road, NW | 029 | 09/07/12 | * | | | |
| 47a | 37 th and T Streets, NW | 029 | 09/07/12 | * | | | |

| | | | | (| Condition | | |
|------------|--|------------------|------------------|------|------------|-------------|----------------|
| | | Associated NPDES | | | Needs Work | 1 | |
| Struct No. | | Outfall | Inspected | Good | | Work Needed | Work performed |
| 47b | 37 th and T Streets, NW | 029 | 09/07/12 | * | | | |
| 47c | 38 th and W Streets, NW | 029 | 09/07/12 | * | | | |
| 49 | Pennsylvania Ave, east side of Rock Creek, NW | 031 | N/A ³ | | | | |
| 50 | 26 and M Streets, NW | 032 | 09/06/12 | * | | | |
| 51 | N Street Extended, west of 25 th Street, NW | 033 | 09/06/12 | * | | | |
| 52 | 22 nd Street between M and N Streets, NW | 034 | 09/28/12 | * | | | |
| 52a | N Street between 22 nd and 23 rd Streets, NW | 034 | 09/06/12 | * | | | |
| 53 | 22 nd and M Streets, NW | 022, 034 | 09/06/12 | * | | | |
| 53a | 22 nd and M Streets, NW | 022, 034 | 09/06/12 | * | | | |
| 53b | L Street between 21st Street and New Hampshire Ave, NW | 022, 034 | 09/26/12 | * | | | |
| 53c | L and 22 nd Streets, NW | 022 | 09/26/12 | * | | | |
| 54 | 23 rd and O Streets, NW | 034 | 09/26/12 | * | | | |
| 55 | 22 nd Street, south of Q Street, NW | 035 | 09/26/12 | * | | | |
| 55a | 22 nd Street, south of Q Street, NW | 035 | 09/26/12 | * | | | |
| 56 | 23 rd and Massachusetts Ave, NW | 036 | 09/26/12 | * | | | |
| 57 | 23 rd Street, south of Q Street, NW | 036 | 09/26/12 | * | | | |
| 58 | Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW | 037 | N/A ³ | | | | |
| 59 | North of Belmont Rd, east of Kalorama Cir, NW | 038 | 09/21/12 | * | | | |
| 60 | Connecticut Ave, east of Rock Creek, NW | 039 | 09/21/12 | * | | | |
| 61 | Biltmore St, Extended, east of Rock Creek, NW | 040 | 09/21/12 | * | | | |
| 62 | Ontario Rd, Extended, and Rock Creek Pkwy, NW | 041 | 09/25/12 | * | | | |
| 63 | Harvard Street and Rock Creek Parkway, NW | 042 | 09/25/12 | * | | | |
| 64 | Adams Mill Road, south of Irving Street, NW | 043 | 09/25/12 | * | | | |
| 65 | Kenyon Street and Adams Mill Road, NW | 044 | 09/25/12 | * | | | |
| 65a | Kenyon Street and Adams Mill Road, NW | 044 | 09/25/12 | * | | | |
| 66 | Adams Mill Road and Lamont Street, NW | 045 | 09/25/12 | * | | | |
| 67 | Park Rd, south of Piney Branch Pkwy, NW | 046 | 09/25/12 | * | | | |
| 68 | Ingleside Terrance, Extended and Piney Branch Parkway, NW | 047 | 09/25/12 | * | | | |
| 69 | Mt. Pleasant Street, Extended and Piney Branch Parkway, NW | 048 | 09/25/12 | * | | | |
| 70 | Piney Branch Parkway, west of 16 th Street, NW | 049 | 09/25/12 | * | | | |
| 70i | 5 th and Quackenbos Streets, NW | 049 | 09/06/12 | * | | | |
| 71 | 28 th Street, west of Rock Creek Parkway, NW | 050 | 09/11/12 | * | | | |

| | | , June | | (| Condition | | |
|------------|---|------------------|------------------|------|------------|---|----------------|
| | | Associated NPDES | | | Needs Work | *** * * * * * * * * * * * * * * * * * * | *** 1 0 1 |
| Struct No. | Location | Outfall | Inspected | Good | | Work Needed | Work performed |
| 72 | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 09/11/12 | * | | | |
| 72a | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 09/11/12 | * | | | |
| 73 | O Street Extended and Rock Creek Parkway, NW | 052 | 09/11/12 | * | | | |
| 74 | Q Street, west of Rock Creek, NW | 053 | N/A ³ | | | | |
| 75 | West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW | 054 | 09/21/12 | * | | | |
| 77 | Normanstone Dr Extended, west of Rock Creek, NW | 056 | 09/21/12 | * | | | |
| 77a | Normanstone Dr and Normanstone Lane, NW | 056 | 09/26/12 | * | | | |
| 78 | 28th Street Extended, west of Rock Creek, NW | 057 | 09/21/12 | * | | | |
| 79 | Connecticut Ave and Rock Creek Parkway, NW | 058 | N/A ³ | | | | |
| 84 | 26 th and P Streets, NW | 060 | 09/11/12 | * | | | |
| 84a | 26 th and P Streets, NW | 060 | 09/11/12 | * | | | |

