

APPENDICES

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Appendix A: EPA NPDES PERMIT NO. DC000021

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NPDES Permit No. DC0000221

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMIT**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*

Government of the District of Columbia
The John A. Wilson Building
1350 Pennsylvania Avenue, N.W.
Washington, D.C. 20004

is authorized to discharge from all portions of the municipal separate storm sewer system owned and operated by the District of Columbia to receiving waters named:

Potomac River, Anacostia River, Rock Creek and stream segments
tributary to each such water body

in accordance with the Stormwater Management Program(s) dated February 19, 2009,
subsequent updates, and related reports, strategies, effluent limitations, monitoring requirements
and other conditions set forth in Parts I through IX herein.

The effective issuance date of this permit is: October 7, 2011.

This permit and the authorization to discharge shall expire at midnight, on: October 7, 2016.

Signed this 30th day of September, 2011.



Jon M. Capacasa, Director
Water Protection Division
U.S. Environmental Protection Agency
Region III

PERMIT FOR THE DISTRICT OF COLUMBIA
MUNICIPAL SEPARATE STORM SEWER SYSTEM

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1. DISCHARGES AUTHORIZED UNDER THIS PERMIT

1.1 Permit Area

This permit covers all areas within the jurisdictional boundary of the District of Columbia served by, or otherwise contributing to discharges from, the Municipal Separate Storm Sewer System (MS4) owned or operated by the District of Columbia. This permit also covers all areas served by or contributing to discharges from MS4s owned or operated by other entities within the jurisdictional boundaries of the District of Columbia unless those areas have separate NPDES MS4 permit coverage or are specifically excluded herein from authorization under the District's stormwater program. Hereinafter these areas collectively are referred to as "MS4 Permit Area".

1.2 Authorized Discharges

This permit authorizes all stormwater point source discharges to waters of the United States from the District of Columbia's MS4 that comply with the requirements of this permit. This permit also authorizes the discharge of stormwater commingled with flows contributed by process wastewater, non-process wastewater, or stormwater associated with industrial activity provided such discharges are authorized under separate NPDES permits.

This permit authorizes the following non-stormwater discharges to the MS4 when appropriate stormwater activities and controls required through this permit have been applied and which are: (1) discharges resulting from clear water flows, roof drainage, dechlorinated water line flushing, landscape irrigation, ornamental fountains, diverted stream flows, rising ground waters, uncontaminated ground water infiltration to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation waters, springs, footing drains, lawn watering, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, wash water, fire fighting activities, and similar types of activities; and (2) which are managed so that water quality is not further impaired and that the requirements of the federal Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*, and EPA regulations are met.

1.3 Limitations to Coverage

1.3.1 Non-stormwater Discharges

The permittee, as defined herein, shall effectively prohibit non-stormwater discharges into the MS4, except to the extent such discharges are regulated with an NPDES permit.

1.3.2 Waivers and Exemptions

This permit does not authorize the discharge of any pollutant from the MS4 which arises from or is based on any existing waivers and exemptions that may otherwise apply and are not consistent with the Federal Clean Water Act and other pertinent guidance, policies, and regulations. This narrative prohibition on the applicability of such waivers and exemptions extends to any activity that would otherwise be authorized under District law, regulations or

ordinance but which impedes the reduction or control of pollutants through the use of stormwater control measures and/or prevents compliance with the narrative /numeric effluent limits of this permit. Any such discharge not otherwise authorized may constitute a violation of this permit.

1.4 Discharge Limitations

The permittee must manage, implement and enforce a stormwater management program (SWMP) in accordance with the Clean Water Act and corresponding stormwater NPDES regulations, 40 C.F.R. Part 122, to meet the following requirements:

1.4.1. Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with existing District of Columbia Water Quality Standards (DCWQS);

1.4.2. Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with 33 U.S.C. § 1342(p)(3)(B)(iii); 40 C.F.R. § 122.44(k)(2) and (3); and

1.4.3. Comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit.

Compliance with the performance standards and provisions contained in Parts 2 through 8 of this permit shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term.

2. LEGAL AUTHORITY, RESOURCES AND STORMWATER PROGRAM ADMINISTRATION

2.1 Legal Authority

2.1.1 The permittee shall use its existing legal authority to control discharges to and from the Municipal Separate Storm Sewer System in order to prevent or reduce the discharge of pollutants to achieve water quality objectives, including but not limited to applicable water quality standards. To the extent deficiencies can be addressed through regulation or other Executive Branch action, the permittee shall remedy such deficiencies within 120 days. Deficiencies that can only be addressed through legislative action shall be remedied within 2 years of the effective date of this permit, except where otherwise stipulated, in accordance with the District's legislative process. Any changes to or deficiencies in the legal authority shall be explained in each Annual Report.

2.1.2 No later than 18 months following the effective date of this permit, the District shall update and implement Chapter 5 of Title 21 of District of Columbia Municipal Regulations (Water Quality and Pollution) ("updated DC Stormwater Regulations"), to address the control of stormwater throughout the MS4 Permit Area. Such regulations shall be consistent with this

permit, and shall be at least as protective of water quality as the federal Clean Water Act and its implementing regulations require.

2.1.3 The permittee shall ensure that the above legal authority in no way restricts its ability to enter into inter-jurisdictional agreements with other District agencies and/or other jurisdictions affected through this permit.

2.1.4 Review and revise, where applicable, building, health, road and transportation, and other codes and regulations to remove barriers to, and facilitate the implementation of the following standards: (1) standards resulting from issuance of District stormwater regulations required by Section 2.1, paragraph 1 herein; and (2) performance standards required by this permit.

2.2 Fiscal Resources

The permittee, including all agencies and departments of the District as specified in section 2.3 below, shall provide adequate finances, staff, equipment and support capabilities to implement the existing Stormwater Management Program (SWMP) and the provisions of this permit. For the core program the District shall provide a dedicated funding source. Each annual report under Part 6 of this permit shall include a demonstration of adequate fiscal capacity to meet the requirements of this permit.

