# QUARTERLY OPERATIONS REPORT

# DISTRICT OF COLUMBIA

# COMBINED SEWER OVERFLOW FACILITIES

# THIRD QUARTER, 2005

Prepared By:

D.C. Water and Sewer Authority
Department of Sewer Services
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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, 2005

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

***Monthly Operations Report for Combined Sewer System***
***Month: July, 2005***

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## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENACE

### 2.1 Regulators

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

**Table 2-1**
**Regulator Structures**

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 2 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 07/25/05 | * | | | |
| 4 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 07/25/05 | * | | | |
| 5 | Poplar Point Pumping Station | 004 | 07/14/05 | * | | | |
| 6 | Chicago Street and Railroad Ave, SE | 005 | 07/05/05 | * | | | |
| 7 | W Street and Railroad Ave, SE | 005 | 07/05/05 | * | | | |
| 8 | Good Hope Rd, west of Nichols Ave, SE | 006 | 07/05/05 | * | | | |
| 9 | 13th Street and Ridge Place, SE | 007 | 07/05/05 | * | | | |
| 11 | "O" Street Pumping Station | 011(a) | 07/14/05 | * | | | |
| 12 | Storm Pump Discharge at Main Pumping Station | 011 | 07/14/05 | * | | | |
| 13 | 2nd Street, 300 ft. north of N Place, SE | 009 | 07/07/05 | * | | | |
| 14 | 2nd Street, 250 ft. north of N Place, SE | 011(a) | 07/14/05 | * | | | |
| 15 | South Capitol and E Streets | 010 | 07/14/05 | * | | | |
| 15a | Half and L Streets, SE | 010 | 07/14/05 | * | | | |
| 15b | South Capitol and I Streets | 010 | 07/18/05 | * | | | |
| 15c | South Capitol and I Streets | 010 | 07/18/05 | * | | | |
| 16 | North of Main Sewage Pumping Station | 012 | 07/14/05 | * | | | |
| 17 | 4th and N Streets, SE, Both Extended | 013 | 07/19/05 | * | | | |
| 17a | K Street between 6th Street and 7th Street, SE | 013 | 07/25/05 | * | | | |
| 18 | 6th and M Streets, SE | 014 | 07/18/05 | * | | | |
| 19 | 9th and M Streets, SE | 015 | 07/05/05 | * | | | |
| 19a | 9th and M Streets, SE | 015 | 07/05/05 | * | | | |
| 20 | 12th and M Streets, SE | 016 | 07/05/05 | * | | | |
| 20a | 12th and M Streets, SE | 016 | 07/05/05 | * | | | |
| 21 | 14th and M Streets, SE | 017 | 07/08/05 | * | | | |
| 22a | Barney Circle and Pennsylvania Ave, SE | 018 | 07/01/05 | * | | | |
| 22b | Barney Circle and Pennsylvania Ave, SE | 018 | 07/01/05 | * | | | |
| 22c | Barney Circle and Pennsylvania Ave, SE | 018 | 07/01/05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 22d | Kentucky Ave and Potomac Street, SE | 018 | 07/01/05 | * | | | |
| 22e | 14th Street and Kentucky Ave, SE | 018 | 07/01/05 | * | | | |
| 23 | Independence Ave, 21st Street, SE, Extended | 019 | 07/05/05 | * | | | |
| 24a | East Capitol St, west of RFK stadium | 019 | 07/26/05 | * | | | |
| 28 | 21st and Constitution Ave, NW | 020 | 07/25/05 | * | | | |
| 29 | 22nd Street, between Constitution Ave and C St, NW | 020 | 07/25/05 | * | | | |
| 30 | 17th and D Streets, NW | 020 | 07/11/05 | * | | | |
| 31 | 15th Street and Pennsylvania Ave, NW | 020 | 07/11/06 | * | | | |
| 33 | 10th and F Streets, NW | 020 | 07/11/05 | * | | | |
| 34 | 23rd Street, north of Constitution Ave, NW | 020 | 07/19/05 | * | | | |
| 34a | 23rd Street near C Street, NW | 020 | 07/25/05 | * | | | |
| 35 | Northeast of Roosevelt Bridge, NW | 021 | 07/19/05 | * | | | |
| 36 | 27th and I Streets, NW | 022 | 07/15/05 | * | | | |
| 36a | New Hampshire Ave and Eye Street, NW | 022 | 07/15/05 | * | | | |
| 36b | 19th and L Streets, NW | 022, 034 | 07/08/05 | * | | | |
| 36d | 17th and L Streets, NW | 022, 034 | 07/08/05 | * | | | |
| 36g | 18th and M Streets, NW | 022, 034 | 07/08/05 | * | | | |
| 36h | 18th and M Streets, NW | 022, 034 | 07/08/05 | * | | | |
| 37 | 27th and Eye Streets, NW | 022 | 07/15/05 | * | | | |
| 38 | 29th and K Streets, NW | 024 | 07/01/05 | * | | | |
| 38a | 30th Street, south of K Street, NW | 024 | 07/01/05 | * | | | |
| 39a | 30th and K Streets, NW | 024 | 07/01/05 | * | | | |
| 39b | 30th and K Streets, NW | 024 | 07/01/05 | * | | | |
| 41b | 31st and K Streets, NW | 025 | 07/15/05 | * | | | |
| 41c | 31st and K Streets, NW | 025 | 07/15/05 | * | | | |
| 42 | Wisconsin Ave and K Street, NW | 026 | 07/08/05 | * | | | |
| 43 | Potomac and Water Streets, NW | 027 | 07/08/05 | * | | | |
| 43a | Potomac and Water Streets, NW | 027 | 07/08/05 | * | | | |
| 44 | Water Street, west of Potomac St, NW | 027 | 07/08/05 | * | | | |
| 45 | 36th and M Streets, NW | 028 | 07/08/05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 46 | Canal Rd, 1000ft. east of Foxhall Rd, NW | 029 | 07/01/05 | * | | | |
| 47 | 38th Street and Reservoir Road, NW | 029 | 07/01/05 | * | | | |
| 47a | 37th and T Streets, NW | 029 | 07/01/05 | * | | | |
| 47b | 37th and T Streets, NW | 029 | 07/01/05 | * | | | |
| 47c | 38th and W Streets, NW | 029 | 07/01/05 | * | | | |
| 49 | Pennsylvania Ave, east side of Rock Creek, NW | 031 | 07/15/05 | * | | | |
| 50 | 26 and M Streets, NW | 032 | 05/15/05 | * | | | |
| 51 | N Street Extended, west of 25th Street, NW | 033 | 07/15/05 | * | | | |
| 52 | 22nd Street between M and N Streets, NW | 034 | 07/20/05 | * | | | |
| 52a | N Street between 22nd and 23rd Streets, NW | 034 | 07/26/05 | * | | | |
| 53 | 22nd and M Streets, NW | 022, 034 | 07/26/05 | * | | | |
| 53a | 22nd and M Streets, NW | 022, 034 | 07/26/05 | * | | | |
| 53b | L Street between 21st Street and New Hampshire Ave, NW | 022, 034 | 07/27/05 | * | | | |
| 53c | L and 22nd Streets, NW | 022 | 07/27/05 | * | | | |
| 54 | 23rd and O Streets, NW | 034 | 07/18/05 | * | | | |
| 55 | 22nd Street, south of Q Street, NW | 035 | 07/27/05 | * | | | |
| 55a | 22nd Street, south of Q Street, NW | 035 | 07/27/05 | * | | | |
| 56 | 23rd and Massachusetts Ave, NW | 036 | 07/27/05 | * | | | |
| 57 | 23rd Street, south of Q Street, NW | 036 | 07/27/05 | * | | | |
| 58 | Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW | 037 | 07/26/05 | * | | | |
| 59 | North of Belmont Rd, east of Kalorama Cir, NW | 038 | 07/26/05 | * | | | |
| 60 | Connecticut Ave, east of Rock Creek, NW | 039 | 07/12/05 | * | | | |
| 61 | Biltmore St, Extended, east of Rock Creek, NW | 040 | 07/12/05 | * | | | |
| 62 | Ontario Rd, Extended, and Rock Creek Pkwy, NW | 041 | 07/12/05 | * | | | |
| 63 | Harvard Street and Rock Creek Parkway, NW | 042 | 07/20/05 | * | | | |
| 64 | Adams Mill Road, south of Irving Street, NW | 043 | 07/20/05 | * | | | |
| 65 | Kenyon Street and Adams Mill Road, NW | 044 | 07/20/05 | * | | | |
| 65a | Kenyon Street and Adams Mill Road, NW | 044 | 07/20/05 | * | | | |
| 66 | Adams Mill Road and Lamont Street, NW | 045 | 07/20/05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 67 | Park Rd , south of Piney Branch Pkwy, NW | 046 | 07/20/05 | * | | | |
| 68 | Ingleside Terrance, Extended and Piney Branch Parkway, NW | 047 | 07/22/05 | * | | | |
| 69 | Mt. Pleasant Street, Extended and Piney Branch Parkway, NW | 048 | 07/22/05 | * | | | |
| 70 | Piney Branch Parkway, west of 16th Street, NW | 049 | 07/22/05 | * | | | |
| 70i | 5th and Quackenbos Streets, NW | 049 | 07/05/05 | * | | | |
| 71 | 28th Street, west of Rock Creek Parkway, NW | 050 | 07/01/05 | * | | | |
| 72 | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 07/18/05 | * | | | |
| 72a | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 07/18/05 | * | | | |
| 73 | O Street Extended and Rock Creek Parkway, NW | 052 | 07/18/05 | * | | | |
| 74 | Q Street, west of Rock Creek, NW | 053 | 07/27/05 | * | | | |
| 75 | West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW | 054 | 07/28/05 | * | | | |
| 77 | Normanstone Dr Extended, west of Rock Creek, NW | 056 | 07/28/05 | * | | | |
| 77a | Normanstone Dr and Normanstone Lane, NW | 056 | 07/28/05 | * | | | |
| 78 | 28th Street Extended, west of Rock Creek, NW | 057 | 07/25/05 | * | | | |
| 79 | Connecticut Ave and Rock Creek Parkway, NW | 058 | 07/07/05 | * | | | |
| 84 | 26th and P Streets, NW | 060 | 07/18/05 | * | | | |
| 84a | 26th and P Streets, NW | 060 | 07/18/05 | * | | | |

Notes:

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

## 2.2 Outfalls, Tide Gates and CSO Signs

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

**Table 2 - Outfalls and Tide Gates**

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 003 | Bolling Air Force Base, at Giavanolli and Chanute, SW | 07/25/05 | * | | * | | * | | * | | |
| 005 | Across from Navy Yard, aligned with Parsons Ave., SE | 07/14/05 | * | | * | | * | | * | | |
| 006 | Good Hope Road and Welsh Memorial Bridge | 07/14/05 | * | | * | | * | | * | | |
| 007 | Between 11th St. and Anacostia Bridges, SE | 0714/05 | * | | * | | * | | * | | |
| 009 | O St. Sewage Pumping Station, SE | 07/14/05 | * | | * | | * | | * | | |
| 010 | O St. Sewage Pumping Station, SE | 07/14/05 | * | | | * | | | * | | |
| 011 | Main Sewage Pumping Station, SE | 07/14/05 | * | | | * | | | * | | |
| 011(a) | Main Sewage Pumping Station, SE | 07/14/05 | * | | * | | * | | * | | |
| 012 | Main Sewage Pumping Station, SE | 07/14/05 | * | | * | | * | | * | | |
| 013 | Southeast Federal Center, aligned with 4th St. | 07/19/05 | * | | * | | * | | * | | |
| 014 | Navy Yard, aligned with 6th St., SE | 07/14/05 | * | | * | | * | | * | | |
| 015 | Navy Yard, aligned with 9th Street, SE | 07/14/05 | * | | | * | | | * | | |
| 016 | 12th and O Streets, SE | 07/07/05 | * | | * | | * | | * | | |
| 017 | M and Water Street, SE | 07/07/05 | * | | * | | * | | * | | |
| 018 | East of Barney Circle and South of Pennsylvania Avenue Bridge, SE | 07/07/05 | * | | * | | * | | * | | |
| 019 | Adjacent to Service Drive behind swirl facility and D.C. General Hospital | 07/28/05 | * | | | * | | | * | | |
| 020 | Rock Creek Parkway and Independence, NW | 07/28/05 | * | | * | | * | | * | | |
| 021 | Rock Creek Parkway and C St., NW | 07/28/05 | * | | | * | | | * | | |
| 022 | Rock Creek Parkway and G St., NW | 07/28/05 | * | | * | | * | | * | | |