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

2.2 Outfalls, Tide Gates and CSO Signs

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

Table 2 - Outfalls and Tide Gates

| | | | 1 | - Outian | | | | | | | |
|---------|---|-----------|----|---------------|------|-------|--------|---------------|----|------------|---------------------------------|
| | | | | Outfall | | Gate | Tide G | | | ago g | |
| | | _ | Co | ondition | Pres | sent? | Condit | | | CSO Sign | |
| NPDES | Lagrica | Date | OK | Needs Work | Yes | Ma | OK | Needs Work | | Needs Work | N-4 W NI-I DI |
| Outfall | Location | Inspected | OK | WOLK | res | No | UK | WOLK | OK | Needs Work | Notes, Work Needed or Performed |
| 003 | Bolling Air Force Base, at Giavanolli and Chanute, SW | 09/27/12 | * | | * | | * | | * | | |
| 005 | Across from Navy Yard, aligned with Parsons Ave., SE | 09/27/12 | * | | * | | * | | * | | |
| 006 | Good Hope Road and Welsh Memorial Bridge ¹ | 09/27/12 | | | | | | | | | |
| 007 | Between 11 th St. and Anacostia Bridges, SE | 09/27/12 | * | | * | | * | | * | | |
| 009 | O St. Sewage Pumping Station, SE | 09/11/12 | * | | * | | * | | * | | |
| 010 | O St. Sewage Pumping Station, SE | 09/11/12 | * | | | * | | | * | | |
| 011 | Main Sewage Pumping Station, SE | 09/11/12 | * | | | * | | | * | | |
| 011(a) | Main Sewage Pumping Station, SE | 09/11/12 | * | | * | | * | | * | | |
| 012 | Main Sewage Pumping Station, SE | 09/11/12 | * | | * | | * | | * | | |
| 013 | Southeast Federal Center, aligned with 4 th St. | 09/11/12 | * | | * | | * | | * | | |
| 014 | Navy Yard, aligned with 6 th St., SE | 09/11/12 | * | | * | | * | | * | | |
| 015 | Navy Yard, aligned with 9th Street, SE | 09/11/12 | * | | | * | | | * | | |
| 016 | 12th and O Streets, SE | 09/11/12 | * | | * | | * | | * | | |
| 017 | M and Water Street, SE | 09/11/12 | * | | * | | * | | * | | |
| 018 | East of Barney Circle and South of Pennsylvania Avenue Bridge, SE | 09/11/12 | * | | * | | * | | * | | |
| 019 | Adjacent to Service Drive behind swirl facility and D.C. General Hospital | 09/11/12 | * | | | * | | | * | | |
| 020 | Rock Creek Parkway and Independence, NW | 09/19/12 | * | | * | | * | | * | | |
| 021 | Rock Creek Parkway and C St., NW | 09/19/12 | * | | | * | | | * | | |
| 022 | Rock Creek Parkway and G St., NW | 09/07/12 | * | | * | | * | | * | | |
| 024 | South of 30 th and K Streets, NW ¹ | 09/07/12 | * | | * | | * | | * | | |
| 025 | South of 31st and K Streets, NW | 09/07/12 | * | | * | | * | | * | | |
| 026 | Wisconsin Avenue and Water Street, NW | 09/07/12 | * | | * | | * | | * | | |
| 027 | 33 rd and Water Sts., NW | 09/07/12 | * | | | * | | | * | | |
| 028 | Key Bridge and Whitehurst Freeway, NW | 09/07/12 | * | | | * | | | * | | |