2.3 Stormwater Management Program Administration/Permittee Responsibilities

2.3.1 The Government of the District of Columbia is the permittee, and all activities of all agencies, departments, offices and authorities of the District must comply with the requirements of this permit. The permittee has designated the District Department of the Environment (DDOE) as the agency responsible for managing the MS4 Stormwater Management Program and all activities necessary to comply with the requirements of this permit and the Comprehensive Stormwater Management Enhancement Amendment Act of 2008 by coordinating and facilitating a collaborative effort among other city agencies and departments including but not limited to departments designated as "Stormwater Agencies" by the Comprehensive Stormwater Management Enhancement Amendment Act of 2008:

District Department of Transportation (DDOT);
Department of Public Works (DPW);
Office of Planning (OP);
Office of Public Education Facilities Modernization (OPEFM);
Department of Real Estate Services (DRES);
Department of Parks and Recreation; and
DC Water and Sewer Authority (also known as and hereinafter referred to as DC Water).

Each named entity is responsible for complying with those elements of the permit within its jurisdictional scope and authorities.

2.3.2 DDOE shall coordinate, and all agencies, offices, departments and authorities shall implement provisions of the existing MS4 Task Force Memorandum of Understanding (MOU) dated 2000, updated matrix of responsibilities (January 2008), any subsequent updates, and other institutional agreements to coordinate compliance activities among agency partners to implement the provisions of this permit. DDOE's major responsibilities under these MOUs and institutional agreements shall include:

1. Convening regular meetings and communication with MS4 Task Force agencies and other committees established to implement this permit to budget, assign and implement projects, and monitor, inspect and enforce all activities required by the MS4 permit.
2. Providing technical and administrative support for the MS4 Task Force and other committees established to implement this permit
3. Evaluating, assessing, and synthesizing results of the monitoring and assessment programs and the effectiveness of the implementation of management practices and coordinating necessary adjustments to the stormwater management program in order to ensure compliance.
4. Coordinating the completion and submission of all deliverables required by the MS4 Permit.
5. Projecting revenue needs to meet MS4 Permit requirements, overseeing the District's stormwater fees to fulfill revenue needs, and coordinating with DC Water to ensure the District's stormwater fee is collected.
6. Making available to the public and other interested and affected parties, the opportunity to comment on the MS4 stormwater management program.

2.3.3 Within 180 days of permit issuance, the permittee shall complete an assessment of additional governmental agencies and departments, non-governmental organizations, watershed groups or other community organizations in the District and adjacent states to partner with to administer required elements of the permit. Intra- and inter-agency agreements between relevant governmental and nongovernmental organizations shall be established to ensure successful coordination and implementation of stormwater management activities in accordance with the requirements of this permit. Additional government and nongovernmental organizations and programs to consider include; land use planning, brownfields redevelopment, fire department, building and safety, public health, parks and recreation, and federal departments and agencies, including but not limited to, the National Park Service, Department of Agriculture, Department of Defense, and General Services Administration, responsible for facilities in the District.

3. STORMWATER MANAGEMENT PROGRAM (SWMP) PLAN

The permittee shall continue to implement, assess and upgrade all of the controls, procedures and management practices, described in this permit, and in the SWMP dated

February 19, 2009, and any subsequent updates. This Program has been determined to reduce the discharge of pollutants to the maximum extent practicable. The Stormwater Management Program is comprised of all requirements in this permit. All existing and new strategies, elements, initiatives, schedules or programs required by this permit must be documented in the SWMP Plan, which shall be the consolidated document of all stormwater program elements. Updates to the plan shall be consistent with all compliance deadlines in this permit. A current plan shall be posted on the District's website at an easily accessible location at all times.

New Stormwater Management Program strategies, elements, initiatives and plans required to be submitted to EPA for review and approval are included in Table 1.

TABLE 1
Elements Requiring EPA Review and/or Approval

Element	Submittal Date (from effective date of this permit)
Anacostia River Watershed Trash Reduction Calculation Methodology (4.10)	1 year
Catch Basin Operation and Maintenance Plan (4.3.5.1)	18 months
Outfall Repair Schedule (4.3.5.3)	18 months
Off-site Mitigation/Payment-in-Lieu Program (4.1.3)	18 months
Retrofit Program (4.1.6)	2 years
Consolidated TMDL Implementation Plan (4.10.3)	2 years
Revised Monitoring Program (5.1)	2 years
Revised Stormwater Management Program Plan (3)	4 years

No later than 3 years from the issuance date of this permit the permittee shall public notice a fully updated Plan including all of the elements required in this permit. No later than 4 years from the issuance date of this permit the permittee shall submit to EPA the fully updated plan for review and approval, as part of the application for permit renewal.

The measures required herein are terms of this permit. These permit requirements do not prohibit the use of 319(h) funds for other related activities that go beyond the requirements of this permit, nor do they prohibit other sources of funding and/or other programs where legal or contractual requirements preclude direct use for stormwater permitting activities.

TABLE 2
Legal Authority for Selected Required Program Stormwater Elements

Required Program Application Element	Regulatory References
Adequate Legal Authority	40 C.F.R. § 122.26(d)(2)(I)(C)-(F)

Green technology stormwater management practices, which incorporate technologies and practices across District activities.	Chapter 5 of Title 21 of District of Columbia Municipal Regulations (Water Quality and Pollution)
Existing Structural and Source Controls	40 C.F.R. § 122.26(d)(2)(iv)(A)(1)
Roadways	40 C.F.R. § 122.26(d)(2)(iv)(A)(3)
Pesticides, Herbicides, and Fertilizers Application	40 C.F.R. § 122.26(d)(2)(iv)(A)(6)
Municipal Waste Sites	40 C.F.R. § 122.26(d)(2)(iv)(A)(5)
Spill Prevention and Response	40 C.F.R. § 122.26(d)(2)(iv)(B)(4)
Infiltration of Seepage	40 C.F.R. § 122.26(d)(2)(iv)(B)(7)
Stormwater Management Program for Commercial and Residential Areas	40 C.F.R. § 122.26(d)(2)(iv)(A)
Manage Critical Source Areas	40 C.F.R. § 122.26(d)(iii)(B)(6)
Stormwater Management for Industrial Facilities	40 C.F.R. § 122.26(d)(2)(iv)(C)
Industrial and High Risk Runoff	40 C.F.R. § 122.26(d)(2)(iv)(C), (iv)(A)(5)
Identify Priority Industrial Facilities	40 C.F.R. § 122.26(d)(2)(iv)(C)(1)
Illicit Discharges and Improper Disposal	40 C.F.R. § 122.26(d)(2)(iv)(B)(1)-(5), (iv)(B)(7)
Flood Control Projects	40 C.F.R. § 122.26(d)(2)(iv)(A)(4)
Public Education and Participation	40 C.F.R. § 122.26(d)(2)(iv)(A)(6), (iv)(B)(5), (iv)(B)(6)