| NPDES Outfall | Location | Date Inspected | Outfall Condition | | Tide Gate Present? | | Tide Gate Condition | | CSO Sign | | Notes, Work Needed or Performed |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 024 | South of 30th and K Streets, NW | 07/28/05 | * | | * | | | * | * | | WASA has developed a capitol project to design and construct a replacement gate for improved performance. |
| 025 | South of 31st and K Streets, NW | 07/28/05 | * | | * | | * | | * | | |
| 026 | Wisconsin Avenue and Water Street, NW | 07/28/05 | * | | * | | * | | * | | |
| 027 | 33rd and Water Sts., NW | 07/28/05 | * | | | * | | | * | | |
| 028 | Key Bridge and Whitehurst Freeway, NW | 07/28/05 | * | | | * | | | * | | |
| 029 | Adjacent to C&O Canal, aligned with 38th St. NW | 07/28/05 | * | | * | | * | | * | | |
| 031 | Rock Creek Pkwy and Pennsylvania Avenue, NW. | 07/15/05 | * | | | * | | | * | | |
| 032 | 26th and M Street, NW. | 07/15/05 | * | | | * | | | * | | |
| 033 | Across street from St. Francis Jr. High and aligned with N St., NW. | 07/15/05 | * | | * | | * | | * | | |
| 034 | Just west of St. Francis Jr. High and north of N St., NW | 07/18/05 | * | | * | | * | | * | | |
| 035 | P St. Bridge and Rock Creek Parkway | 07/18/05 | * | | * | | * | | * | | |
| 036 | 22nd Street, South of Q Street NW. | 07/28/05 | * | | * | | * | | * | | |
| 037 | Waterside Dr. and Rock Creek Parkway | 07/26/05 | * | | * | | * | | * | | |
| 038 | Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW. | 07/28/05 | * | | * | | * | | * | | |
| 039 | Connecticut Avenue Bridge and Rock Creek Parkway, NW. | 07/18/05 | * | | * | | * | | * | | |
| 040 | Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge. | 07/12/05 | * | | * | | * | | * | | |
| 041 | Beach Dr. and Ontario Pl., NW | 07/12/05 | * | | * | | * | | * | | |
| 042 | Harvard St. and Beach Dr NW. | 07/21/05 | * | | * | | * | | * | | |
| 043 | Upstream of Harvard St. and Beach Dr NW. | 07/21/05 | * | | * | | * | | * | | |
| 044 | Kenyon Street and Beach Dr., NW. | 07/21/05 | * | | * | | * | | * | | |
| 045 | North of Beach Dr. and Walbridge Pl, NW. | 07/21/05 | * | | * | | * | | * | | |

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 046 | Piney Branch Parkway and Park Road, NW. | 07/22/05 | * | | | * | | | * | | |
| 047 | Piney Branch Parkway and Ingleside Terrace | 07/22/05 | * | | * | | * | | * | | |
| 048 | South of Piney Branch Parkway and 17th St. | 07/22/05 | * | | * | | * | | * | | |
| 049 | North of Piney Branch Parkway and 17th St. | 07/23/05 | * | | * | | * | | * | | |
| 050 | Rock Creek Parkway and L St., NW | 07/01/05 | * | | * | | * | | * | | |
| 051 | Across Rock Creek Parkway, aligned with Olive St., NW. | 07/07/05 | * | | * | | * | | * | | |
| 052 | Between P and Penna. Ave Bridges, aligned with O Street, NW. | 07/07/05 | * | | * | | * | | * | | |
| 053 | Q St. Bridge and Rock Creek Parkway, NW. | 07/28/05 | * | | * | | * | | * | | |
| 054 | Massachusetts Avenue and Rock Creek Parkway, NW. | 07/28/05 | * | | * | | * | | * | | |
| 056 | Normanstone Dr. and Rock Creek Parkway, NW. | 07/28/05 | * | | * | | * | | * | | |
| 057 | 28th Street and Rock Creek Parkway, NW | 07/28/05 | * | | * | | * | | * | | |
| 058 | Connecticut Avenue and Rock Creek Parkway, NW. | 07/07/05 | * | | | * | | | * | | |
| 060 | North of P Street Bridge and Rock Creek Pkwy, NW | 07/28/05 | * | | * | | * | | * | | |

Notes:

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

## 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

| *Pumping Station* | *No. of Inspections* | *No. Screens* | *No. Pumps* | *Screens or Pumps Out of Service* | *Dates* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|---|---|
| Main | 31 | 4 | 12 | None | | | |
| Eastside | 31 | 2 | 4 | None | | | |
| Poplar Point | 31 | 2 [1] | 3 | None | | | |
| Potomac | 31 | 4 | 5 | None | | | |

Notes:

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

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

| *Pumping Station* | *Date Performed* | *Type of Preventive Maintenance Performed*[1] | *Comments* |
|---|---|---|---|
| Main | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| O St | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Eastside | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Poplar Point | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Potomac | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Rock Creek | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Upper Anacostia | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Earle Place | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |

Notes:

1. Group A consists of:

Exercise bar screens
Exercise all sump pumps
Drain condensation from air compressor storage tank
Check depth of screening in the screen room and schedule Vactor truck as required
Check all safety equipment
Issue work order requests as required

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

| *Pumping Station* | *Sanitary Pumpage* | | *Storm Water/CSO Pumped To Anacostia River* | | |
|---|---|---|---|---|---|
| | *Total Wastewater (mg)* | *Daily Average Wastewater (mg)* | *Date* | *Volume (mg)* | *Screenings Collected (units)* |
| Main | 2,187.30 | 70.56 | N/A | N/A | N/A |
| O St[1] | 169.30 | 5.46 | N/A<br>7/8/05<br>7/16/05 | None<br>48.3<br>9.2 | Normal |
| Eastside | 97.80 | 3.26 | N/A | N/A | N/A |
| Poplar Point | 504.80 | 16.28 | N/A | N/A | N/A |
| Potomac | 3,969.88 | 128.06 | N/A | N/A | N/A |
| Rock Creek | 318.40 | 10.27 | N/A | N/A | N/A |
| Upper Anacostia | 56.2 | 1.81 | N/A | N/A | N/A |
| Earle Place | 0.69 | 0.02 | 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* | *# Screens* | *# Swirls* | *Screens or Swirls Out of Service* | *Dates* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|---|
| 07/28/05 | 1,2 & 3 | 1,2 & 3 | None | N/a | N/a | N/a |

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

| *Date Performed* | *Type of Preventive Maintenance Performed*[1] | *Comments* |
|---|---|---|
| 07/28/05 | Group A | |

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

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

| *Date* | *Approx. Storm Duration[1] (Hours)* | *Total Influent Volume (mg)* | *Total Foul Sewer Volume (mg)* | *Total Effluent Volume[2] (mg)* | *Approx. Screenings Volume[3] # of bins (cu ft)* |
|---|---|---|---|---|---|
| 7/2 | 4.50 | 4.03 | 4.03 | 0 | 1.0 (80) |
| 7/5 | 3.00 | 3.26 | 3.26 | 0 | 0.80(64) |
| 7/6 | 4.00 | 4.15 | 4.15 | 0 | 0.20(16) |
| 7/7 | 2.00 | 1.35 | 1.35 | 0 | 0.15(12) |
| 7/8 | 8.00 | 38.37 | 8.30 | 30.07 | 1.0 (80) |
| 7/8 | 8.00 | 13.8 | 2.87 | 10.93 | 0.15(12) |
| 7/14 | 3.50 | 2.15 | 2.15 | 0 | 0.20(16) |
| 7/15 | 7.00 | 19.36 | 4.12 | 15.24 | 0.40(32) |
| 7/16 | 5.00 | 4.2 | 2.63 | 1.57 | 0.10(8) |
| 7/17 | 7.00 | 7.49 | 7.49 | 0 | 0.15(12) |
| 7/23 | 5.25 | 6.32 | 6.32 | 0 | 0.30(24) |
| 7/27 | 5.50 | 4.46 | 4.46 | 0 | 0.20(16) |

Chlorination/Dechlorination Systems.

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

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

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

| *Date* | *Chlor/ Dechlor System Used?* | *Dosages* | | *Residual Chlorine Test Results* | | *Enterococcus Test Results* | | *Fecal Coliform Test Results* | |
|---|---|---|---|---|---|---|---|---|---|
| | | *NaOCl (mg/l)* | *$NaHSO_3$ (mg/l)* | *Location* | *Conc. (mg/l)* | *Site* | *Count Per 100ml* | *Site* | *Count Per 100ml* |
| 7/8/05 | Yes | 5 | 2 | Mix Chamber | 0.3 | Mix Chamber | 58,000 | Mix Chamber | 270,000 |
| 7/8/05 | Yes | 5 | 2 | Anacostia River | 0.1 | Anacostia River | 57,000 | Anacostia River | 49,000 |
| 7/8/05 | Yes | 5 | 2 | Mix Chamber | 0.6 | Mix Chamber | 48,000 | Mix Chamber | 220,000 |
| 7/8/05 | Yes | 5 | 2 | Anacostia River | 0.0 | Anacostia River | 34,000 | Anacostia River | 29,000 |
| 7/15/05 | Yes | 5 | 2 | Mix Chamber | 0.2 | Mix Chamber | 51,000 | Mix Chamber | 47,000 |
| 7/15/05 | Yes | 5 | 2 | Anacostia River | 0.1 | Anacostia River | 230,000 | Anacostia River | 39,000 |
| 7/16/05 | Yes | 5 | 2 | Mix Chamber | 0.5 | Mix Chamber | 37,000 | Mix Chamber | 56,000 |
| 7/16/05 | Yes | 5 | 2 | Anacostia River | 0.4 | Anacostia River | 42,000 | Anacostia River | 58,000 |

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

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

| *Date* | *Flow Composited Sample Results* | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total suspended solids (mg/L) | Nitrite (NO2-N) mg/L | Nitrate (NO3-N)) mg/L | Total Kjeldahl Nitrogen (mg/L as N) | Total Nitrogen (mg/L) | Total Phosphorus (mg/L) | Carbonaceous Biological Oxygen Demand (mg/L) |
| 7/08/05 | 68.0 | < 0.05 | 0.44 | 1.41 | 1.85 | 0.35 | 10.4 |
| 7/15/05 | 113 | < 0.05 | 1.16 | 2.83 | 3.99 | 0.46 | 22.2 |
| 7/16/05 | 77.0 | < 0.05 | 0.79 | 2.32 | 3.11 | 0.51 | 21.5 |

## 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 Structure No* | *Date Inspected* | *Was Dam Out of Service During the Month?* | *Dates out of Service* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|
| 14 - East | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 14 - West | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 15 | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 15A | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 16 - East | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 16 - West | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - North | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - Middle | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - South | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 34 | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 35 | 07/21/05 | **No** | **N/A** | **N/A** | **N/A** |
| 52 | 07/21/05 | **Yes** | **7/19/05** | **Power Failure*** | **8/17/05** |

***** On July 19, 2005, a manhole riser near the intersection of 22nd and N Streets, NW failed, causing a sinkhole immediately downstream of the inflatable dam at Structure 52. The sinkhole caused a failure of other adjacent utilities and rendered the inflatable dam inoperable. On August 15, 2005, the sinkhole was sufficiently stabilized to allow a safe manned entry inspection of the sewer and inflatable dam. By August 17, 2005, repairs were completed on the inflatable dam and it was placed back in service.