| | | | (| Outfall | Tide | Gate | Tide G | Tide Gate | | | |
|---------|---|-----------|----|----------|------|-------|--------|-----------|----|------------|---------------------------------|
| | | | Co | ondition | Pres | sent? | Condii | | | CSO Sign | |
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| | Adjacent to C&O Canal, aligned with 38 th St. NW | 09/07/12 | * | | * | | * | | * | | |
| 031 | Rock Creek Pkwy & Pennsylvania Avenue, NW1 | N/A | | | | | | | | | |
| 032 | 26th and M Street, NW. | 09/19/12 | * | | | * | | | * | | |
| 033 | Across street from St. Francis Jr. High and aligned with N St., NW. | 09/19/12 | * | | * | | * | | * | | |
| 034 | Just west of St. Francis Jr. High and north of N St., NW | 09/26/12 | * | | * | | * | | * | | |
| 035 | P St. Bridge and Rock Creek Parkway | 09/26/12 | * | | * | | * | | * | | |
| 036 | 22nd Street, South of Q Street NW. | 09/18/12 | * | | * | | * | | * | | |
| 037 | Waterside Dr. and Rock Creek Parkway ¹ | N/A | | | * | | * | | | | |
| 038 | Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW. | 09/21/12 | * | | * | | * | | * | | |
| 039 | Connecticut Avenue Bridge and Rock Creek Parkway, NW. | 09/18/12 | * | | * | | * | | * | | |
| 040 | Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge. | 09/18/12 | * | | * | | * | | * | | |
| 041 | Beach Dr. and Ontario Pl., NW | 09/18/12 | * | | * | | * | | * | | |
| 042 | Harvard St. and Beach Dr NW. | 09/18/12 | * | | * | | * | | * | | |
| 043 | Upstream of Harvard St. and Beach Dr NW. | 09/18/12 | * | | * | | * | | * | | |
| 044 | Kenyon Street and Beach Dr., NW. | 09/18/12 | * | | * | | * | | * | | |
| 045 | North of Beach Dr. and Walbridge Pl, NW. | 09/18/12 | * | | * | | * | | * | | |
| 046 | Piney Branch Parkway and Park Road, NW. | 09/25/12 | * | | | * | | | * | | |
| 047 | Piney Branch Parkway and Ingleside Terrace | 09/07/12 | * | | * | | * | | * | | |
| 048 | South of Piney Branch Parkway and 17 th St. | 09/07/12 | * | | * | | * | | * | | |
| 049 | North of Piney Branch Parkway and 17 th St. | 09/07/12 | * | | * | | * | | * | | |
| | Rock Creek Parkway and L St., NW | 09/07/12 | * | | * | | * | | * | | |
| 051 | Across Rock Creek Pkwy, aligned with Olive St., NW. | 09/07/12 | * | | * | | * | | * | | |
| | Between P & Penna. Ave Bridges, aligned with O Street, NW. | 09/07/12 | * | | * | | * | | * | | |
| 053 | Q St. Bridge and Rock Creek Parkway, NW. ¹ | 09/07/12 | | | | | | | | | |
| 054 | Massachusetts Ave & Rock Creek Parkway, NW. | 09/07/12 | * | | * | | * | | * | | |

| | | | | Outfall ondition | | Gate sent? | Tide G Condit | | | CSO Sign | |
|---------|--|-----------|----|---------------------|-----|---------------|------------------|-------|----|------------|---------------------------------|
| NPDES | | Date | | Needs | | | | Needs | | | |
| Outfall | Location | Inspected | OK | Work | Yes | No | OK | Work | OK | Needs Work | Notes, Work Needed or Performed |
| 056 | Normanstone Dr. and Rock Creek Parkway, NW. | 09/07/12 | * | | * | | * | | * | | |
| 057 | 28th Street and Rock Creek Parkway, NW | 09/07/12 | * | | * | | * | | * | | |
| 058 | Connecticut Ave & Rock Creek Parkway, NW. ¹ | 09/18/12 | | | | * | | | | | |
| 060 | North of P St. Bridge & Rock Creek Pkwy, NW | 09/18/12 | * | | * | | * | | * | | |

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

2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

| | | | | T dimping Station | is inspections | and Equipment in Service | |
|--------------|-------------|---------|-------|-------------------|----------------|--------------------------|--------------------------------|
| Pumping | No. of | No. | No. | Screens or Pumps | | | |
| Station | Inspections | Screens | Pumps | Out of Service | Dates | Reason | Schedule to Restore to Service |
| Main | 30 | 4 | 10 | #3 Sanitary Pump | September 1-30 | Pump being rehabbed | December 2012 |
| | | | | #2 Screen | September 1-30 | Screen being rehabbed | December 2012 |
| Eastside | 30 | 2 | 4 | #2 Screen | September 1-30 | Screen being rehabbed | December 2012 |
| Poplar Point | 30 | 2 | 3 | #1 Screen | September 1-30 | Screen being rehabbed | December 2012 |
| Potomac | 30 | 4 | 5 | #2 Sanitary Pump | September 1-24 | Pump being rehabbed | Completed September 2012 |
| | | | | #4 Screen | September 1-30 | Screen being rehabbed | December 2012 |

Notes:

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

Table 2-4
Pumping Stations – Preventive Maintenance

| | | Type of Preventive Maintenance | |
|-----------------|----------------|--------------------------------|---|
| Pumping Station | Date Performed | $Performed^{l}$ | Comments |
| Main | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| O St | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Eastside | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Poplar Point | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Potomac | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Rock Creek | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Upper Anacostia | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |
| Earle Place | 9/26/2012 | Group A | Add oil, grease bearings and replace packing if needed. |

1. Group A consists of:

Exercise bar screens

Exercise all sump pumps

Drain condensation from air compressor storage tank

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

Check all safety equipment

Issue work order requests as required

Table 2-5 Pumping Stations – Pumpage

| | Sanitary Pı | ımpage | Storm W | Vater/CSO Pumped To | Anacostia River |
|-----------------|------------------|-----------------|-----------|---------------------|----------------------|
| | Total Wastewater | Daily Average | | | Screenings Collected |
| Pumping Station | (mg) | Wastewater (mg) | Date | Volume (mg) | (units) ¹ |
| Main | 1,536.90 | 51.23 | N/A | N/A | N/A |
| O St | 131.20 | 4.37 | 9/2/2012 | 25.60 | Normal |
| | | | 9/8/2012 | 77.70 | Normal |
| | | | 9/18/2012 | 29.40 | Normal |
| | | | 9/28/2012 | 7.60 | Normal |
| Eastside | 309.69 | 10.32 | N/A | N/A | N/A |
| Poplar Point | 647.28 | 21.58 | N/A | N/A | N/A |
| Potomac | 3,166.10 | 105.54 | N/A | N/A | N/A |
| Rock Creek | 151.67 | 5.06 | N/A | N/A | N/A |
| Upper Anacostia | 147.71 | 4.92 | N/A | N/A | N/A |
| Earle Place | 0.18 | 0.01 | N/A | N/A | N/A |

Notes:

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

2-4 Northeast Boundary Swirl Facility

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

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

| Date Inspected | # of | # of Swirls | Screens or Swirls Out of Service | Dates | Reason | Schedule to Restore to Service |
|-------------------|----------|----------------|----------------------------------|-------|--------|--------------------------------|
| тврестей | Screens | Swirts | Out of service | Duies | Reason | Schedule to Restore to Service |
| 9/26/12 | 1, 2 & 3 | 1, 2 & 3 | None | N/A | N/A | N/A |

Table 2-7 Northeast Boundary Swirl Facility – Preventive Maintenance

| Date Performed | Type of Preventive Maintenance Performed ¹ | Comments |
|----------------|---|----------|
| 9/27/12 | Group A | comments |

1. Group A consists of:

Exercise bar screens

Exercise wash down system

Exercise knife gates full travel both directions

Check depth of grit in grit channel and schedule Vactor truck as required

Change chart paper on strip chart recorders at the end of each month

Thoroughly clean each Swirl tank and channels

Issue work order requests as required

Drain condensation from air compress

Check all safety equipment

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

| | Approx. Storm | Total Influent | Total Foul Sewer | Total Effluent | Approx. Screenings |
|-----------|----------------|----------------|------------------|----------------|--------------------|
| Date | Duration (hrs) | Volume (mg) | Volume (mg) | Volume (mg) | Volume (Cu. ft) |
| 9/1/2012 | 4 | 4.0 | 4.0 | 0.0 | 96.0 |
| 9/2/2012 | 4 | 7.2 | 7.2 | 0.0 | 24.0 |
| 9/8/2012 | 6.5 | 5.3 | 5.3 | 0.0 | 40.0 |
| 9/18/2012 | 4 | 2.2 | 2.2 | 0.0 | 40.0 |
| 9/18/2012 | 4.5 | 6.0 | 6.0 | 0.0 | 160.0 |
| 9/28/2012 | 6.5 | 18.2 | 18.2 | 0.0 | 48.0 |

Chlorination/Dechlorination Systems.

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

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

Table 2-9
Northeast Boundary Swirl Facility – Disinfection Performance

| | Chlor/ | Do | sages | Residual Chlorin Results | ne Test | E. Coli Test R | esults |
|------|---------|--------|-----------|------------------------------|---------|------------------------------|--------|
| | Dechlor | | | | | | Count |
| | System | NaOCl | $NaHSO_3$ | | Conc. | | Per |
| Date | Used? | (mg/l) | (mg/l) | Location | (mg/l) | Site | 100ml |
| N/A | | | | Mix Chamber | | Mix Chamber | |
| 14/A | | | | Anacostia River ¹ | | Anacostia River ¹ | |

Notes:

1. River: River Outfall

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

| Ī | | | | F | Tlow Composited Sam | ple Results | | |
|---|------|-----------------|---------|----------|---------------------|----------------|------------|-------------------|
| | | | Nitrite | Nitrate | Total Kjeldahl | | Total | Carbonaceous |
| | | Total suspended | (NO2-N) | (NO3-N)) | Nitrogen | Total Nitrogen | Phosphorus | Biological Oxygen |
| | Date | solids (mg/L) | mg/L | mg/L | $(mg/L \ as \ N)$ | (mg/L) | (mg/L) | Demand (mg/L) |
| I | N/A | | | | | | | |

2.5 Inflatable Dams

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

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

| Inflatable Dam | | Was Dam Out of Service | ? | | Schedule to Restore to |
|----------------|----------------|------------------------|----------------------|--------|------------------------|
| Structure No | Date Inspected | During the Month? | Dates out of Service | Reason | Service |
| 14 - East | 9/20/2012 | No | N/A | N/A | N/A |
| 14 - West | 9/20/2012 | No | N/A | N/A | N/A |
| 15 | 9/20/2012 | No | N/A | N/A | N/A |
| 15A | 9/20/2012 | No | N/A | N/A | N/A |
| 16 - East | 9/20/2012 | No | N/A | N/A | N/A |
| 16 - West | 9/20/2012 | No | N/A | N/A | N/A |
| 24 - North | 9/20/2012 | No | N/A | N/A | N/A |
| 24 - Middle | 9/20/2012 | No | N/A | N/A | N/A |
| 24 - South | 9/20/2012 | No | N/A | N/A | N/A |
| 34 | 9/20/2012 | No | N/A | N/A | N/A |
| 35 | 9/20/2012 | No | N/A | N/A | N/A |
| 52 | 9/20/2012 | No | N/A | N/A | N/A |

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

| Inflatable Dam Structure No. | Overflow Dates | Estimated Duration of Overflow |
|----------------------------------|--------------------|--|
| 14 (E & W) | None | N/A |
| 15 | 9/1 | 3 mins |
| 13 | 9/2 | 4 mins |
| | 9/8 | 10 mins |
| | 9/18 | 4 mins |
| 15A | 9/1 | 50 mins |
| | 9/2 | 98 mins |
| | 9/3 | 2 mins |
| | 9/8 | 107 mins |
| | 9/18 | 59 mins |
| 16 (E & W) | 9/8 | 10 mins |
| , , | 9/18 | 2 mins |
| 24 | 9/2 | 27 mins |
| | 9/3 | 2 mins |
| | 9/8 | 4 mins |
| | 9/11 | 11 mins |
| | 9/18 | 21 mins |
| 34 | 9/2 | 38 mins |
| | 9/8 | 21 mins |
| | 9/18 | 23 mins |
| 35 | 9/1 | 3 mins |
| | 9/2 | 39 mins |
| | 9/8 | 26 mins |
| | 9/18 | 16 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 |

| 3. | DRY WEATHER OVERFLOWS There was no dry weather combined sewer overflow during September 2012. |
|----|---|
| | |

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:

Table 4-1 Catch Basin Summaries

| | | | Inspections | | | Cleaning | | | | | |
|-----------------------------|-----------|---------------|------------------|--|--|--------------------------------|--------|--------------------------|--------|--|--------|
| | | | CBs in | Total Anacostia CBs Inspected | Total Anacostia CBs Inspected | CBs Cleaned Thru Last Month | | CB's Cleaned this Month | | Total CBs Cleaned This Year to Date | |
| Ward | Total CBs | CBs in CSS | Anacostia CSS | Once this Year | Twice this Year | Total | In CSS | Total | In CSS | Total | In CSS |
| 1 | 1,591 | 1,568 | 734 | 734 | 608 | 2456 | 2187 | 227 | 227 | 2683 | 2414 |
| 2 | 4,714 | 4,112 | 2,316 | 2316 | 553 | 4084 | 3554 | 797 | 695 | 4881 | 4249 |
| 3 | 3,555 | 461 | - | 0 | 0 | 5365 | 737 | 84 | 0 | 5449 | 737 |
| 4 | 2,782 | 1,985 | 159 | 159 | 159 | 4559 | 3148 | 36 | 2 | 4595 | 3150 |
| 5 | 2,167 | 1,035 | 1,035 | 1035 | 1035 | 3171 | 1873 | 429 | 204 | 3600 | 2077 |
| 6 | 1,783 | 1,594 | 1,594 | 1565 | 271 | 1344 | 1157 | 457 | 408 | 1801 | 1565 |
| 7 | 2,313 | - | - | 0 | 0 | 750 | 0 | 384 | 0 | 1134 | 0 |
| 8 | 1,278 | 116 | 116 | 116 | 116 | 1565 | 147 | 102 | 9 | 1667 | 156 |
| WASA Subtotal | 20,183 | 10,871 | 5,954 | 5,925 | 2,742 | 23,294 | 12,803 | 2,516 | 1,545 | 25,810 | 14,348 |
| DDOT (via VMS) Subtotal | | | | | | | | | | | |
| Grand Total | 20,183 | 10,871 | | | | | | | | 25,810 | 14,348 |
| % Cleaned/Inspected to Date | | | | 99% | 46% | | | | | >100% | >100% |