Monitoring and Assessment and Reporting	40 C.F.R. § 122.26(d)(2)(iv)(D)(v)
Monitoring Program	40 C.F.R. § 122.26(d)(2)(iv)(B)(2), (iii), iv(A), (iv)(C)(2)
Characterization Data	40 C.F.R. § 122.26(d)(2)(iii)(B)-(D), 40 C.F.R. § 122.21(g)(7)
Reporting	40 C.F.R. § 122.41(l)

4. IMPLEMENTATION OF STORMWATER CONTROL MEASURES

4.1 Standard for Long-Term Stormwater Management

The permittee shall continue to develop, implement, and enforce a program in accordance with this permit and the permittee's updated SWMP Plan that integrates stormwater management practices at the site, neighborhood and watershed levels that shall be designed to mimic pre-development site hydrology through the use of on-site stormwater retention measures (e.g., harvest and use, infiltration and evapotranspiration), through policies, regulations, ordinances and incentive programs

4.1.1 Standard for Stormwater Discharges from Development

No later than 18 months following issuance of this permit, the permittee shall, through its Updated DC Stormwater Regulations or other permitting or regulatory mechanisms, implement one or more enforceable mechanism(s) that will adopt and implement the following performance standard for all projects undertaking development that disturbs land greater than or equal to 5,000 square feet:

Require the design, construction and maintenance of stormwater controls to achieve on-site retention of 1.2" of stormwater from a 24-hour storm with a 72-hour antecedent dry period through evapotranspiration, infiltration and/or stormwater harvesting and use for all development greater than or equal to 5,000 square feet.

The District may allow a portion of the 1.2" volume to be compensated for in a program consistent with the terms and requirements of Part 4.1.3.

4.1.2 Code and Policy Consistency, Site Plan Review, Verification and Tracking

By the end of this permit term the District must review and revise, as applicable, stormwater, building, health, road and transportation, and other codes and regulations to remove barriers to, and facilitate the implementation of the retention performance standard required in

Section 4.1.1. The District must also establish/update and maintain a formal process for site plan reviews and a post-construction verification process (e.g., inspections, submittal of as-builts) to ensure that standards are appropriately implemented. The District must also track the on-site retention performance of each project subject to this regulatory requirement.

4.1.3 Off-Site Mitigation and/or Fee-in Lieu for all Facilities

Within 18 months of the effective date of this permit the District shall develop, public notice, and submit to EPA for review and comment an off-site mitigation and/or fee-in-lieu program to be utilized when projects will not meet stormwater management performance standard as defined in Section 4.1.1. The District has the option of implementing an off-site mitigation program, a fee-in-lieu program, or both. Any allowance for adjustments to the retention standard shall be defined in the permittee's regulations. The program shall include at a minimum:

1. Establishment of baseline requirements for on-site retention and for mitigation projects. On-site volume plus off-site volume (or fee-in-lieu equivalent or other relevant credits) must equal no less than the relevant volume in Section 4.1.1;
2. Specific criteria for determining when compliance with the performance standard requirement for on-site retention cannot technically be met based on physical site constraints, or a rationale for why this is not necessary;
3. For a fee-in-lieu program, establishment of a system or process to assign monetary values at least equivalent to the cost of implementation of controls to account for the difference in the performance standard, and the alternative reduced value calculated; and
4. The necessary tracking and accounting systems to implement this section, including policies and mechanisms to ensure and verify that the required stormwater practices on the original site and appropriate required off-site practices stay in place and are adequately maintained.

The program may also include incentives for achieving other important environmental objectives such as ongoing measurable carbon sequestration, energy savings, air quality reductions in green house gases, or other environmental benefits for which the program can develop methods for quantifying and documenting those outcomes. Controls implemented to achieve those outcomes are subject to the same level of site plan review, inspection, and operation and maintenance requirements as stormwater controls.

District-owned transportation right-of-way projects are subject to a similarly stringent process for determining an alternate performance volume, but for the duration of this permit term need not conduct off-site mitigation or pay into a fee-in-lieu program to compensate for the difference.

4.1.4 Green Landscaping Incentives Program

No later than one year following permit issuance, the permittee shall develop an incentive program to increase the quantity and quality of planted areas in the District while allowing flexibility for developers and designers to meet development standards. The Incentive Program

shall use such methods as a scoring system to encourage green technology practices such as larger plants, permeable paving, green roofs, vegetated walls, preservation of existing trees, and layering of vegetation along streets and other areas visible to the public.

4.1.5 Retrofit Program for Existing Discharges

4.1.5.1 Within two years of the effective date of this permit the District shall develop, public notice, and submit to EPA for review and approval a program that establishes performance metrics for retrofit projects. The District shall fully implement the program upon EPA approval. The starting point for the performance metrics shall be the standard in Section 4.1.1. Performance metrics may be established generally for all retrofit projects, or for categories of projects, e.g., roads, sidewalks, parking lots, campuses. Specific site conditions may constitute justifications for setting a performance standard at something less than the standard in Section 4.1.1, and a similar calculator or algorithm process may be used in conjunction with a specific site analysis.

4.1.5.2 The District, with facilitation assistance from EPA Region III, will also work with major Federal landholders, such as the General Services Administration and the Department of Defense, with the objective of identifying retrofit opportunities, documenting federal commitments, and tracking pollutant reductions from relevant federal actions.

4.1.5.3 For each retrofit project estimate the potential pollutant load and volume reductions achieved through the DC Retrofit program by major waterbody (Rock Creek, Potomac, Anacostia) for the following pollutants: Bacteria (E. coli), Total Nitrogen, Total Phosphorus, Total Suspended Solids, Cadmium, Copper, Lead, Zinc, and Trash. These estimates shall be included in the annual report following implementation of the project.

4.1.5.4 The DC Retrofit Program shall implement retrofits for stormwater discharges from a minimum of 18,000,000 square feet of impervious surfaces during the permit term. A minimum of 1,500,000 square feet of this objective must be in transportation rights-of-way.