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

| *Inflatable Dam Structure No.* | *Overflow Dates* | *Estimated Duration of Overflow (hrs)* |
|---|---|---|
| 14 (E & W) | *None* | *N/A* |
| 15 | *7/8/05*<br>*7/16/05* | *1hr 39min*<br>*5min* |
| 15A | *None* | *N/A* |
| 16 (E & W) | *None* | *N/A* |
| 24 | *None* | *N/A* |
| 34 | *None* | *N/A* |
| 35 | *None* | *N/A* |
| 52 | **e* | *N/A* |
| *Structures on Outfall Sewers* | *Overflow Dates* | *Estimated Duration of Overflow (hrs)* |
| Outfall Structure 1 | None | This structure has been bulk Headed. Overflows are no longer possible. |
| Outfall Structure 1A | None | This structure has been bulk headed. Overflows are no longer possible. |
| Outfall Structure 2(E & W) | None | None |
| | | |
| *Outfall Sewer Control Gates* | *Operational Status* | *Position* |
| Outfall Sewer Control Gate No. 1 | Operational | Open |
| Outfall Sewer Control Gate No.2 | Operational | Open |

***** SCADA @ Inflatable dam structure no. 52 was inoperable because of a power failure from 7/19/05 to 8/17/05.

## 3. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

**Table 3-1**
**Dry Weather Overflows**

| | |
|---|---|
| Location: | Rock Creek at NPDES Outfall #034; Northwest of 22nd and M Street NW |
| Cause | On 7/19/05, the brick manhole riser at structure #52 collapsed and Anchor Construction Company started construction activity to repair the manhole. A rainstorm on 7/27/05 caused dirt and debris to clogged the 24-inch pipe creating an overflow. |
| Date/ Time Discovered | 07/27/05 at 11:05 am |
| Action Taken | WASA contractor constructed a dam with sandbags and is pumping the flow into the Rock Creek Main Interceptor. |
| Date/Time Discharge Ceased | Overflow has not stopped |
| Estimated Volume (mg) | Unknown |
| Did Overflow Reach Receiving water? | Yes, Rock Creek |
| Action taken to prevent reoccurrence | Anchor Construction Company has started construction activity to repair the manhole. |

There was a dry weather over flow in the month of July 2005.

## 4. SOLIDS AND FLOATABLES CONTROL

### 4.1 Catch Basin Cleaning

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

**Table 4-1 Catch Basin Summaries**

| *Ward* | *Total CBs* | *CBs in CSS* | *CBs in Anacostia CSS* | *Inspections* | | *Cleaning* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *Total CBs Inspected Once this Year* | *Total CBs Inspected Twice this Year* | *CBs Cleaned Thru Last Month* | | *CB's Cleaned this Month* | | *Total CBs Cleaned This Year to Date* | |
| | | | | | | Total | In CSS | Total | In CSS | Total | In CSS |
| 1 | 1,591 | 1,568 | 734 | 734 | 734 | 2434 | 2376 | 20 | 20 | 2454 | 2396 |
| 2 | 4,714 | 4,112 | 2,316 | 1122 | 654 | 2021 | 1686 | 393 | 372 | 2414 | 2058 |
| 3 | 3,555 | 461 | - | 0 | 0 | 4839 | 1304 | 82 | 0 | 4921 | 1304 |
| 4 | 2,782 | 1,985 | 159 | 159 | 159 | 3612 | 1940 | 505 | 359 | 4117 | 2299 |
| 5 | 2,167 | 1,035 | 1,035 | 407 | 157 | 262 | 168 | 613 | 239 | 875 | 407 |
| 6 | 1,783 | 1,594 | 1,594 | 577 | 362 | 253 | 175 | 478 | 402 | 731 | 577 |
| 7 | 2,313 | - | - | 0 | 0 | 546 | 0 | 162 | 0 | 708 | 0 |
| 8 | 1,278 | 116 | 116 | 116 | 58 | 504 | 125 | 23 | 15 | 527 | 140 |
| WASA Subtotal | **20,183** | **10,871** | **5,954** | **3,115** | **2,124** | **14,471** | **7,774** | **2,276** | **1,407** | **16,747** | **9,181** |
| DDOT (via VMS) Subtotal | | | | **0** | **0** | **0** | **0** | **0** | **0** | | |
| Grand Total | **20,183** | **10,871** | **5,954** | **3,115** | **2,124** | **14,471** | **7,774** | **2,276** | **1,407** | | |
| % Cleaned/Inspected to Date | | | | **52%** | **36%** | | | | | **83%** | **84%** |

### 4.2 BMP Demonstration Projects

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

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

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

| *Facility* | *Date Inspected* | *Condition* | *Work Needed* | *Work performed* | *Material Removed (CY)* |
|---|---|---|---|---|---|
| Netting System CSO 018 | 7/13/05<br>7/27/05 | Good | None | Nets emptied. | 250 lbs. |
| Bar Rack CSO 040 | 7/12/05 | Good | None | Routine Cleaning | (1) |
| Bar Rack CSO 041 | 7/12/05 | Good | None | Routine Cleaning | (1) |

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

## 4.3 Anacostia River Floating Debris Removal Program

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

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

| | |
|---|---|
| *Program Operation* | 5-day work week, excluding holidays, weather permitting |
| *Work Days this month:* | 20 |
| *Days not Operating* | 2 |
| *Reason not Operating* | Strong winds |
| *# Skimmer in Fleet* | 2 skimmers |
| *# Skimmers Out of Service* | None |
| *Dates* | N/A |
| *Reason* | N/A |
| *Plan to Restore to Service* | N/A |
| *Volume Material Collected* | 60 ton. |
| *Nature of Material* | Bottles, cans, natural debris and plastics. |

## 4.4 CSS Litter Control

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

Status: no activities this month.

## 5. MONITORING

### 5.1 Visual Wet Weather Surveys at Main & O

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

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

**Date: 7/8/05** **Inspector's Initials: C.D**

| CSO | Time of Observation | Overflow | | Observed | | | Quantity of | | | Quantity of | | | REMARKS/OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Y | N | L | M | H | L | M | H | L | M | H | |
| 009 | 8:30 | x | | | x | | x | | | x | | | |
| | 9:30 | x | | | x | | x | | | x | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 010 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 011 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 011a | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 012 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

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

## 5.2 Rain Data

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

**Table 5-2 Rainfall Data (inches)**

| Date | Brentwood Reservoir | Bryant St PS | Main PS | Rock Creek PS | National Airport |
|---|---|---|---|---|---|
| 7/1/2005 | 0.25 | 0.24 | 0.41 | 0.21 | 0.18 |
| 7/2/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/3/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/4/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/5/2005 | 0.28 | 0.34 | 0.24 | 0.59 | 0.68 |
| 7/6/2005 | 0.05 | 0.07 | 0.05 | 0.04 | 0 |
| 7/7/2005 | 0.26 | 0.36 | 0.29 | 0.29 | 0.33 |
| 7/8/2005 | 1.88 | 1.97 | 1.73 | 1.75 | 2.14 |
| 7/9/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/10/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/11/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/12/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/13/2005 | 0 | 0 | 0 | 0 | 0.3 |
| 7/14/2005 | 0.09 | 0.09 | 0.09 | 0.48 | 0.09 |
| 7/15/2005 | 1.15 | 1.27 | 1.22 | 0.58 | 1.18 |
| 7/16/2005 | 0.96 | 1.03 | 0.96 | 0.81 | 0.09 |
| 7/17/2005 | 0.01 | 0.01 | 0.01 | 0 T | |
| 7/18/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/19/2005 | 0 | 0 | 0 | 0 T | |
| 7/20/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/21/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/22/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/23/2005 | 0.61 | 0.84 | 0.52 | 0.2 | 0.87 |
| 7/24/2005 | 0 | 0 | 0 | 0 T | |
| 7/25/2005 | 0.12 | 0.17 | 0.12 | 0.11 | 0.08 |
| 7/26/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/27/2005 | 0.22 | 0.27 | 0.25 | 0.3 | 0.11 |
| 7/28/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/29/2005 | 0.03 | 0.05 | 0.03 | 0.07 | 0.01 |
| 7/30/2005 | 0 | 0 | 0 | 0 | 0 |
| 7/31/2005 | 0 | 0 | 0 | 0 | 0 |
| Total | 5.91 | 6.71 | 5.92 | 5.43 | 6.06 |