3.2 BMP Demonstration Projects

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

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

Table 4-2 BMP Demonstration Projects – Report

| Facility | Date Inspected | Condition | Work Needed | Work performed | Material Removed (CY) |
|------------------------|-------------------|-------------------------|-------------|------------------|--------------------------|
| Netting System CSO 018 | 9/7/2012 | Netting platform has | Boom and | None. Reviewing | None collected |
| | | dropped under the water | flotation | bids to perform | |
| | | level. | replacement | repair work. | |
| Bar Rack CSO 040 | 9/18/2012 | Good | None | Routine Cleaning | (1) |
| Bar Rack CSO 041 | 9/18/2012 | 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 September 1992 to remove floating debris from Anacostia and Potomac Rivers on a routine basis. The program has continued from that time and is now under the auspices of WASA, Department of Sewer Services. The floating debris removal program utilizes a skimmer boat and support boats to remove floatable debris from the Rivers as well as trash, which accumulates on the riverbanks and in the mud flats at low tides. Work for the most part is directed toward the Anacostia River. The boats pick up debris five days a week. Operations are summarized as follows:

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

| D | 5 day was day and a substitution and a state of the substitution of |
|----------------------------|---|
| Program Operation | 5-day work week, excluding holidays, weather permitting |
| Work Days this month: | 21 |
| Days not Operating | 4 |
| Reason not Operating | High winds, low tide, and PM service. |
| # Skimmer in Fleet | 3 skimmers |
| # Skimmers Out of Service | 2 |
| Dates | B28: 9/12 - 9/30 B29: 9/9 - 9/20 |
| Reason | B28: hydraulic oil leak front ram and low voltage. |
| | B29: shut down and would not run. |
| Plan to Restore to Service | B28: ETR unknown. B29: repaired 9/20. |
| Volume Material Collected | 20 tons. |
| Nature of Material | Bottles, cans, natural debris and plastics. |

3.4 CSS Litter Control

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

Status: no activities this month.

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 5.1 Bar Racks at Main & O Street Pumping Stations

Inspector: Claude Price

| | | Data | Condition | | | Work Performed |
|------------------------|-----------|-------------------|-----------|---------------|-------------|-------------------------------|
| Pumping Station | Inspector | Date Inspected | Good | Needs Work | Work Needed | or Schedule for Completion |
| Bar Racks at O | | | | | | |
| Street Storm | CP | 9/12/2012 | X | | | |
| Pumps (CSO 010) | | | | | | |
| Bar Racks at Main | | | | | | |
| Storm Pumps | CP | 9/12/2012 | X | | | |
| (CSO 011) | | | | | | |

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

| Date | Brentwood Reservoir | Bryant St PS | Main PS | Rock Creek PS |
|-----------|---------------------|--------------|---------|---------------|
| 9/1/2012 | 0.03 | 0.13 | 0.53 | 0.3 |
| 9/2/2012 | 0 | 2.8 | 0.01 | 0 |
| 9/3/2012 | 0 | 0 | 0 | 0 |
| 9/4/2012 | 0 | 0.01 | 0 | 0.11 |
| 9/5/2012 | 0 | 0 | 0.09 | 0 |
| 9/6/2012 | 0 | 0.1 | 0.18 | 0.14 |
| 9/7/2012 | 0 | 0 | 0 | 0 |
| 9/8/2012 | 0.08 | 0.86 | 0.69 | 0.79 |
| 9/9/2012 | 0 | 0 | 0 | 0 |
| 9/10/2012 | 0 | 0 | 0 | 0 |
| 9/11/2012 | 0 | 0 | 0 | 0 |
| 9/12/2012 | 0 | 0 | 0 | 0 |
| 9/13/2012 | 0 | 0 | 0 | 0 |
| 9/14/2012 | 0 | 0 | 0 | 0 |
| 9/15/2012 | 0 | 0 | 0 | 0 |
| 9/16/2012 | 0 | 0 | 0 | 0 |
| 9/17/2012 | 0.01 | 0.11 | 0.09 | 0.12 |
| 9/18/2012 | 0.56 | 0.64 | 0.81 | 0.67 |
| 9/19/2012 | 0 | 0 | 0 | 0 |
| 9/20/2012 | 0 | 0 | 0 | 0 |
| 9/21/2012 | 0 | 0 | 0 | 0 |
| 9/22/2012 | 0 | 0 | 0 | 0 |
| 9/23/2012 | 0 | 0 | 0 | 0 |
| 9/24/2012 | 0 | 0 | 0 | 0 |
| 9/25/2012 | 0 | 0 | 0 | 0 |
| 9/26/2012 | 0 | 0 | 0.01 | 0 |
| 9/27/2012 | 0.01 | 0.39 | 0.42 | 0.43 |
| 9/28/2012 | 0.08 | 0.13 | 0.21 | 0.14 |
| 9/29/2012 | 0 | 0 | 0 | 0 |
| 9/30/2012 | 0.01 | 0.01 | 0 | 0.03 |
| TOTAL | 0.78 | 5.18 | 3.04 | 2.73 |