4.1.5.5 No later than 18 months following issuance of this permit, the permittee shall, through its Updated DC Stormwater Regulations or other permitting or regulatory mechanisms, implement an enforceable mechanism that will adopt and implement stormwater retention requirements for properties where less than 5,000 square feet of soil is being disturbed but where the buildings or structures have a footprint that is greater than or equal to 5,000 square feet and are undergoing substantial improvement. Substantial improvement, as consistent with District regulations at 12J DCMR § 202, is any repair, alteration, addition, or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. The characteristics of these types of projects may constitute justifications for setting a performance standard at something less than the standard in Section 4.1.1.

4.1.5.6 The permittee shall ensure that every major renovation/rehabilitation project for District-owned properties within the inventory of DRES and OPEFM (e.g., schools and school administration buildings) includes on-site stormwater retention measures, including but not

limited to green roofs, stormwater harvest/reuse, and/or other practices that can achieve the retention performance standard.

4.1.6 Tree Canopy

4.1.6.1 No later than one year following issuance of this permit, the District shall develop and public notice a strategy to reduce the discharge of stormwater pollutants by expanding tree canopy throughout the city. The strategy shall identify locations throughout the District where tree plantings and expanded tree boxes are technically feasible and commit to specific schedules for implementation at locations throughout the District, with highest priority given to projects that offer the greatest stormwater retention potential. The strategy shall also include the necessary elements to achieve the requirements of Section 4.1.6.2.

4.1.6.2 The District shall achieve a minimum net annual tree planting rate of 4,150 plantings annually within the District MS4 area, with the objective of a District-wide urban tree canopy coverage of 40% by 2035. The annual total tree planting shall be calculated as a net increase, such that annual mortality is also included in the estimate. The District shall ensure that trees are planted and maintained, including requirements for adequately designed and sized tree boxes, to achieve optimal stormwater retention and tree survival rate. Trees shall be planted in accordance with the Planting Specifications issued by the International Society of Arboriculture as appropriate to the site conditions.

4.1.6.3 The District shall annually document the total trees planted and make an annual estimate of the volume of stormwater that is being removed from the MS4 (and combined system, as relevant) in a typical year of rainfall as a result of the maturing tree canopy over the life of the MS4 permit. Also report annually on the status of achieving 40% canopy District-wide.

4.1.7 Green Roof Projects

4.1.7.1 Complete a structural assessment of all District properties maintained by DRES and slated for redevelopment to determine current roof conditions and the feasibility for green roof installation. These assessments shall be performed on an ongoing basis for all properties as they are considered for redevelopment. Based on the structural assessment and other factors, identify all District-owned properties where green roof projects are technically feasible and commit to specific schedules for implementing these projects. Highest priority shall be given to projects that offer the greatest stormwater capture potential.

4.1.7.2 The permittee shall install at a minimum 350,000 square feet of green roofs on District properties during the term of the permit (including schools and school administration buildings).

4.1.7.3 Document the square footage of green roof coverage in the District, whether publicly or privately owned, report any incentive programs implemented during the permit term, and estimate the volume of stormwater that is being removed from the MS4 (and combined

system, as relevant) in a typical year of rainfall as a result of the combined total green roof facilities in the District.

4.2 Operation and Maintenance of Stormwater Capture Practices

4.2.1 District Owned and Operated Practices.

Within two years of the effective date of this permit, develop and implement operation and maintenance protocols and guidance for District-owned and operated on-site retention practices (development and retrofits) to include maintenance needs, inspection frequencies, estimated maintenance frequencies, and a tracking system to document relevant information. Provide training to all relevant municipal employees and contractors, with regular refreshers, as necessary.

4.2.2 Non-District Owned and Operated Practices.

In conjunction with updating of relevant ordinances and policies, develop accountability mechanisms to ensure maintenance of stormwater control measures on non-District property. Those mechanisms may include combinations of deed restrictions, ordinances, maintenance agreements, or other policies deemed appropriate by the District. The District must also include a long-term verification process of O&M, which may include municipal inspections, 3rd party inspections, owner/operator certification on a frequency deemed appropriate by the District, and/or other mechanisms. The District must continue to maintain an electronic inventory of practices on private property to include this information.

4.2.3 Stormwater Management Guidebook and Training

4.2.3.1 No later than 18 months from the permit issuance date, the permittee shall finalize a Stormwater Management Guidebook to be available for wide-spread use by land use planners and developers. The Stormwater Management Guidebook shall provide regular updates, as applicable, in a format that facilitates such regular updates, and shall include objectives and specifications for integration of stormwater management technologies, including on site retention practices, in the areas of:

- a. Site Assessment.
- b. Site Planning and Layout.
- c. Vegetative Protection, Revegetation, and Maintenance.
- d. Techniques to Minimize Land Disturbance.
- e. Techniques to Implement Measures at Various Scales.
- f. Integrated Water Resources Management Practices.
- g. Designing to meet the required performance standard(s).
- h. Flow Modeling Guidance.
- i. Hydrologic Analysis.
- j. Construction Considerations.
- k. Operation and Maintenance

4.2.3.2 The permittee shall continue to provide key industry, regulatory, and other stakeholders with information regarding objectives and specifications of green infrastructure practices contained in the Stormwater Management Guidebook through a training program. The Stormwater Management training program will include at a minimum the following:

- a. Stormwater management/green technology practices targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders.
- b. Materials and data from stormwater management/green technology practices pilot projects and demonstration projects including case studies.
- c. Design and construction methods for integration of stormwater management/green technology practices measures at various project scales.
- d. Guidance on performance and cost of various types of stormwater management/green technology practices measures in the District.

4.3 Management of for District Government Areas

Procedures to reduce the discharge of pollutants in stormwater runoff shall include, but not be limited to:

4.3.1 Sanitary Sewage System Maintenance Overflow and Spill Prevention Response

The permittee shall coordinate with DC Water to implement an effective response protocol for overflows of the sanitary sewer system into the MS4. The response protocol shall clearly identify agencies responsible and telephone numbers and e-mail for any contact and shall contain at a minimum, procedures for:

1. Investigating any complaints received within 24 hours of the incident report.
2. Responding within two hours to overflows for containment.
3. Notifying appropriate sewer, public health agencies and the public within 24 hours when the sanitary sewer overflows to the MS4.

This provision in no way authorizes sanitary sewer overflow discharges either directly or via the MS4.