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

***Monthly Operations Report for Combined Sewer System***
***Month: August, 2005***

**Table of Contents**

## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENACE

### 2.1 Regulators

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

**Table 2-1**
**Regulator Structures**

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 2 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 08/10/05 | * | | | |
| 4 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 08/10/05 | * | | | |
| 5 | Poplar Point Pumping Station | 004 | 08/11/05 | * | | | |
| 6 | Chicago Street and Railroad Ave, SE | 005 | 08/02/05 | * | | | |
| 7 | W Street and Railroad Ave, SE | 005 | 08/02/05 | * | | | |
| 8 | Good Hope Rd, west of Nichols Ave, SE | 006 | 08/02/05 | * | | | |
| 9 | 13th Street and Ridge Place, SE | 007 | 08/02/05 | * | | | |
| 11 | "O" Street Pumping Station | 011(a) | 08/11/05 | * | | | |
| 12 | Storm Pump Discharge at Main Pumping Station | 011 | 08/11/05 | * | | | |
| 13 | 2nd Street, 300 ft. north of N Place, SE | 009 | 08/01/05 | * | | | |
| 14 | 2nd Street, 250 ft. north of N Place, SE | 011(a) | 08/11/05 | * | | | |
| 15 | South Capitol and E Streets | 010 | 08/11/05 | * | | | |
| 15a | Half and L Streets, SE | 010 | 08/11/05 | * | | | |
| 15b | South Capitol and I Streets | 010 | 08/10/05 | * | | | |
| 15c | South Capitol and I Streets | 010 | 08/10/05 | * | | | |
| 16 | North of Main Sewage Pumping Station | 012 | 08/11/05 | * | | | |
| 17 | 4th and N Streets, SE, Both Extended | 013 | 08/03/05 | * | | | |
| 17a | K Street between 6th Street and 7th Street, SE | 013 | 08/03/05 | * | | | |
| 18 | 6th and M Streets, SE | 014 | 08/08/05 | * | | | |
| 19 | 9th and M Streets, SE | 015 | 08/01/05 | * | | | |
| 19a | 9th and M Streets, SE | 015 | 08/01/05 | * | | | |
| 20 | 12th and M Streets, SE | 016 | 08/01/05 | * | | | |
| 20a | 12th and M Streets, SE | 016 | 08/01/05 | * | | | |
| 21 | 14th and M Streets, SE | 017 | 08/01/05 | * | | | |
| 22a | Barney Circle and Pennsylvania Ave, SE | 018 | 08/04/05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 22b | Barney Circle and Pennsylvania Ave, SE | 018 | 08/04/05 | * | | | |
| 22c | Barney Circle and Pennsylvania Ave, SE | 018 | 08/04/05 | * | | | |
| 22d | Kentucky Ave and Potomac Street, SE | 018 | 08/03/05 | * | | | |
| 22e | 14th Street and Kentucky Ave, SE | 018 | 08/03/05 | * | | | |
| 23 | Independence Ave, 21st Street, SE, Extended | 019 | 08/01/05 | * | | | |
| 24a | East Capitol St, west of RFK stadium | 019 | 08/08/05 | * | | | |
| 28 | 21st and Constitution Ave, NW | 020 | 08/22/05 | * | | | |
| 29 | 22nd Street, between Constitution Ave and C St, NW | 020 | 08/22/05 | * | | | |
| 30 | 17th and D Streets, NW | 020 | 08/22/05 | * | | | |
| 31 | 15th Street and Pennsylvania Ave, NW | 020 | 08/22/05 | * | | | |
| 33 | 10th and F Streets, NW | 020 | 08/10/05 | * | | | |
| 34 | 23rd Street, north of Constitution Ave, NW | 020 | 08/16/05 | * | | | |
| 34a | 23rd Street near C Street, NW | 020 | 08/22/05 | * | | | |
| 35 | Northeast of Roosevelt Bridge, NW | 021 | 08/16/05 | * | | | |
| 36 | 27th and I Streets, NW | 022 | 08/22/05 | * | | | |
| 36a | New Hampshire Ave and Eye Street, NW | 022 | 08/22/05 | * | | | |
| 36b | 19th and L Streets, NW | 022, 034 | 08/08/05 | * | | | |
| 36d | 17th and L Streets, NW | 022, 034 | 08/08/05 | * | | | |
| 36g | 18th and M Streets, NW | 022, 034 | 08/08/05 | * | | | |
| 36h | 18th and M Streets, NW | 022, 034 | 08/08/05 | * | | | |
| 37 | 27th and Eye Streets, NW | 022 | 08/22/05 | * | | | |
| 38 | 29th and K Streets, NW | 024 | 08/05/05 | * | | | |
| 38a | 30th Street, south of K Street, NW | 024 | 08/29/05 | * | | | |
| 39a | 30th and K Streets, NW | 024 | 08/15/05 | * | | | |
| 39b | 30th and K Streets, NW | 024 | 08/15/05 | * | | | |
| 41b | 31st and K Streets, NW | 025 | 08/15/05 | * | | | |
| 41c | 31st and K Streets, NW | 025 | 08/15/05 | * | | | |
| 42 | Wisconsin Ave and K Street, NW | 026 | 08/15/05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 43 | Potomac and Water Streets, NW | 027 | 08/05/05 | * | | | |
| 43a | Potomac and Water Streets, NW | 027 | 08/05/05 | * | | | |
| 44 | Water Street, west of Potomac St, NW | 027 | 08/05/05 | * | | | |
| 45 | 36th and M Streets, NW | 028 | 08/05/05 | * | | | |
| 46 | Canal Rd, 1000ft. east of Foxhall Rd, NW | 029 | 08/08/05 | * | | | |
| 47 | 38th Street and Reservoir Road, NW | 029 | 08/08/05 | * | | | |
| 47a | 37th and T Streets, NW | 029 | 08/08/05 | * | | | |
| 47b | 37th and T Streets, NW | 029 | 08/08/05 | * | | | |
| 47c | 38th and W Streets, NW | 029 | 08/08/05 | * | | | |
| 49 | Pennsylvania Ave, east side of Rock Creek, NW | 031 | 08/04/05 | * | | | |
| 50 | 26 and M Streets, NW | 032 | 08/15/05 | * | | | |
| 51 | N Street Extended, west of 25th Street, NW | 033 | 08/15/05 | * | | | |
| 52 | 22nd Street between M and N Streets, NW | 034 | 08/01/05 | * | | | |
| 52a | N Street between 22nd and 23rd Streets, NW | 034 | 08/03/05 | * | | | |
| 53 | 22nd and M Streets, NW | 022, 034 | 08/16/05 | * | | | |
| 53a | 22nd and M Streets, NW | 022, 034 | 08/16/05 | * | | | |
| 53b | L Street between 21st Street and New Hampshire Ave, NW | 022, 034 | 08/24/05 | * | | | |
| 53c | L and 22nd Streets, NW | 022 | 08/24/05 | * | | | |
| 54 | 23rd and O Streets, NW | 034 | 08/19/05 | * | | | |
| 55 | 22nd Street, south of Q Street, NW | 035 | 08/24/05 | * | | | |
| 55a | 22nd Street, south of Q Street, NW | 035 | 08/24/05 | * | | | |
| 56 | 23rd and Massachusetts Ave, NW | 036 | 08/24/05 | * | | | |
| 57 | 23rd Street, south of Q Street, NW | 036 | 08/24/05 | * | | | |
| 58 | Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW | 037 | 08/25/05 | * | | | |
| 59 | North of Belmont Rd, east of Kalorama Cir, NW | 038 | 08/25/05 | * | | | |
| 60 | Connecticut Ave, east of Rock Creek, NW | 039 | 08/10/05 | * | | | |
| 61 | Biltmore St, Extended, east of Rock Creek, NW | 040 | 08/10/05 | * | | | |
| 62 | Ontario Rd, Extended, and Rock Creek Pkwy, NW | 041 | 08/12/05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 63 | Harvard Street and Rock Creek Parkway, NW | 042 | 08/12/05 | * | | | |
| 64 | Adams Mill Road, south of Irving Street, NW | 043 | 08/12/05 | * | | | |
| 65 | Kenyon Street and Adams Mill Road, NW | 044 | 08/12/05 | * | | | |
| 65a | Kenyon Street and Adams Mill Road, NW | 044 | 08/12/05 | * | | | |
| 66 | Adams Mill Road and Lamont Street, NW | 045 | 08/12/05 | * | | | |
| 67 | Park Rd , south of Piney Branch Pkwy, NW | 046 | 08/12/05 | * | | | |
| 68 | Ingleside Terrance, Extended and Piney Branch Parkway, NW | 047 | 08/12/05 | * | | | |
| 69 | Mt. Pleasant Street, Extended and Piney Branch Parkway, NW | 048 | 08/12/05 | * | | | |
| 70 | Piney Branch Parkway, west of 16th Street, NW | 049 | 08/12/05 | * | | | |
| 70i | 5th and Quackenbos Streets, NW | 049 | 08/05/05 | * | | | |
| 71 | 28th Street, west of Rock Creek Parkway, NW | 050 | 08/04/05 | * | | | |
| 72 | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 08/19/05 | * | | | |
| 72a | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 08/19/05 | * | | | |
| 73 | O Street Extended and Rock Creek Parkway, NW | 052 | 08/19/05 | * | | | |
| 74 | Q Street, west of Rock Creek, NW | 053 | 08/24/05 | * | | | |
| 75 | West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW | 054 | 08/25/05 | * | | | |
| 77 | Normanstone Dr Extended, west of Rock Creek, NW | 056 | 08/25/05 | * | | | |
| 77a | Normanstone Dr and Normanstone Lane, NW | 056 | 08/.29/05 | * | | | |
| 78 | 28th Street Extended, west of Rock Creek, NW | 057 | 08/25/05 | * | | | |
| 79 | Connecticut Ave and Rock Creek Parkway, NW | 058 | 08/25/05 | * | | | |
| 84 | 26th and P Streets, NW | 060 | 08/19/05 | * | | | |
| 84a | 26th and P Streets, NW | 060 | 08/19/05 | * | | | |

Notes:

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

## 2.2 Outfalls, Tide Gates and CSO Signs

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

**Table 2 - Outfalls and Tide Gates**

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 003 | Bolling Air Force Base, at Giavanolli and Chanute, SW | 08/10/05 | * | | * | | * | | * | | |
| 005 | Across from Navy Yard, aligned with Parsons Ave., SE | 08/29/05 | * | | * | | * | | * | | |
| 006 | Good Hope Road and Welsh Memorial Bridge | 08/29/05 | * | | * | | * | | * | | |
| 007 | Between 11th St. and Anacostia Bridges, SE | 08/29/05 | * | | * | | * | | * | | |
| 009 | O St. Sewage Pumping Station, SE | 08/30/05 | * | | * | | * | | * | | |
| 010 | O St. Sewage Pumping Station, SE | 08/30/05 | * | | | * | | | * | | |
| 011 | Main Sewage Pumping Station, SE | 08/30/05 | * | | | * | | | * | | |
| 011(a) | Main Sewage Pumping Station, SE | 08/30/05 | * | | * | | * | | * | | |
| 012 | Main Sewage Pumping Station, SE | 08/30/05 | * | | * | | * | | * | | |
| 013 | Southeast Federal Center, aligned with 4th St. | 08/29/05 | * | | * | | * | | * | | |
| 014 | Navy Yard, aligned with 6th St., SE | 08/29/05 | * | | * | | * | | * | | |
| 015 | Navy Yard, aligned with 9th Street, SE | 08/29/05 | * | | | * | | | * | | |
| 016 | 12th and O Streets, SE | 08/04/05 | * | | * | | * | | * | | |
| 017 | M and Water Street, SE | 08/04/05 | * | | * | | * | | * | | |
| 018 | East of Barney Circle and South of Pennsylvania Avenue Bridge, SE | 08/04/05 | * | | * | | * | | * | | |
| 019 | Adjacent to Service Drive behind swirl facility and D.C. General Hospital | 08/25/05 | * | | | * | | | * | | |
| 020 | Rock Creek Parkway and Independence, NW | 08/18/05 | * | | * | | * | | * | | |
| 021 | Rock Creek Parkway and C St., NW | 08/18/05 | * | | | * | | | * | | |
| 022 | Rock Creek Parkway and G St., NW | 08/18/05 | * | | * | | * | | * | | |

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 024 | South of 30th and K Streets, NW | 08/18/05 | * | | * | | | * | * | | WASA has developed a capitol project to design and construct a replacement gate for improved performance. |
| 025 | South of 31st and K Streets, NW | 08/18/05 | * | | * | | * | | * | | |
| 026 | Wisconsin Avenue and Water Street, NW | 08/18/05 | * | | * | | * | | * | | |
| 027 | 33rd and Water Sts., NW | 08/18/05 | * | | | * | | | * | | |
| 028 | Key Bridge and Whitehurst Freeway, NW | 08/18/05 | * | | | * | | | * | | |
| 029 | Adjacent to C&O Canal, aligned with 38th St. NW | 08/18/05 | * | | * | | * | | * | | |
| 031 | Rock Creek Pkwy and Pennsylvania Avenue, NW. | 08/04/05 | * | | | * | | | * | | |
| 032 | 26th and M Street, NW. | 08/15/05 | * | | | * | | | * | | |
| 033 | Across street from St. Francis Jr. High and aligned with N St., NW. | 08/15/05 | * | | * | | * | | * | | |
| 034 | Just west of St. Francis Jr. High and north of N St., NW | 08/04/05 | * | | * | | * | | * | | |
| 035 | P St. Bridge and Rock Creek Parkway | | * | | * | | * | | * | | |
| 036 | 22nd Street, South of Q Street NW. | 08/25/05 | * | | * | | * | | * | | |
| 037 | Waterside Dr. and Rock Creek Parkway | 08/25/05 | * | | * | | * | | * | | |
| 038 | Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW. | 08/25/05 | * | | * | | * | | * | | |
| 039 | Connecticut Avenue Bridge and Rock Creek Parkway, NW. | 08/10/05 | * | | * | | * | | * | | |
| 040 | Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge. | 08/10/05 | * | | * | | * | | * | | |
| 041 | Beach Dr. and Ontario Pl., NW | 08/11/05 | * | | * | | * | | * | | |
| 042 | Harvard St. and Beach Dr NW. | 08/11/05 | * | | * | | * | | * | | |
| 043 | Upstream of Harvard St. and Beach Dr NW. | 08/11/05 | * | | * | | * | | * | | |
| 044 | Kenyon Street and Beach Dr., NW. | 08/11/05 | * | | * | | * | | * | | |

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 045 | North of Beach Dr. and Walbridge Pl, NW. | 08/11/05 | * | | * | | * | | * | | |
| 046 | Piney Branch Parkway and Park Road, NW. | 08/12/05 | * | | | * | | | * | | |
| 047 | Piney Branch Parkway and Ingleside Terrace | 08/12/05 | * | | * | | * | | * | | |
| 048 | South of Piney Branch Parkway and 17th St. | 08/12/05 | * | | * | | * | | * | | |
| 049 | North of Piney Branch Parkway and 17th St. | 08/12/05 | * | | * | | * | | * | | |
| 050 | Rock Creek Parkway and L St., NW | 08/04/05 | * | | * | | * | | * | | |
| 051 | Across Rock Creek Parkway, aligned with Olive St., NW. | 08/04/05 | * | | * | | * | | * | | |
| 052 | Between P and Penna. Ave Bridges, aligned with O Street, NW. | 08/04/05 | * | | * | | * | | * | | |
| 053 | Q St. Bridge and Rock Creek Parkway, NW. | 08/25/05 | * | | * | | * | | * | | |
| 054 | Massachusetts Avenue and Rock Creek Parkway, NW. | 08/25/05 | * | | * | | * | | * | | |
| 056 | Normanstone Dr. and Rock Creek Parkway, NW. | 08/25/05 | * | | * | | * | | * | | |
| 057 | 28th Street and Rock Creek Parkway, NW | 08/25/05 | * | | * | | * | | * | | |
| 058 | Connecticut Avenue and Rock Creek Parkway, NW. | 08/25/05 | * | | | * | | | * | | |
| 060 | North of P Street Bridge and Rock Creek Pkwy, NW | 08/25/05 | * | | * | | * | | * | | |

Notes:

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

## 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

| *Pumping Station* | *No. of Inspections* | *No. Screens* | *No. Pumps* | *Screens or Pumps Out of Service* | *Dates* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|---|---|
| Main | 31 | 4 | 12 | None | | | |
| Eastside | 31 | 2 | 4 | None | | | |
| Poplar Point | 31 | 2 [1] | 3 | None | | | |
| Potomac | 31 | 4 | 5 | None | | | |

Notes:

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

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

| *Pumping Station* | *Date Performed* | *Type of Preventive Maintenance Performed*[1] | *Comments* |
|---|---|---|---|
| Main | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| O St | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Eastside | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Poplar Point | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Potomac | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Rock Creek | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Upper Anacostia | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |
| Earle Place | 31 days | Group A | Add oil, grease bearings and replace packing if needed. |

Notes:

1. Group A consists of:

Exercise bar screens
Exercise all sump pumps
Drain condensation from air compressor storage tank
Check depth of screening in the screen room and schedule Vactor truck as required
Check all safety equipment
Issue work order requests as required

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

| *Pumping Station* | *Sanitary Pumpage* | | *Storm Water/CSO Pumped To Anacostia River* | | |
|---|---|---|---|---|---|
| | *Total Wastewater (mg)* | *Daily Average Wastewater (mg)* | *Date* | *Volume (mg)* | *Screenings Collected (units)* |
| Main | 2,110.0 | 68.06 | N/A | N/A | N/A |
| O St[1] | 159.90 | 5.16 | N/A | None | Normal |
| Eastside | 77.40 | 2.50 | N/A | N/A | N/A |
| Poplar Point | 414.20 | 13.36 | N/A | N/A | N/A |
| Potomac | 3,185.0 | 102.74 | N/A | N/A | N/A |
| Rock Creek | 228.80 | 7.38 | N/A | N/A | N/A |
| Upper Anacostia | 55.0 | 1.77 | N/A | N/A | N/A |
| Earle Place | 0.49 | 0.02 | 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* | *# Screens* | *# Swirls* | *Screens or Swirls Out of Service* | *Dates* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|---|
| 08/31/05 | 1,2 & 3 | 1,2 & 3 | None | N/a | N/a | N/a |

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

| *Date Performed* | *Type of Preventive Maintenance Performed*[1] | *Comments* |
|---|---|---|
| 08/31/05 | Group A | |

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

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

| *Date* | *Approx. Storm Duration[1] (Hours)* | *Total Influent Volume (mg)* | *Total Foul Sewer Volume (mg)* | *Total Effluent Volume[2] (mg)* | *Approx. Screenings Volume[3] # of bins (cu ft)* |
|---|---|---|---|---|---|
| 8/8/05 | 4 | 18.06 | 2.511 | 15.55 | 0.20(16) |
| 8/8/05 | 4 | 3.55 | 3.55 | 0 | 0.55(44) |
| 8/9/05 | 2 | 1.37 | 1.37 | 0 | 0.75(60) |
| 8/19/05 | 7 | 6.3 | 2.70 | 3.60 | 0.55(44) |
| 8/28/05 | 5 | 3.08 | 3.08 | 0 | 0.50(40) |

Chlorination/Dechlorination Systems.

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

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

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

| *Date* | *Chlor/ Dechlor System Used?* | *Dosages* | | *Residual Chlorine Test Results* | | *Enterococcus Test Results* | | *Fecal Coliform Test Results* | |
|---|---|---|---|---|---|---|---|---|---|
| | | *NaOCl (mg/l)* | *$NaHSO_3$ (mg/l)* | *Location* | *Conc. (mg/l)* | *Site* | *Count Per 100ml* | *Site* | *Count Per 100ml* |
| 8/8/05 | Yes | 5 | 2 | Mix Chamber | 0.2 | Mix Chamber | 18 | Mix Chamber | 270 |
| 8/8/05 | Yes | 5 | 2 | Anacostia River | 0.0 | Anacostia River | 25,000 | Anacostia River | 27,000 |
| 8/19/05 | Yes | 5 | 2 | Mix Chamber | 0.3 | Mix Chamber | 320,000 | Mix Chamber | 340,000 |
| 8/19/05 | Yes | 5 | 2 | Anacostia River | 0.0 | Anacostia River | 51,000 | Anacostia River | 90,000 |

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

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

| Date | Flow Composited Sample Results | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total suspended solids (mg/L) | Nitrite (NO2-N) mg/L | Nitrate (NO3-N)) mg/L | Total Kjeldahl Nitrogen (mg/L as N) | Total Nitrogen (mg/L) | Total Phosphorus (mg/L) | Carbonaceous Biological Oxygen Demand (mg/L) |
| 8/08/05 | 88.0 | < 0.05 | 0.58 | 1.32 | 1.90 | 0.28 | 15.7 |
| 8/19/05 | 149 | < 0.05 | 0.99 | 5.90 | 6.89 | 1.22 | 53.4 |

## 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 Structure No* | *Date Inspected* | *Was Dam Out of Service During the Month?* | *Dates out of Service* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|
| 14 - East | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 14 - West | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 15 | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 15A | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 16 - East | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 16 - West | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - North | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - Middle | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - South | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 34 | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 35 | 8/26/05 | **No** | **N/A** | **N/A** | **N/A** |
| 52 | 8/26/05 | **Yes** | **8/1/05** | **Power Failure*** | **8/17/05** |

* On July 19, 2005, a manhole riser near the intersection of 22nd and N Streets, NW failed, causing a sinkhole immediately downstream of the inflatable dam at Structure 52. The sinkhole caused a failure of other adjacent utilities and rendered the inflatable dam inoperable. On August 15, 2005, the sinkhole was sufficiently stabilized to allow a safe manned entry inspection of the sewer and inflatable dam. By August 17, 2005, repairs were completed on the inflatable dam and it was placed back in service.

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

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

*****SCADA @ Inflatable dam structure no. 52 was inoperable because of a power failure from 8/1/05 to 8/17/05.

## 3. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

**Table 3-1**
**Dry Weather Overflows**

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

## 4. SOLIDS AND FLOATABLES CONTROL

### 4.1 Catch Basin Cleaning

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

**Table 4-1 Catch Basin Summaries**

| *Ward* | *Total CBs* | *CBs in CSS* | *CBs in Anacostia CSS* | *Inspections* | | *Cleaning* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *Total CBs Inspected Once this Year* | *Total CBs Inspected Twice this Year* | *CBs Cleaned Thru Last Month* | | *CB's Cleaned this Month* | | *Total CBs Cleaned This Year to Date* | |
| | | | | | | Total | In CSS | Total | In CSS | Total | In CSS |
| 1 | 1,591 | 1,568 | 734 | 734 | 734 | 2454 | 2396 | 61 | 43 | 2515 | 2439 |
| 2 | 4,714 | 4,112 | 2,316 | 1122 | 859 | 2414 | 2058 | 105 | 58 | 2519 | 2116 |
| 3 | 3,555 | 461 | - | 0 | 0 | 4921 | 1304 | 241 | 15 | 5162 | 1319 |
| 4 | 2,782 | 1,985 | 159 | 159 | 159 | 4117 | 2299 | 112 | 59 | 4229 | 2358 |
| 5 | 2,167 | 1,035 | 1,035 | 1013 | 1013 | 875 | 407 | 1109 | 606 | 1984 | 1013 |
| 6 | 1,783 | 1,594 | 1,594 | 884 | 595 | 731 | 577 | 376 | 307 | 1107 | 884 |
| 7 | 2,313 | - | - | 0 | 0 | 708 | 0 | 217 | 0 | 925 | 0 |
| 8 | 1,278 | 116 | 116 | 116 | 58 | 527 | 140 | 4 | 4 | 531 | 144 |
| WASA Subtotal | **20,183** | **10,871** | **5,954** | **4,028** | **3,418** | **16,747** | **9,181** | **2,225** | **1,092** | **18,972** | **10,273** |
| DDOT (via VMS) Subtotal | | | | **0** | **0** | | | **0** | **0** | **0** | **0** |
| Grand Total | **20,183** | **10,871** | **5,954** | **4,028** | **3,418** | | | **2,225** | **1,092** | **18,972** | **10,273** |
| % Cleaned/Inspected to Date | | | | **68%** | **57%** | | | | | **94%** | **94%** |

## 4.2 BMP Demonstration Projects

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

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

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

| *Facility* | *Date Inspected* | *Condition* | *Work Needed* | *Work performed* | *Material Removed (CY)* |
|---|---|---|---|---|---|
| Netting System CSO 018 | 8/1/05, 8/10/05 8/24/05 | Good | Minor Maintenance | Nets emptied. | 260 lbs. |
| Bar Rack CSO 040 | 8/10/05 | Good | None | Routine Cleaning | (1) |
| Bar Rack CSO 041 | 8/11/05 | Good | None | Routine Cleaning | (1) |

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

## 4.3 Anacostia River Floating Debris Removal Program

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

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

| | |
|---|---|
| *Program Operation* | 5-day work week, excluding holidays, weather permitting |
| *Work Days this month:* | 23 |
| *Days not Operating* | 4 |
| *Reason not Operating* | Strong winds |
| *# Skimmer in Fleet* | 2 skimmers |
| *# Skimmers Out of Service* | One |
| *Dates* | 8/17/05 to present |
| *Reason* | Need to replace head screens – parts on order |
| *Plan to Restore to Service* | As soon as screens are replaced. |
| *Volume Material Collected* | 40 ton. |
| *Nature of Material* | Bottles, cans, natural debris and plastics. |

## 4.4 CSS Litter Control

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

Status: no activities this month.

## 5. MONITORING

### 5.1 Visual Wet Weather Surveys at Main & O

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

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

**Date:** **Inspector's Initials:**

| CSO | Time of Observation | Overflow Y | Overflow N | Observed L | Observed M | Observed H | Quantity of L | Quantity of M | Quantity of H | Quantity of L | Quantity of M | Quantity of H | REMARKS/OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 009 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 010 | | | | NONE IN AUGUST | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 011 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 011a | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 012 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

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

**5.2 Rain Data**

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

**Table 5-2 Rainfall Data (inches)**

| Date | Brentwood Reservoir | Bryant St PS | Main PS | Rock Creek PS |
|---|---|---|---|---|
| 8/1/2004 | 0 | 0 | 0 | 0 |
| 8/2/2004 | 0 | 0 | 0 | 0 |
| 8/3/2004 | 0 | 0 | 0 | 0 |
| 8/4/2004 | 0 | 0 | 0 | 0 |
| 8/5/2004 | 0 | 0 | 0 | 0 |
| 8/6/2004 | 0 | 0 | 0 | 0 |
| 8/7/2004 | 0 | 0 | 0 | 0 |
| 8/8/2004 | 0.97 | 1.07 | 1.07 | 0.97 |
| 8/9/2004 | 0.16 | 0.13 | 0.13 | 0.17 |
| 8/10/2004 | 0 | 0 | 0 | 0 |
| 8/11/2004 | 0 | 0 | 0 | 0 |
| 8/12/2004 | 0 | 0 | 0 | 0 |
| 8/13/2004 | 0 | 0 | 0 | 0 |
| 8/14/2004 | 0 | 0 | 0 | 0 |
| 8/15/2004 | 0 | 0 | 0 | 0 |
| 8/16/2004 | 0.05 | 0.12 | 0.12 | 0.05 |
| 8/17/2004 | 0 | 0 | 0 | 0 |
| 8/18/2004 | 0 | 0 | 0 | 0 |
| 8/19/2004 | 0.39 | 0.31 | 0.01 | 0.31 |
| 8/20/2004 | 0 | 0 | 0 | 0 |
| 8/21/2004 | 0 | 0 | 0 | 0 |
| 8/22/2004 | 0 | 0 | 0 | 0 |
| 8/23/2004 | 0 | 0.03 | 0 | 0 |
| 8/24/2004 | 0 | 0 | 0 | 0 |
| 8/25/2004 | 0 | 0 | 0 | 0 |
| 8/26/2004 | 0 | 0 | 0 | 0 |
| 8/27/2004 | 0.13 | 0.12 | 0.07 | 0.12 |
| 8/28/2004 | 0.26 | 0.13 | 0.02 | 0.12 |
| 8/29/2004 | 0 | 0 | 0 | 0 |
| 8/30/2004 | 0 | 0 | 0 | 0 |
| 8/31/2004 | 0 | 0 | 0 | 0 |
| Total | 1.96 | 1.91 | 1.42 | 1.74 |

**DISTRICT OF COLUMBIA**
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# Monthly Operations Report
# For
# *Combined Sewer System*
## Month: August, 2005