Combined Sewer System Model Results Period: July, August & September 2012 SCENARIO: Q3Y2012, October 15, 2012

| | | | | 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 CSOs | | | | | | | |
| 005 | Chicago St and Railroad Station SE | 17 | 3.16 | 31.25 | 1.84 | 4.75 | 0.25 |
| 003 | Good Hope Road, West of Nichols | 17 | 3.10 | | I | 4.73 | 0.20 |
| 006 | Ave.,SE | | | sepa | rated | | |
| 007 | 13 th Street and Ridge Place,SE | 9 | 6.10 | 10.00 | 1.11 | 3.50 | 0.25 |
| | 2nd Street, 300 feet North of N Place, | | 00 | | | 0.00 | 0.20 |
| 009 | SE | 11 | 2.16 | 12.50 | 1.14 | 2.25 | 0.25 |
| | O Street SewagePumping Station, SE | | | | | | |
| 010 | (pumped Overflow) | 7 | 34.24 | 8.50 | 1.21 | 3.75 | 0.25 |
| | South of Main Sewage Pumping | | | | | | |
| 011 | 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 |
| | North of Main SewagePumping | _ | | | | _ | |
| 012 | Station, SE (Tiber Creek) | 4 | 27.96 | 8.00 | 2.00 | 2.75 | 1.25 |
| 013 | 4th and N Streets, SE | 13 | 3.07 | 23.75 | 1.83 | 4.75 | 0.25 |
| 014 | 6th and M Streets, SE | 12 | 4.97 | 18.25 | 1.52 | 4.00 | 0.25 |
| 015 | 9th and M Streets, SE | 11 | 1.16 | 7.75 | 0.70 | 1.75 | 0.25 |
| 016 017 | 12th and M Streets, SE 14th and M Streets, SE | 6 15 | 3.21 9.42 | 7.25 27.75 | 1.21 1.85 | 2.00 4.50 | 0.75 0.50 |
| 017 | Barney Circle and Pennsylvania Ave, | 15 | 9.42 | 21.15 | 1.05 | 4.50 | 0.50 |
| 018 | SE | 9 | 7.68 | 15.75 | 1.75 | 3.50 | 0.25 |
| 019 | Northeast Boundary - Swirl Effluent | 8 | 158.14 | 45.50 | 5.69 | 9.25 | 2.25 |
| 019 | Northeast Bound Swirl Bypass | 7 | 177.27 | 6.75 | 0.96 | 1.75 | 0.25 |
| 0.10 | SUBTOTAL | , | 438.53 | 0.70 | 0.00 | 1.70 | 0.20 |
| | 1002:0::: | | 100.00 | | | | |
| 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) | 7 | 20.84 | 12.25 | 1.75 | 3.50 | 1.00 |
| 021 | Northeast ofRoosevelt Bridge, NW | 7 | 110.32 | 13.25 | 1.89 | 2.75 | 1.00 |
| 022 | 27th and K Streets, NW | 15 | 31.86 | 19.75 | 1.32 | 3.25 | 0.25 |
| 024 | 30th and K Streets, NW | 12 | 11.77 | 18.75 | 1.56 | 5.50 | 0.25 |
| 025 | 31st & K St NW | 8 | 0.52 | 5.00 | 0.63 | 1.25 | 0.25 |
| 026 | Wisconsin Avenue andK St., NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 027 028 | Water Street West ofStreet, NW 36th and M Streets, NW | 44 43 | 51.37 5.87 | 429.75 123.50 | 9.77 2.87 | 89.50 31.25 | 0.50 0.25 |
| 020 | Canal Road 1000 feet east of Rock | 43 | 5.07 | 123.50 | 2.01 | 31.23 | 0.25 |
| 029 | Creek,NW | 14 | 8.20 | 18.25 | 1.30 | 5.25 | 0.25 |
| 023 | SUBTOTAL | 17 | 240.76 | 10.23 | 1.50 | 5.25 | 0.20 |
| | | | | | | | |
| Rock Creek | | | <u> </u> | | | | |
| | Pennsylvania Avenue, East Rock | | · · · · · · · · · · · · · · · · · · · | sepa | rated | | · |
| 031 | Creek, NW | | | · . | | | |
| 032 | 26th and M Streets, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | N Street extendedwest of 25th | | | | | | |
| 033 | Street,NW | 1 | 0.34 | 1.00 | 1.00 | 1.00 | 1.00 |
| 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 | 1 | 2.11 | 0.50 | 0.50 | 0.50 | 0.50 |
| 036 | 22nd Street South of Q Street, NW | 22 | 0.798 | 42.25 | 1.92 | 14.50 | 0.25 |
| 027 | Northwest of Belmontand Rock Creek | | | sepa | rated | | |
| 037 | and Potomac Parkway North of Belmont Road,east of | | Γ | <u> </u> | | <u> </u> | |
| 038 | Kalorama Circle, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 030 | Connecticut Avenue east of Rock | U | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 039 | Creek, NW | 1 | 0.03 | 0.25 | 0.25 | 0.25 | 0.25 |
| 009 | Biltmore Street extended east of | ' | 0.03 | 0.20 | 0.20 | 0.20 | 0.20 |
| 040 | RockCreek, NW | 1 | 0.20 | 0.75 | 0.75 | 0.75 | 0.75 |
| 5.10 | Ontario extended and Rock Creek | | 3.23 | 5.70 | 5.7.0 | 5.70 | 5.70 |
| 041 | Parkway | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | |

Combined Sewer System Model Results Period: July, August & September 2012 SCENARIO: Q3Y2012, October 15, 2012

| | | | | Total | | Maximum | Minimum |
|-----------|---|---------------|-------------|-------------|--------------|-------------|-------------|
| | | Number of | CSO | Duration of | Avg Duration | Duration of | Duration of |
| | | Overflows | Overflow | Overflow | of Overflow | Overflow | Overflow |
| NPDES No. | Description | (Occurrences) | Volume (mg) | (hrs) | (hrs) | (hrs) | (hrs) |
| | Harvard Street and RockCreek | | | | | | |
| 042 | Parkway, NW | 1 | 0.21 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Adams Mill Road South of Irving | | | | | | |
| 043 | Street, NW | 5 | 1.61 | 2.00 | 0.40 | 0.75 | 0.25 |
| | Kenyon Street and Adams Mill Road, | | | | | | |
| 044 | NW | 1 | 0.04 | 0.75 | 0.75 | 0.75 | 0.75 |
| | Adams Mill Road and Lamont Street, | | | | | | |
| 045 | NW | 6 | 0.16 | 2.75 | 0.46 | 0.75 | 0.25 |
| | Park Road south of Piney Branch | | | | | | |
| 046 | Parkway, NW | 3 | 0.04 | 1.00 | 0.33 | 0.50 | 0.25 |
| | Ingleside Terrace extended and Piney | | | | | | |
| 047 | Branch Parkway | 2 | 0.12 | 1.00 | 0.50 | 0.75 | 0.25 |
| | Mt. Pleasant Street extended and | | | | | | |
| 048 | Piney Branch Parkway | 3 | 0.33 | 1.75 | 0.58 | 0.75 | 0.50 |
| | | | | | | | |
| 049 | Piney Branch and LamontStreet, NW | 31 | 55.461 | 84.25 | 2.72 | 25.00 | 0.25 |
| 050 | 28th Street west of 16th Street, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Olive Street extended and Rock Creek | | | | | | |
| 051 | Parkway, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | O Street extended and Rock Creek | | | | | | |
| 052 | Parkway, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | O Street west of Rock Creek Parkway, | | | sepa | rated | | |
| 053 | NW | | | | | | |
| | West Side of Rock Creek300 ft. south | | | | | | |
| 054 | of Mass. Ave, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | Normanstone Drive extended west of | | | | | | |
| 056 | Rock Creek, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | 28th Street extended west of Rock | | | | | | |
| 057 | Creek, NW | 13 | 6.02 | 49.50 | 3.81 | 29.00 | 0.25 |
| | Connecticut Avenue and Rock Creek | | | sepa | rated | | |
| 058 | Parkway, NW | | 1 | | 1 | r | • |
| 060 | P St and 26 th St, NW | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUBTOTAL | | 67.49 | | | | |
| | | | | | | | |
| | TOTAL 2012-03\[03\Y2012 Report 15\(0ct2012\) v | | 746.79 | | | | |

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Prepared by: Greeley and Hansen LLC and Limno-Tech, Inc.