4.3.2 Public Construction Activities Management

The permittee shall implement and comply with the Development and Redevelopment and the Construction requirements in Part 4.6 of this permit at all permittee-owned or operated public construction projects.

The permittee shall obtain discharge authorization under the applicable EPA Construction General permit for construction activities and comply with provisions therein.

4.3.3 Vehicle Maintenance/Material Storage Facilities/ Municipal Operations.

The permittee shall implement stormwater pollution prevention measures at all permittee-owned, leased facilities and job sites including but not limited to vehicle/ equipment maintenance facilities, and material storage facilities.

For vehicle and equipment wash areas and municipal facilities constructed, redeveloped, or replaced, the permittee shall eliminate discharges of wash waters from vehicle and equipment washing into the MS4 by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:

1. Self-contain, and haul off-site for disposal;
2. Equip with a clarifier; or
3. Equip with an alternative pre-treatment device.

4.3.4 Landscape and Recreational Facilities Management, Pesticide, Herbicide, Fertilizer and Landscape Irrigation

4.3.4.1 The permittee shall further reduce pollutants and pollutant discharges associated with the storage and application of pesticides, fertilizers, herbicides, the use of other toxic substances and landscape irrigation according to an integrated pest management program (IPM). The IPM shall be an ecosystem based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, use of resistant varieties, and use of low or no chemical and irrigation input landscapes, in accordance with the provisions of this permit, procedures and practices described in the SWMP and regulations.

The permittee shall further utilize IPM controls to reduce pollutants related to the storage and application of pesticides, herbicides, and fertilizers applied by employees or contractors, to public rights-of-way, parks, and other District property to ensure that:

- a. Pesticides are used only if monitoring indicates they are needed according to established guidelines;
- b. Fertilizers are used only when soil tests indicate that they are necessary, and only in minimum amounts and for needed purposes (e.g., seed germination).
- c. Treatments are made with the purpose of removing only the target organism;
- d. Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial, non-target organisms, and the environment;
- e. No pesticides or fertilizers are applied to an area immediately prior to an expected rain event, or during or immediately following a rain event, or when water is flowing off the area;
- f. No banned or unregistered pesticides are stored or applied;

- g. All staff applying pesticides are certified or are under the direct supervision of a pesticide applicator certified in the appropriate category;
- h. Procedures are implemented to encourage the retention and planting of native and/or non-invasive, naturalized vegetation to reduce water, pesticide and fertilizer needs;
- i. Pesticides and fertilizers are stored indoors or under cover on paved surfaces or enclosed in secondary containment and storage areas inspected regularly to reduce the potential for spills; and
- j. Landscapes that maximize on-site retention of stormwater, while minimizing mowing, chemical inputs and irrigation are given preference for all new landscape installation.

4.3.4.2 The District shall coordinate internally among departments for the purpose of ensuring that pesticide and fertilizer use within its jurisdiction does not threaten water quality.

4.3.4.3 The District shall partner with other organizations to ensure that pesticide and fertilizer use within their jurisdiction does not threaten water quality.

4.3.4.4 The District shall continue to conduct education and outreach, as well as provide incentives, to curtail the use of turf-grass fertilizers for the purpose of reducing nitrogen and phosphorous discharges to surface waters. The program shall incentivize the use of vegetative landscapes other than turf grass and other measures to restrict the use of turf grass fertilizers.

4.3.4.5 The District shall use GIS layers of public land and sewersheds, as well as background data, to identify priority areas for a targeted strategy to reduce the sources of pesticides, herbicides, and fertilizers that contaminate the stormwater runoff, and report progress toward completing the screening characterization in the next Updated SWMP.

4.3.4.6 The District shall include in each Annual Report a report on the implementation of the above application procedures, a history of the improvements in the control of these materials, and an explanation on how these procedures will meet the requirements of this permit.

4.3.5 Storm Drain System Operation and Management and Solids and Floatables Reduction

4.3.5.1 Within 18 months of the effective date of this permit, the District shall complete, public notice and submit to EPA for review and approval a plan for optimal catch basin inspections, cleaning and repairs. The District shall fully implement the plan upon EPA approval.

4.3.5.2 Until such time as the catch basin maintenance study has been completed and approved, the permittee shall ensure that each catch basin within the DC MS4 Permit Area is cleaned at least once annually during the life of the permit. The permittee shall continue to use strategies for coordinated catch basin cleaning and street-sweeping that will optimize reduction of stormwater pollutants.

4.3.5.3 Within 18 months of the effective date of this permit, and consistent with the 2006 Outfall Survey, the District shall complete, public notice and submit to EPA for review and approval an outfall repair schedule to ensure that approximately 10% of all outfalls needing repair are repaired annually, with the overall objective of having all outfalls in good repair by 2022. This schedule may be combined with the catch basin maintenance study outlined in 4.3.5.1. The repair schedule shall be fully implemented upon EPA approval.

4.3.5.4 The permittee shall comply with the Anacostia River Trash TMDL implementation provisions in Part 4.10 of this permit and apply the technologies and other activities developed in the Anacostia River Watershed Trash TMDL throughout the entire MS4 Permit Area. The permittee shall continue to report the progress of trash reduction in the Consolidated Annual Report.

4.3.6 Streets, Alleys and Roadways

4.3.6.1 Street sweeping shall be conducted on no less than 641 acres of roadway in the MS4 area annually in accordance with the following schedule:

TABLE 3
Street Sweeping

Area/Street Classification	Frequency
Arterials-heavily developed commercial and central business districts with considerable vehicular and pedestrian traffic	At least nine (9) times per year
Industrial areas	At least six (6) times per year
Residential-residential areas with limited throughway and pedestrian traffic AND neighborhood streets which are used for local purposes only	At least four (4) times per year
Central Business District/Commercial-neighborhood business districts and main streets with moderate vehicular and pedestrian traffic	At least one (1) time every two weeks
Environmental hot spots in the	At least two (2) times per month

4.3.6.2 Standard road repair practices shall include limiting the amount of soil disturbance to the immediate area under repair. Stormwater conveyances which are denuded shall be resodded, reseeded and mulched, or otherwise stabilized for rapid revegetation, and these areas should have effective erosion control until stabilized.