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

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

***Monthly Operations Report for Combined Sewer System***
***Month: September, 2005***

**Table of Contents**

## 1. INTRODUCTION

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

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

## 2. OPERATION AND MAINTENACE

### 2.1 Regulators

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

**Table 2-1**
**Regulator Structures**

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 2 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 9-6-05 | * | | | |
| 4 | Bolling AFB, 2250 ft. north of the south line of the Base, SW | 003 | 9-6-05 | * | | | |
| 5 | Poplar Point Pumping Station | 004 | 9-8-05 | * | | | |
| 6 | Chicago Street and Railroad Ave, SE | 005 | 9-2-05 | * | | | |
| 7 | W Street and Railroad Ave, SE | 005 | 9-2-05 | * | | | |
| 8 | Good Hope Rd, west of Nichols Ave, SE | 006 | 9-2-05 | * | | | |
| 9 | 13th Street and Ridge Place, SE | 007 | 9-23-05 | * | | | |
| 11 | "O" Street Pumping Station | 011(a) | 9-8-05 | * | | | |
| 12 | Storm Pump Discharge at Main Pumping Station | 011 | 9-11-05 | * | | | |
| 13 | 2nd Street, 300 ft. north of N Place, SE | 009 | 9-6-05 | * | | | |
| 14 | 2nd Street, 250 ft. north of N Place, SE | 011(a) | 9-13-05 | * | | | |
| 15 | South Capitol and E Streets | 010 | 9-13-05 | * | | | |
| 15a | Half and L Streets, SE | 010 | 9-13-05 | * | | | |
| 15b | South Capitol and I Streets | 010 | 9-6-05 | * | | | |
| 15c | South Capitol and I Streets | 010 | 9-6-05 | * | | | |
| 16 | North of Main Sewage Pumping Station | 012 | 9-13-05 | * | | | |
| 17 | 4th and N Streets, SE, Both Extended | 013 | 9-15-05 | * | | | |
| 17a | K Street between 6th Street and 7th Street, SE | 013 | 9-29-05 | * | | | |
| 18 | 6th and M Streets, SE | 014 | 9-14-05 | * | | | |
| 19 | 9th and M Streets, SE | 015 | 9-2-05 | * | | | |
| 19a | 9th and M Streets, SE | 015 | 9-2-05 | * | | | |
| 20 | 12th and M Streets, SE | 016 | 9-8-05 | * | | | |
| 20a | 12th and M Streets, SE | 016 | 9-8-05 | * | | | |
| 21 | 14th and M Streets, SE | 017 | 9-23-05 | * | | | |
| 22a | Barney Circle and Pennsylvania Ave, SE | 018 | 9-19-05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 22b | Barney Circle and Pennsylvania Ave, SE | 018 | 9-19-05 | * | | | |
| 22c | Barney Circle and Pennsylvania Ave, SE | 018 | 9-19-05 | * | | | |
| 22d | Kentucky Ave and Potomac Street, SE | 018 | 9-14-05 | * | | | |
| 22e | 14th Street and Kentucky Ave, SE | 018 | 9-14-05 | * | | | |
| 23 | Independence Ave, 21st Street, SE, Extended | 019 | 9-08-05 | * | | | |
| 24a | East Capitol St, west of RFK stadium | 019 | 9-19-05 | * | | | |
| 28 | 21st and Constitution Ave, NW | 020 | 9-16-05 | * | | | |
| 29 | 22nd Street, between Constitution Ave and C St, NW | 020 | 9-16-05 | * | | | |
| 30 | 17th and D Streets, NW | 020 | 9-12-05 | * | | | |
| 31 | 15th Street and Pennsylvania Ave, NW | 020 | 9-12-05 | * | | | |
| 33 | 10th and F Streets, NW | 020 | 9-12-05 | * | | | |
| 34 | 23rd Street, north of Constitution Ave, NW | 020 | 9-16-05 | * | | | |
| 34a | 23rd Street near C Street, NW | 020 | 9-16-05 | * | | | |
| 35 | Northeast of Roosevelt Bridge, NW | 021 | 9-13-05 | * | | | |
| 36 | 27th and I Streets, NW | 022 | 9-16-05 | * | | | |
| 36a | New Hampshire Ave and Eye Street, NW | 022 | 9-16-05 | * | | | |
| 36b | 19th and L Streets, NW | 022, 034 | 9-12-05 | * | | | |
| 36d | 17th and L Streets, NW | 022, 034 | 9-12-05 | * | | | |
| 36g | 18th and M Streets, NW | 022, 034 | 9-12-05 | * | | | |
| 36h | 18th and M Streets, NW | 022, 034 | 9-12-05 | * | | | |
| 37 | 27th and Eye Streets, NW | 022 | 9-16-05 | * | | | |
| 38 | 29th and K Streets, NW | 024 | 9-16-05 | * | | | |
| 38a | 30th Street, south of K Street, NW | 024 | 9-16-05 | * | | | |
| 39a | 30th and K Streets, NW | 024 | 9-16-05 | * | | | |
| 39b | 30th and K Streets, NW | 024 | 9-16-05 | * | | | |
| 41b | 31st and K Streets, NW | 025 | 9-2-05 | * | | | |
| 41c | 31st and K Streets, NW | 025 | 9-2-05 | * | | | |
| 42 | Wisconsin Ave and K Street, NW | 026 | 9-12-05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 43 | Potomac and Water Streets, NW | 027 | 9-12-05 | * | | | |
| 43a | Potomac and Water Streets, NW | 027 | 9-12-05 | * | | | |
| 44 | Water Street, west of Potomac St, NW | 027 | 9-12-05 | * | | | |
| 45 | 36th and M Streets, NW | 028 | 9-02-05 | * | | | |
| 46 | Canal Rd, 1000ft. east of Foxhall Rd, NW | 029 | 9-09-05 | * | | | |
| 47 | 38th Street and Reservoir Road, NW | 029 | 9-09-05 | * | | | |
| 47a | 37th and T Streets, NW | 029 | 9-09-05 | * | | | |
| 47b | 37th and T Streets, NW | 029 | 9-09-05 | * | | | |
| 47c | 38th and W Streets, NW | 029 | 9-09-05 | * | | | |
| 49 | Pennsylvania Ave, east side of Rock Creek, NW | 031 | 9-16-05 | * | | | |
| 50 | 26 and M Streets, NW | 032 | 9-16-05 | * | | | |
| 51 | N Street Extended, west of 25th Street, NW | 033 | 9-16-05 | * | | | |
| 52 | 22nd Street between M and N Streets, NW | 034 | 9-15-05 | * | | | |
| 52a | N Street between 22nd and 23rd Streets, NW | 034 | 9-19-05 | * | | | |
| 53 | 22nd and M Streets, NW | 022, 034 | 9-19-05 | * | | | |
| 53a | 22nd and M Streets, NW | 022, 034 | 9-19-05 | * | | | |
| 53b | L Street between 21st Street and New Hampshire Ave, NW | 022, 034 | 9-19-05 | * | | | |
| 53c | L and 22nd Streets, NW | 022 | 9-19-05 | * | | | |
| 54 | 23rd and O Streets, NW | 034 | 9-21-05 | * | | | |
| 55 | 22nd Street, south of Q Street, NW | 035 | 9-21-05 | * | | | |
| 55a | 22nd Street, south of Q Street, NW | 035 | 9-21-05 | * | | | |
| 56 | 23rd and Massachusetts Ave, NW | 036 | 9-21-05 | * | | | |
| 57 | 23rd Street, south of Q Street, NW | 036 | 9-21-05 | * | | | |
| 58 | Northwest of Belmont Road and Rock Creek and Potomac Parkway, NW | 037 | 9-19-05 | * | | | |
| 59 | North of Belmont Rd, east of Kalorama Cir, NW | 038 | 9-19-05 | * | | | |
| 60 | Connecticut Ave, east of Rock Creek, NW | 039 | 9-14-05 | * | | | |
| 61 | Biltmore St, Extended, east of Rock Creek, NW | 040 | 9-14-05 | * | | | |
| 62 | Ontario Rd, Extended, and Rock Creek Pkwy, NW | 041 | 9-14-05 | * | | | |

| *Struct No.* | *Location* | *Associated NPDES Outfall* | *Date Inspected* | *Condition* | | *Work Needed* | *Work performed* |
|---|---|---|---|---|---|---|---|
| | | | | Good | Needs Work | | |
| 63 | Harvard Street and Rock Creek Parkway, NW | 042 | 9-14-05 | * | | | |
| 64 | Adams Mill Road, south of Irving Street, NW | 043 | 9-14-05 | * | | | |
| 65 | Kenyon Street and Adams Mill Road, NW | 044 | 9-14-05 | * | | | |
| 65a | Kenyon Street and Adams Mill Road, NW | 044 | 9-14-05 | * | | | |
| 66 | Adams Mill Road and Lamont Street, NW | 045 | 9-14-05 | * | | | |
| 67 | Park Rd , south of Piney Branch Pkwy, NW | 046 | 9-14-05 | * | | | |
| 68 | Ingleside Terrance, Extended and Piney Branch Parkway, NW | 047 | 9-14-05 | * | | | |
| 69 | Mt. Pleasant Street, Extended and Piney Branch Parkway, NW | 048 | 9-14-05 | * | | | |
| 70 | Piney Branch Parkway, west of 16th Street, NW | 049 | 9-14-05 | * | | | |
| 70i | 5th and Quackenbos Streets, NW | 049 | 9-2-05 | * | | | |
| 71 | 28th Street, west of Rock Creek Parkway, NW | 050 | 9-22-05 | * | | | |
| 72 | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 9-21-05 | * | | | |
| 72a | Olive Street Extended and Rock Creek Pkwy, NW | 051 | 9-21-05 | * | | | |
| 73 | O Street Extended and Rock Creek Parkway, NW | 052 | 9-21-05 | * | | | |
| 74 | Q Street, west of Rock Creek, NW | 053 | 9-21-05 | * | | | |
| 75 | West side of Rock Creek, 300 ft. south of Massachusetts Ave, NW | 054 | 9-22-05 | * | | | |
| 77 | Normanstone Dr Extended, west of Rock Creek, NW | 056 | 9-22-05 | * | | | |
| 77a | Normanstone Dr and Normanstone Lane, NW | 056 | 9-8-05 | * | | | |
| 78 | 28th Street Extended, west of Rock Creek, NW | 057 | 9-22-05 | * | | | |
| 79 | Connecticut Ave and Rock Creek Parkway, NW | 058 | 9-6-05 | * | | | |
| 84 | 26th and P Streets, NW | 060 | 9-21-05 | * | | | |
| 84a | 26th and P Streets, NW | 060 | 9-21-05 | * | | | |

Notes:

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

## 2.2 Outfalls, Tide Gates and CSO Signs

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

**Table 2 - Outfalls and Tide Gates**

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 003 | Bolling Air Force Base, at Giavanolli and Chanute, SW | 9-6-05 | * | | * | | * | | * | | |
| 005 | Across from Navy Yard, aligned with Parsons Ave., SE | 9-15-05 | * | | * | | * | | * | | |
| 006 | Good Hope Road and Welsh Memorial Bridge | 9-15-05 | * | | * | | * | | * | | |
| 007 | Between 11th St. and Anacostia Bridges, SE | 9-15-05 | * | | * | | * | | * | | |
| 009 | O St. Sewage Pumping Station, SE | 9-16-05 | * | | * | | * | | * | | |
| 010 | O St. Sewage Pumping Station, SE | 9-26-05 | * | | | * | | | * | | |
| 011 | Main Sewage Pumping Station, SE | 9-26-05 | * | | | * | | | * | | |
| 011(a) | Main Sewage Pumping Station, SE | 9-26-05 | * | | * | | * | | * | | |
| 012 | Main Sewage Pumping Station, SE | 9-26-05 | * | | * | | * | | * | | |
| 013 | Southeast Federal Center, aligned with 4th St. | 9-15-05 | * | | * | | * | | * | | |
| 014 | Navy Yard, aligned with 6th St., SE | 9-15-05 | * | | * | | * | | * | | |
| 015 | Navy Yard, aligned with 9th Street, SE | 9-15-05 | * | | | * | | | * | | |
| 016 | 12th and O Streets, SE | 9-01-05 | * | | * | | * | | * | | |
| 017 | M and Water Street, SE | 9-01-05 | * | | * | | * | | * | | |
| 018 | East of Barney Circle and South of Pennsylvania Avenue Bridge, SE | 9-01-05 | * | | * | | * | | * | | |
| 019 | Adjacent to Service Drive behind swirl facility and D.C. General Hospital | 9-08-05 | * | | | * | | | * | | |
| 020 | Rock Creek Parkway and Independence, NW | 9-21-05 | * | | * | | * | | * | | |
| 021 | Rock Creek Parkway and C St., NW | 9-22-05 | * | | | * | | | * | | |
| 022 | Rock Creek Parkway and G St., NW | 9-22-05 | * | | * | | * | | * | | |