4.3.6.3 The permittee shall continue to evaluate and update the use, application and removal of anti-icers, chemical deicers, salt, sand, and/or sand/deicer mixtures in an effort to minimize the impact of these materials on water quality. The permittee shall investigate and implement techniques available for reducing pollution from deicing salts in snowmelt runoff and runoff from salt storage facilities. The permittee shall evaluate and implement the use of porous/permeable surfaces that require less use of deicing materials and activities. This evaluation shall be made a part of an overall investigation of ways to meet the requirements of the Clean Water Act and reported in each Annual Report.

4.3.6.4 The permittee shall continue to implement and update a program to ensure that excessive quantities of snow and ice control materials do not enter the District's water bodies. The permittee shall report its progress in implementing the program in each Annual Report. Except during a declared Snow Emergency when the permittee determines that the foremost concern of snow removal activities is public health and safety, it shall avoid snow dumping or storage in areas adjacent to water bodies, wetlands, and areas near public or private drinking water wells which would ultimately reenter the MS4.

4.3.7 Infrastructure Maintenance/Pollution Source Control Maintenance

The permittee shall continue to implement an operation and maintenance program that incorporates good housekeeping components at all municipal facilities located in the DC MS4 Permit Area, including but not limited to; municipal waste water treatment facility, potable drinking water facility, municipal fleet operations, maintenance garages, parks and recreation, street and infrastructure maintenance, and grounds maintenance operations, libraries and schools. The permittee shall document the program in the Annual Report, as required at Section 6.2 herein. The permittee shall, at a minimum:

1. Continue to implement maintenance standards at all municipal facilities that will protect the physical, chemical and biological integrity of receiving waters.
2. Continue to implement an inspection schedule in which to perform inspections to determine if maintenance standards are being met. Inspections shall be performed no less than once per calendar year and shall provide guidance in Stormwater Pollution Prevention Plan development and implementation, where needed.
3. Continue to implement procedures for record keeping and tracking inspections and maintenance at all municipal facilities.

4. Continue to implement an inspection and maintenance program for all permittee-owned management practices, including post-construction measures.
5. Continue to ensure proper operation of all treatment management practices and maintain them as necessary for proper operation, including all post-construction measures.
6. Ensure that any residual water following infrastructure maintenance shall be self-contained and disposed of legally in accordance with the Clean Water Act.

4.3.8 Public Industrial Activities Management/Municipal and Hazardous Facilities

For any municipal activity associated with industrial activity, as defined by 40 C.F.R. § 122.26, which discharges stormwater to, from and through the DC MS4, the permittee shall obtain separate coverage under either: (1) the EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) (As modified May 27, 2009); or (2) an individual permit.

4.3.9 Emergency Procedures

The permittee may conduct repairs of essential public service systems and infrastructure in emergency situations. An emergency includes only those situations included as conditions necessary for demonstration of an upset at 40 C.F.R. 122.41(n). For each claimed emergency, the permittee shall submit to the Permitting Authority a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality, no later than required by applicable Clean Water Act regulations.

4.3.10 Municipal Official Training

The permittee shall continue to implement an on-going training program for those employees specified below, and any other employees whose job functions may impact stormwater program implementation. The training program shall address the importance of protecting water quality, the requirements of this permit, design, performance, operation and maintenance standards, inspection procedures, selecting appropriate management practices, ways to perform their job activities to prevent or minimize impacts to receiving waters, and procedures for tracking, inspecting and reporting, including potential illicit discharges. The permittee shall provide follow-up and refresher training at a minimum of once every twelve months, and shall include any changes in procedures, techniques or requirements.

The training program shall include, but is not limited to, those employees who work in the following areas:

1. Municipal Planning
2. Site plan review

3. Design
4. Construction
5. Transportation planning and engineering
6. Street/sewer and right-of-way construction and maintenance
7. Water and sewer departments
8. Parks and recreation department
9. Municipal water treatment and waste water treatment
10. Fleet maintenance
11. Fire and police departments
12. Building maintenance and janitorial
13. Garage and mechanic crew
14. Contractors and subcontractors who may be contracted to work in the above described
15. areas
16. Personnel responsible for answering questions about the permittee's stormwater program,
17. including persons who may take phone calls about the program
18. Any other department of the permittee that may impact stormwater runoff

4.4 Management of Commercial and Institutional Areas

The District shall establish and implement policies and procedures to reduce the discharge of pollutants in stormwater runoff from all commercial and institutional (including federal) areas covered by this permit.

The permittee shall ensure maintenance of all stormwater management controls in commercial and institutional land areas in accordance with the following provisions:

1. Tracking all controls;
2. Inspecting all controls on a regular basis, according to an inspection schedule;
3. Ensure compliance with the MS4 permit and municipal ordinances at commercial and institutional facilities.

4.4.1 Inventory of Critical Sources and Source Controls

4.4.1.1 The permittee shall continue to maintain a watershed-based inventory or database of all facilities within its jurisdiction that are critical sources of stormwater pollution. Critical sources to be tracked shall include the following:

- a. Automotive service facilities, *e.g.*, service, fueling and salvage facilities;
- b. Industrial activities, as defined at 40 C.F.R. §§ 122.26(b)(14); and
- c. Construction sites exceeding one acre, or sites under one acre that are part of a larger common plan of development.
- d. Dry cleaners
- e. Any other facility the District has identified as a Critical Source

4.4.1.2 The permittee shall include the following minimum fields of information for each industrial and commercial facility identified as a critical source:

- a. Name of facility and name of owner/ operator;
- b. Address of facility;
- c. Size of facility; and
- d. Activities conducted at the facility that could impact stormwater.
- e. Practices and/or measures to control pollutants.
- f. Inspection and maintenance schedules, dates and findings.

4.4.1.3 The permittee shall update its inventory of critical sources at least annually. The update may be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (*e.g.*, business licenses, pretreatment permits, sanitary sewer hook-up permits, and similar information).

4.4.2 Inspection of Critical Sources

The permittee shall continue to inspect all commercial facilities identified in Part 4.4.1. herein and any others found to be critical sources twice during the five-year term of the permit. A minimum interval of six months between the first and the second mandatory compliance inspection is required, unless a follow-up inspection to ensure compliance must occur sooner.

4.4.3 Compliance Assurance.

At each facility identified as a critical source, the permittee's inspector(s) shall verify that the operator is implementing a control strategy necessary to protect water quality. Where the permittee determines that existing measures are not adequate to protect water quality, the permittee shall require additional site-specific controls sufficient to protect water quality.

4.5 Management of Industrial Facilities and Spill Prevention

4.5.1 The District shall continue to implement a program to monitor and control pollutants in stormwater discharged from Industrial Facilities located within the MS4 Permit Area, as defined herein, pursuant to the requirements in 40 C.F.R. § 122.26(d)(2)(iv)(C). These facilities shall include, but are not limited to:

- a. Private Solid Waste Transfer Stations
- b. Hazardous Waste Treatment, Disposal, and/or Recovery Plants
- c. Industrial Facilities subject to SARA or EPCRA Title III
- d. Industrial Facilities with NPDES Permits
- e. Industrial facilities with a discharge to the MS4

4.5.2 The District shall continue to maintain and update the industrial facilities database.

4.5.3 The District shall continue to perform or provide on-site assistance/inspections and outreach focused on the development of stormwater pollution prevention plans and NPDES permit compliance.

4.5.4 The District shall continue to refine and implement procedures to govern the investigation of facilities suspected of contributing pollutants to the MS4, including at a minimum: (i) a review, if applicable, of monitoring data collected by the facility pursuant to its NPDES permit; and (ii) wet weather screening as required by Part 5.2.1 herein (including collecting data on discharges from industrial sites). These procedures shall be submitted as part of each Annual Report required by Part 6.2 herein.

4.5.5 The District shall continue to implement the prohibition against illicit discharges, control spills, and prohibit dumping. Continue to implement a program to prevent, contain, and respond to spills that may discharge to the MS4, and report on such implementation submitted in each Annual Report. The spill response program may include a combination of spill response actions by the permittee and/or another public or private entity.

4.5.6 The District shall report progress in developing and carrying out industrial-related programs in each Annual Report required by Section 6 herein. Provide an explanation as to how the implementation of these procedures will meet the requirements of the Clean Water Act.

4.6 Stormwater Management for Construction Sites

4.6.1 Continue implementation of the Program that reduces the discharge of pollutants from construction sites. In each Annual Report, the permittee shall evaluate and report to determine if the existing practices meet the requirements of 40 C.F.R. § 122.26(d)(2)(iv)(A) and (D).

4.6.2 Continue the review and approval process of the sediment and erosion control plans under this program. Also, the permittee shall ensure that all construction projects impacting one acre or greater, or less than one acre when part of a larger common plan of development or sale equal to or larger than one acre, are not authorized until documentation is provided that they have received EPA NPDES Construction General Permit Coverage.

4.6.3 Continue to implement inspection and enforcement procedures, including but not limited to inspection of permitted construction sites that disturb more than 5,000 square feet of soil as follows:

1. First inspection prior to ground disturbing activities to review planned sediment and erosion control measures;
2. Second inspection to verify proper installation and maintenance of sediment and erosion control measures;
3. Third inspection to review planned installation and maintenance of stormwater BMPs;

4. Fourth inspection to verify proper installation of stormwater management practices following final stabilization of the project site; and
5. Other inspections as necessary to ensure compliance with relevant standards and requirements.

4.6.4 When a violation of local erosion and sediment control ordinances occurs, the permittee shall follow existing enforcement procedures and practices using standardized reports as part of the inspection process to provide accurate record keeping of inspections of construction sites. The permittee shall use a listing of all violations and enforcement actions to assess the effectiveness of the Enforcement Program in each Annual Report.

4.6.5 Continue with educational measures for construction site operators (Section 4.9 of this permit) that consist, at a minimum, of providing guidance manuals and technical publications.

4.6.6 Report progress in developing and carrying out the above construction-related programs in each Annual Report required by Parts 6.2 herein, including: (i) an explanation as to how the implementation of these procedures will meet the requirements of the Clean Water Act; (ii) an explanation as to how the implementation of these procedures, particularly with regard to District "waivers and exemptions", will meet the requirements of the Clean Water Act; and (iii) discussion of progress toward meeting TMDL and the District Watershed Implementation Plan deadlines.

4.7 Illicit Discharges and Improper Disposal.

4.7.1 The District shall continue to implement an ongoing program to detect illicit discharges, pursuant to the SWMP, and Part 4 of this permit, and to prevent improper disposal into the storm sewer system, pursuant to 40 C.F.R. § 122.26(d)(2)(iv)(B)(1). Such program shall include, at a minimum the following:

- a. An updated schedule of procedures and practices to prevent illicit discharges, as defined at 40 C.F.R. § 122.26(b)(2), and, pursuant to 40 C.F.R. § 122.26(d)(2)(iv)(B)(1), to detect and remove illicit discharges as defined herein;
- b. An updated inventory (organized by watershed) of all outfalls that discharge through the MS4 including any changes to the identification and mapping of existing permitted outfalls. Such inventory shall include, but not be limited to, the name and address, and a description (such as SIC code) which best reflects the principal products or services provided by each facility which may discharge to the MS4;
- c. Continue to implement an illicit connection detection and enforcement program to perform dry weather flow inspections in target areas;
- d. Visual inspections of targeted areas;

- e. Issuance of fines, tracking and reporting illicit discharges, and reporting progress on stopping targeted illicit discharges, and in appropriate cases, chemical testing immediately after discovery of an illicit discharge;
- f. Enforcement procedures for illicit discharges set forth in Part 4 herein;
- g. All necessary inspection, surveillance, and monitoring procedures to remedy and prevent illicit discharges. The permittee shall submit an inspection schedule, inspection criteria, documentation regarding protocols and parameters of field screening, and allocation of resources as a part of each Annual Report.
- h. The permittee shall continue to implement procedures to prevent, contain, and respond to spills that may discharge into the MS4. The permittee shall provide for the training of appropriate personnel in spill prevention and response procedures.
- i. The permittee shall report the accomplishments of this program in each Annual Report.

4.7.2 The District shall continue to ensure the implementation of a program to further reduce the discharge of floatables (e.g. litter and other human-generated solid refuse). The floatables program shall include source controls and, where necessary, structural controls.