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 024 | South of 30th and K Streets, NW | 9-22-05 | * | | * | | | * | * | | WASA has developed a capitol project to design and construct a replacement gate for improved performance. |
| 025 | South of 31st and K Streets, NW | 9-22-05 | * | | * | | * | | * | | |
| 026 | Wisconsin Avenue and Water Street, NW | 9-22-05 | * | | * | | * | | * | | |
| 027 | 33rd and Water Sts., NW | 9-22-05 | * | | | * | | | * | | |
| 028 | Key Bridge and Whitehurst Freeway, NW | 9-22-05 | * | | | * | | | * | | |
| 029 | Adjacent to C&O Canal, aligned with 38th St. NW | 9-22-05 | * | | * | | * | | * | | |
| 031 | Rock Creek Pkwy and Pennsylvania Avenue, NW. | 9-16-05 | * | | | * | | | * | | |
| 032 | 26th and M Street, NW. | 9-16-05 | * | | | * | | | * | | |
| 033 | Across street from St. Francis Jr. High and aligned with N St., NW. | 9-16-05 | * | | * | | * | | * | | |
| 034 | Just west of St. Francis Jr. High and north of N St., NW | 9-21-05 | * | | * | | * | | * | | |
| 035 | P St. Bridge and Rock Creek Parkway | 9-21-05 | * | | * | | * | | * | | |
| 036 | 22nd Street, South of Q Street NW. | 9-23-05 | * | | * | | * | | * | | |
| 037 | Waterside Dr. and Rock Creek Parkway | 9-19-05 | * | | * | | * | | * | | |
| 038 | Between arch footbridge and Connecticut Ave., north of Kalorama Circle, NW. | 9-19-05 | * | | * | | * | | * | | |
| 039 | Connecticut Avenue Bridge and Rock Creek Parkway, NW. | 9-14-05 | * | | * | | * | | * | | |
| 040 | Aligned with Biltmore Rd., between Connecticut Ave and Ellington Bridge. | 9-14-05 | * | | * | | * | | * | | |
| 041 | Beach Dr. and Ontario Pl., NW | 9-22-05 | * | | * | | * | | * | | |
| 042 | Harvard St. and Beach Dr NW. | 9-22-05 | * | | * | | * | | * | | |
| 043 | Upstream of Harvard St. and Beach Dr NW. | 9-22-05 | * | | * | | * | | * | | |
| 044 | Kenyon Street and Beach Dr., NW. | 9-22-05 | * | | * | | * | | * | | |

| *NPDES Outfall* | *Location* | *Date Inspected* | *Outfall Condition* | | *Tide Gate Present?* | | *Tide Gate Condition* | | *CSO Sign* | | *Notes, Work Needed or Performed* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | OK | Needs Work | Yes | No | OK | Needs Work | OK | Needs Work | |
| 045 | North of Beach Dr. and Walbridge Pl, NW. | 9-22-05 | * | | * | | * | | * | | |
| 046 | Piney Branch Parkway and Park Road, NW. | 9-14-05 | * | | | * | | | * | | |
| 047 | Piney Branch Parkway and Ingleside Terrace | 9-14-05 | * | | * | | * | | * | | |
| 048 | South of Piney Branch Parkway and 17th St. | 9-14-05 | * | | * | | * | | * | | |
| 049 | North of Piney Branch Parkway and 17th St. | 9-14-05 | * | | * | | * | | * | | |
| 050 | Rock Creek Parkway and L St., NW | 9-22-05 | * | | * | | * | | * | | |
| 051 | Across Rock Creek Parkway, aligned with Olive St., NW. | 9-8-05 | * | | * | | * | | * | | |
| 052 | Between P and Penna. Ave Bridges, aligned with O Street, NW. | 9-8-05 | * | | * | | * | | * | | |
| 053 | Q St. Bridge and Rock Creek Parkway, NW. | 9-23-05 | * | | * | | * | | * | | |
| 054 | Massachusetts Avenue and Rock Creek Parkway, NW. | 9-22-05 | * | | * | | * | | * | | |
| 056 | Normanstone Dr. and Rock Creek Parkway, NW. | 9-22-05 | * | | * | | * | | * | | |
| 057 | 28th Street and Rock Creek Parkway, NW | 9-22-05 | * | | * | | * | | * | | |
| 058 | Connecticut Avenue and Rock Creek Parkway, NW. | 9-23-05 | * | | | * | | | * | | |
| 060 | North of P Street Bridge and Rock Creek Pkwy, NW | 9-23-05 | * | | * | | * | | * | | |

Notes:

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

## 2.3 Pumping Stations

Pumping station operations are summarized in the table below.

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

| *Pumping Station* | *No. of Inspections* | *No. Screens* | *No. Pumps* | *Screens or Pumps Out of Service* | *Dates* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|---|---|
| Main | 30 | 4 | 12 | None | | | |
| Eastside | 30 | 2 | 4 | None | | | |
| Poplar Point | 30 | 2 [1] | 3 | None | | | |
| Potomac | 30 | 4 | 5 | None | | | |

Notes:

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

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

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

Notes:

1. Group A consists of:

Exercise bar screens
Exercise all sump pumps
Drain condensation from air compressor storage tank
Check depth of screening in the screen room and schedule Vactor truck as required
Check all safety equipment
Issue work order requests as required

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

| *Pumping Station* | *Sanitary Pumpage* | | *Storm Water/CSO Pumped To Anacostia River* | | |
|---|---|---|---|---|---|
| | *Total Wastewater (mg)* | *Daily Average Wastewater (mg)* | *Date* | *Volume (mg)* | *Screenings Collected (units)* |
| Main | 2,100 | 70.02 | N/A | N/A | N/A |
| O St[1] | 150.20 | 5.01 | N/A | None | Normal |
| Eastside | 91.80 | 3.06 | N/A | N/A | N/A |
| Poplar Point | 387.30 | 12.91 | N/A | N/A | N/A |
| Potomac | 3,721.60 | 124.05 | N/A | N/A | N/A |
| Rock Creek | 208.00 | 6.93 | N/A | N/A | N/A |
| Upper Anacostia | 51.60 | 1.72 | N/A | N/A | N/A |
| Earle Place | 0.62 | 0.02 | 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* | *# Screens* | *# Swirls* | *Screens or Swirls Out of Service* | *Dates* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|---|
| 09/29/05 | 1,2 & 3 | 1,2 & 3 | None | N/a | N/a | N/a |

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

| *Date Performed* | *Type of Preventive Maintenance Performed*[1] | *Comments* |
|---|---|---|
| 09/29/05 | Group A | |

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

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

| *Date* | *Approx. Storm Duration[1] (Hours)* | *Total Influent Volume (mg)* | *Total Foul Sewer Volume (mg)* | *Total Effluent Volume[2] (mg)* | *Approx. Screenings Volume[3] # of bins (cu ft)* |
|---|---|---|---|---|---|
| | | | | | |
| | | **NO EVENT IN THE MONTH OF SEPTEMBER, 2005** | | | |
| | | | | | |
| | | | | | |
| | | | | | |

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**

| *Date* | *Chlor/ Dechlor System Used?* | *Dosages* | | *Residual Chlorine Test Results* | | *Enterococcus Test Results* | | *Fecal Coliform Test Results* | |
|---|---|---|---|---|---|---|---|---|---|
| | | *NaOCl (mg/l)* | *$NaHSO_3$ (mg/l)* | *Location* | *Conc. (mg/l)* | *Site* | *Count Per 100ml* | *Site* | *Count Per 100ml* |
| | **NO EVENT IN THE MONTH OF SEPTEMBER, 2005** | | | | | | | | |
| | | | | | | | | | |

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

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

| Date | Flow Composited Sample Results | | | | | | |
|---|---|---|---|---|---|---|---|
| | Total suspended solids (mg/L) | Nitrite (NO2-N) mg/L | Nitrate (NO3-N)) mg/L | Total Kjeldahl Nitrogen (mg/L as N) | Total Nitrogen (mg/L) | Total Phosphorus (mg/L) | Carbonaceous Biological Oxygen Demand (mg/L) |
| | **NO EVENT IN THE MONTH OF SEPTEMBER, 2005** | | | | | | |
| | | | | | | | |

## 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 Structure No* | *Date Inspected* | *Was Dam Out of Service During the Month?* | *Dates out of Service* | *Reason* | *Schedule to Restore to Service* |
|---|---|---|---|---|---|
| 14 - East | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 14 - West | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 15 | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 15A | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 16 - East | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 16 - West | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - North | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - Middle | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 24 - South | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 34 | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 35 | 9/22/05 | **No** | **N/A** | **N/A** | **N/A** |
| 52 | 9/22/05 | **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 (hrs)* |
|---|---|---|
| 14 (E & W) | *None* | *N/A* |
| 15 | *None* | *N/A* |
| 15A | *None* | *N/A* |
| 16 (E & W) | *None* | *N/A* |
| 24 | *None* | *N/A* |
| 34 | *None* | *N/A* |
| 35 | *None* | *N/A* |
| 52 | *None* | *N/A* |
| *Structures on Outfall Sewers* | *Overflow Dates* | *Estimated Duration of Overflow (hrs)* |
| Outfall Structure 1 | None | This structure has been bulk Headed. Overflows are no longer possible. |
| Outfall Structure 1A | None | This structure has been bulk headed. Overflows are no longer possible. |
| Outfall Structure 2(E & W) | None | None |
| | | |
| *Outfall Sewer Control Gates* | *Operational Status* | *Position* |
| Outfall Sewer Control Gate No. 1 | Operational | Open |
| Outfall Sewer Control Gate No.2 | Operational | Open |

## 3. DRY WEATHER OVERFLOWS

Dry weather overflows (DWOs), are summarized below:

**Table 3-1**
**Dry Weather Overflows**

| | |
|---|---|
| Location: | |
| Cause | NO DRY WEATHER OVERFLOW IN SEPTEMBER |
| Date/ Time Discovered | |
| Action Taken | |
| Date/Time Discharge Ceased | |
| Estimated Volume (mg) | |
| Did Overflow Reach Receiving water? | |
| Action taken to prevent reoccurrence | |

## 4. SOLIDS AND FLOATABLES CONTROL

### 4.1 Catch Basin Cleaning

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

**Table 4-1 Catch Basin Summaries**

| *Ward* | *Total CBs* | *CBs in CSS* | *CBs in Anacostia CSS* | *Inspections* | | *Cleaning* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | *Total CBs Inspected Once this Year* | *Total CBs Inspected Twice this Year* | *CBs Cleaned Thru Last Month* | | *CB's Cleaned this Month* | | *Total CBs Cleaned This Year to Date* | |
| | | | | | | Total | In CSS | Total | In CSS | Total | In CSS |
| 1 | 1,591 | 1,568 | 734 | 734 | 734 | 2515 | 2439 | 56 | 56 | 2571 | 2495 |
| 2 | 4,714 | 4,112 | 2,316 | 1426 | 939 | 2519 | 2116 | 352 | 304 | 2871 | 2420 |
| 3 | 3,555 | 461 | - | 0 | 0 | 5162 | 1319 | 0 | 0 | 5162 | 1319 |
| 4 | 2,782 | 1,985 | 159 | 159 | 159 | 4229 | 2358 | 264 | 59 | 4493 | 2417 |
| 5 | 2,167 | 1,035 | 1,035 | 1035 | 1035 | 1984 | 1013 | 792 | 310 | 2776 | 1323 |
| 6 | 1,783 | 1,594 | 1,594 | 1206 | 1206 | 1107 | 884 | 361 | 322 | 1468 | 1206 |
| 7 | 2,313 | - | - | 0 | 0 | 925 | 0 | 0 | 0 | 925 | 0 |
| 8 | 1,278 | 116 | 116 | 116 | 116 | 531 | 144 | 154 | 71 | 685 | 215 |
| WASA Subtotal | **20,183** | **10,871** | **5,954** | **5,064** | **4,189** | **18,972** | **10,273** | **1,979** | **1,122** | **20,951** | **11,395** |
| DDOT (via VMS) Subtotal | | | | **0** | **0** | | | **0** | **0** | **0** | **0** |
| Grand Total | **20,183** | **10,871** | **5,954** | **5,064** | **4,189** | | | **1,979** | **1,122** | **20,951** | **11,395** |
| % Cleaned/Inspected to Date | | | | **85%** | **70%** | | | | | **>100%** | **>100%** |

## 4.2 BMP Demonstration Projects

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

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

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

| *Facility* | *Date Inspected* | *Condition* | *Work Needed* | *Work performed* | *Material Removed (CY)* |
|---|---|---|---|---|---|
| Netting System CSO 018 | 9/2/05<br>9/16/05<br>9/23/05 | Good | Minor Maintenance | Nets emptied. | 230 lbs. |
| Bar Rack CSO 040 | 9/14/05 | Good | None | Routine Cleaning | (1) |
| Bar Rack CSO 041 | 9/22/05 | Good | None | Routine Cleaning | (1) |

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

## 4.3 Anacostia River Floating Debris Removal Program

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

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

| | |
|---|---|
| *Program Operation* | 5-day work week, excluding holidays, weather permitting |
| *Work Days this month:* | 21 |
| *Days not Operating* | 6 |
| *Reason not Operating* | Strong winds |
| *# Skimmer in Fleet* | 2 skimmers |
| *# Skimmers Out of Service* | One |
| *Dates* | 8/17/05 to present |
| *Reason* | Skimmer removed from the water for comprehensive PM. |
| *Plan to Restore to Service* | As soon as possible. |
| *Volume Material Collected* | 30 ton. |
| *Nature of Material* | Bottles, cans, natural debris and plastics. |

## 4.4 CSS Litter Control

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

Status: no activities this month.

## 5. MONITORING

### 5.1 Visual Wet Weather Surveys at Main & O

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

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

**Date:** **Inspector's Initials:**

| CSO | Time of Observation | Overflow | | Observed | | | Quantity of | | | Quantity of | | | REMARKS/OTHER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Y | N | L | M | H | L | M | H | L | M | H | |
| 009 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 010 | | | | NONE IN SEPTEMBER | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 011 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 011a | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 012 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

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

**5.2 Rain Data**

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

**Table 5-2 Rainfall Data (inches)**

| Date | Brentwood Reservoir | Bryant St PS | Main PS | Rock Creek PS |
|---|---|---|---|---|
| 9/1/2004 | 0 | 0 | 0.01 | 0 |
| 9/2/2004 | 0 | 0 | 0 | 0 |
| 9/3/2004 | 0 | 0 | 0 | 0 |
| 9/4/2004 | 0 | 0 | 0 | 0 |
| 9/5/2004 | 0 | 0 | 0 | 0 |
| 9/6/2004 | 0 | 0 | 0 | 0 |
| 9/7/2004 | 0 | 0 | 0.05 | 0 |
| 9/8/2004 | 0 | 0 | 0 | 0 |
| 9/9/2004 | 0 | 0 | 0 | 0 |
| 9/10/2004 | 0 | 0 | 0 | 0 |
| 9/11/2004 | 0 | 0 | 0 | 0 |
| 9/12/2004 | 0 | 0 | 0 | 0 |
| 9/13/2004 | 0 | 0 | 0 | 0 |
| 9/14/2004 | 0 | 0 | 0 | 0.02 |
| 9/15/2004 | 0 | 0 | 0 | 0 |
| 9/16/2004 | 0 | 0 | 0.07 | 0 |
| 9/17/2004 | 0 | 0 | 0 | 0 |
| 9/18/2004 | 0 | 0 | 0 | 0 |
| 9/19/2004 | 0 | 0 | 0 | 0 |
| 9/20/2004 | 0 | 0 | 0 | 0 |
| 9/21/2004 | 0 | 0 | 0 | 0 |
| 9/22/2004 | 0 | 0 | 0 | 0 |
| 9/23/2004 | 0 | 0 | 0 | 0 |
| 9/24/2004 | 0 | 0 | 0 | 0 |
| 9/25/2004 | 0 | 0 | 0 | 0 |
| 9/26/2004 | 0.06 | 0.07 | 0.06 | 0.06 |
| 9/27/2004 | 0 | 0 | 0 | 0 |
| 9/28/2004 | 0 | 0 | 0 | 0 |
| 9/29/2004 | 0 | 0 | 0.01 | 0 |
| 9/30/2004 | 0.01 | 0 | 0 | 0 |
| Total | 0.07 | 0.07 | 0.2 | 0.08 |

District of Columbia Water and Sewer Authority

**Combined Sewer System Model Results**
**Period: July, August, September 2005**
**SCENARIO: Q3Y2005, 10-20-05**

| NPDES No. | Description | Number of Overflows (Occurrences) | CSO Overflow Volume (mg) | Total Duration of Overflow (hrs) | Avg Duration of Overflow (hrs) | Maximum Duration of Overflow (hrs) | Minimum Duration of Overflow (hrs) |
|---|---|---|---|---|---|---|---|
| **Anacostia CSOs** | | | | | | | |
| 005 | Chicago St and Railroad Station SE | 12 | 7.9 | 47.5 | 4.0 | 12.8 | 1.0 |
| 006 | Good Hope Road, West of Nichols Ave.,SE | 5 | 0.2 | 3.8 | 0.8 | 1.0 | 0.3 |
| 007 | 13th Street and Ridge Place,SE | 13 | 21.1 | 46.0 | 3.5 | 12.0 | 0.5 |
| 009 | 2nd Street, 300 feet North of N Place, SE | 9 | 6.7 | 27.8 | 3.1 | 10.5 | 1.5 |
| 010 | O Street SewagePumping Station, SE (pumped Overflow) | 5 | 156.3 | 14.8 | 3.0 | 6.8 | 0.8 |
| 011 | South of Main Sewage Pumping Station, SE (pumped overflow) | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 011a | South of Main SewagePumping Station, SE (gravity overflow) | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 012 | North of Main SewagePumping Station, SE (Tiber Creek) | 5 | 34.4 | 4.3 | 0.9 | 1.8 | 0.3 |
| 013 | 4th and N Streets, SE | 7 | 4.8 | 20.0 | 2.9 | 8.0 | 0.8 |
| 014 | 6th and M Streets, SE | 11 | 18.4 | 34.8 | 3.2 | 11.5 | 0.3 |
| 015 | 9th and M Streets, SE | 6 | 1.4 | 7.8 | 1.3 | 3.0 | 0.5 |
| 016 | 12th and M Streets, SE | 7 | 9.5 | 15.3 | 2.2 | 6.0 | 1.0 |
| 017 | 14th and M Streets, SE | 8 | 13.8 | 17.8 | 2.2 | 6.8 | 0.3 |
| 018 | Barney Circle andPennsylvania Ave, SE | 9 | 5.6 | 20.5 | 2.3 | 7.5 | 0.3 |
| 019 | Northeast Boundary - Swirl Effluent | 10 | 269.9 | 37.3 | 3.7 | 12.8 | 0.8 |
| 019 | Northeast Bound. - Swirl Bypass | 5 | 122.7 | 11.3 | 2.3 | 4.3 | 1.0 |
| | **SUBTOTAL** | | **673** | | | | |
| **Potomac CSOs** | | | | | | | |
| 003 | Bolling AFB | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 020 | 23rd Street, North ofConstitution Ave, NW (Easby Point) | 6 | 42.5 | 12.3 | 2.0 | 4.8 | 0.3 |
| 021 | Northeast ofRoosevelt Bridge, NW | 10 | 274.6 | 29.5 | 3.0 | 11.5 | 0.3 |
| 022 | 27th and K Streets, NW | 10 | 50.1 | 27.0 | 2.7 | 9.3 | 0.8 |
| 024 | 30th and K Streets, NW | 7 | 37.4 | 24.0 | 3.4 | 10.0 | 0.8 |
| 025 | 31st & K St NW | 6 | 0.2 | 8.0 | 1.3 | 2.3 | 0.5 |
| 026 | Wisconsin Avenue andK St., NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 027 | Water Street West ofStreet, NW | 12 | 23.4 | 52.5 | 4.4 | 13.5 | 0.3 |
| 028 | 36th and M Streets, NW | 6 | 0.8 | 9.8 | 1.6 | 3.8 | 0.3 |
| 029 | Canal Road 1000 feet east of Rock Creek,NW | 12 | 18.6 | 41.8 | 3.5 | 12.0 | 1.5 |
| | **SUBTOTAL** | | **448** | | | | |
| **Rock Creek** | | | | | | | |
| 031 | Pennsylvania Avenue, East Rock Creek, NW | 5 | 0.3 | 13.0 | 2.6 | 4.8 | 0.8 |
| 032 | 26th and M Streets, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 033 | N Street extendedwest of 25th Street,NW | 5 | 6.6 | 6.8 | 1.4 | 2.8 | 0.5 |
| 034 | 23rd and O Streets, SW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 035 | 22nd Street south of Q Street, NW | 1 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 |
| 036 | 22nd Street South of Q Street, NW | 10 | 1.7 | 25.3 | 2.5 | 9.0 | 0.8 |
| 037 | Northwest of Belmontand Rock Creek and Potomac Parkway | 3 | 0.1 | 3.0 | 1.0 | 1.0 | 1.0 |
| 038 | North of Belmont Road,east of Kalorama Circle, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 039 | Connecticut Avenue east of Rock Creek, NW | 1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 |
| 040 | Biltmore Street extended east of RockCreek, NW | 2 | 0.1 | 0.8 | 0.4 | 0.5 | 0.3 |
| 041 | Ontario extended and Rock Creek Parkway | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

District of Columbia Water and Sewer Authority

**Combined Sewer System Model Results**
**Period: July, August, September 2005**
**SCENARIO: Q3Y2005, 10-20-05**

| NPDES No. | Description | Number of Overflows (Occurrences) | CSO Overflow Volume (mg) | Total Duration of Overflow (hrs) | Avg Duration of Overflow (hrs) | Maximum Duration of Overflow (hrs) | Minimum Duration of Overflow (hrs) |
|---|---|---|---|---|---|---|---|
| 042 | Harvard Street and RockCreek Parkway, NW | 1 | 0.0 | 0.3 | 0.3 | 0.3 | 0.3 |
| 043 | Adams Mill Road South of Irving Street, NW | 3 | 0.6 | 1.8 | 0.6 | 0.8 | 0.5 |
| 044 | Kenyon Street and Adams Mill Road, NW | 1 | 0.1 | 0.3 | 0.3 | 0.3 | 0.3 |
| 045 | Adams Mill Road and Lamont Street, NW | 4 | 0.1 | 3.3 | 0.8 | 1.0 | 0.8 |
| 046 | Park Road south of Piney Branch Parkway, NW | 3 | 0.0 | 2.5 | 0.8 | 1.0 | 0.8 |
| 047 | Ingleside Terrace extended and Piney Branch Parkway | 5 | 1.2 | 4.0 | 0.8 | 1.0 | 0.3 |
| 048 | Mt. Pleasant Street extended and Piney Branch Parkway | 4 | 0.4 | 3.5 | 0.9 | 1.0 | 0.8 |
| 049 | Piney Branch and LamontStreet, NW | 8 | 61.5 | 19.5 | 2.4 | 7.3 | 0.5 |
| 050 | 28th Street west of 16th Street, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 051 | Olive Street extended and Rock Creek Parkway, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 052 | O Street extended and Rock Creek Parkway, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 053 | O Street west of Rock Creek Parkway, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 054 | West Side of Rock Creek300 ft. south of Mass. Ave, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 056 | Normanstone Drive extended west of Rock Creek, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 057 | 28th Street extended west of Rock Creek, NW | 6 | 3.0 | 9.3 | 1.5 | 3.8 | 0.5 |
| 058 | Connecticut Avenue and Rock Creek Parkway, NW | 1 | 0.0 | 0.8 | 0.8 | 0.8 | 0.8 |
| 060 | P St and 26th St, NW | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | **SUBTOTAL** | | **76** | | | | |
| | | | | | | | |
| | **TOTAL** | | **1,197** | | | | |

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