4.7.3 The District shall continue to implement the prohibition against the discharge or disposal of used motor vehicle fluids, household hazardous wastes, grass clippings, leaf litter, and animal waste into separate storm sewers. The permittee shall ensure the implementation of programs to collect used motor vehicle fluids (at a minimum oil and anti-freeze) for recycle, reuse, and proper disposal and to collect household hazardous waste materials (including paint, solvents, pesticides, herbicides, and other hazardous materials) for recycle, reuse, or proper disposal. The permittee shall ensure that such programs are readily available within the District, and that they are publicized and promoted on a regular basis, pursuant to Public Education provisions in this permit at Part 4.9 herein.

4.7.4 The District shall continue to work with members of the Metropolitan Police Department to enhance illegal dumping enforcement.

4.7.5 The District shall implement the District's ban on coal tar pavement products, including conducting outreach and enforcement activities.

4.7.6 The District shall implement the Anacostia Clean Up and Protection Act of 2009, to ban the use of disposable non-recyclable plastic carryout bags and restrict the use on disposable carryout bags in certain food establishments.

4.8 Flood Control Projects

4.8.1 The District shall update the impervious surface analysis of floodplains six months after the approval of the revised Flood Insurance Rate Maps by the Federal Emergency Management Agency.

4.8.2 The District shall assess potential impacts on the water quality and the ability of the receiving water to support beneficial uses for all flood management projects. Evaluate the feasibility of retrofitting existing flood control devices to provide additional pollutant and volume removal from stormwater. Report results of such assessment, mapping program, and feasibility studies in the Annual Report (Part 6.2 herein).

4.8.3 The District shall review all development proposed in flood plain areas to ensure that the impacts on the water quality of receiving water bodies have been properly addressed. Information regarding impervious surface area located in the flood plains shall be used (in conjunction with other environmental indicators) as a planning tool. The permittee shall collect data on the percentage of impervious surface area located in flood plain boundaries for all proposed development beginning six months after the effective date of this permit. The permittee shall collect similar data for existing development in flood plain areas, in accordance with the mapping program and other activities designed to improve water quality. Critical unmapped areas shall be prioritized by the permittee with an emphasis on developed and developing acreage. Reports of this work shall be summarized in the Annual Report.

4.9 Public Education and Public Participation

The District shall continue to implement a public education program including but not limited to an education program aimed at residents, businesses, industries, elected officials, policy makers, planning staff and other employees of the permittee. The purpose of education is to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts. Education initiatives may be developed locally or regionally.

4.9.1 Education and Outreach.

4.9.1.1 The District shall continue to implement its education and outreach program for the area served by the MS4 that was established during the previous permit cycle. The outreach program shall be designed to achieve measurable improvements in the target audience's understanding of stormwater pollution and steps they can take to reduce their impacts.

4.9.1.2 The permittee shall assess current education and outreach efforts and identify areas where additional outreach and education are needed. Audiences and subject areas to be considered include:

a. General public

- 1) General impacts of stormwater flows into surface waters
- 2) Impacts from impervious surfaces
- 3) Source control practices and environmental stewardship actions and opportunities in the areas of pet waste, vehicle maintenance, landscaping, and rain water reuse.

- 4) A household hazardous waste educational and outreach program to control illicit discharges to the MS4 as required herein
- 5) Information and education on proper management and disposal of used oil, other automotive fluids, and household chemicals
- 6) Businesses, including home-based and mobile businesses
- 7) Management practices for use and storage of automotive chemicals, hazardous cleaning supplies, carwash soaps and other hazardous materials
- 8) Impacts of illicit discharges and how to report them including information for industries about stormwater permitting and pollution prevention plans and the requirement that they develop structural and non-structural control systems

b. Homeowners, landscapers and property managers

- 1) Use of low or no phosphorus fertilizers, alternatives to fertilizers, alternative landscaping requiring no fertilizers
- 2) Landscape designs to reduce runoff and pollutant loadings
- 3) Car washing alternatives with the objective of eliminating phosphorus detergent discharges
- 4) Yard care techniques that protect water quality
- 5) Management practices for use and storage of pesticides and fertilizers
- 6) Management practices for carpet cleaning and auto repair and maintenance
- 7) Runoff Reduction techniques, including site design, on-site retention, pervious paving, retention of forests and mature trees
- 8) Stormwater pond maintenance

c. Engineers, contractors, developers, review staff and land use planners

- 1) Technical standards for construction site sediment and erosion control
- 2) Runoff Reduction techniques, including site design, on-site reduction, pervious pavement, alternative parking lot design, retention of forests and mature trees
- 3) Stormwater treatment and flow control controls
- 4) Impacts of increased stormwater flows into receiving water bodies

4.9.2 Measurement of Impacts.

The permittee shall continue to measure the understanding and adoption of selected targeted behaviors among the targeted audiences. The resulting measurements shall be used to direct education and outreach resources most effectively, as well as to evaluate changes in adoption of the targeted behaviors.

4.9.3 Recordkeeping.

The permittee shall track and maintain records of public education and outreach activities.

4.9.4 Public Involvement and Participation.

The permittee shall continue to include ongoing opportunities for public involvement through advisory councils, watershed associations and/or committees, participation in developing updates to the stormwater fee system, stewardship programs, environmental activities or other similar activities. The permittee shall facilitate opportunities for direct action, educational, and volunteer programs such as riparian planting, volunteer monitoring programs, storm drain marking or stream clean up programs.

4.9.4.1 The permittee shall continue to create opportunities for the public to participate in the decision making processes involving the implementation and update of the permittee's SWMP. The permittee shall continue to implement its process for consideration of public comments on their SWMP.

4.9.4.2 The permittee shall continue to establish a method of routine communication to groups such as watershed associations and environmental organizations that are located in the same watershed(s) as the permittee, or organizations that conduct environmental stewardship projects located in the same watershed(s) or in close proximity to the permittee. This is to make these groups aware of opportunities for their direct involvement and assistance in stormwater activities that are in their watershed.

4.9.4.3 The permittee shall make all draft and approved MS4 documents required under this permit available to the public for comment. The current draft and approved SWMP and the MS4 annual reports deliverable documents required under this permit shall be posted on the permittee's website.

4.9.4.4 The permittee shall continue to develop public educational and participation materials in cooperation and coordination with other agencies and organizations in the District with similar responsibilities and objectives. Progress reports on public education shall be included in the Annual Report. An explanation shall be provided as to how this effort will reduce pollution loadings to meet the requirements of this permit.

4.9.4.5 The permittee shall periodically, and at least annually, update its website.

4.10 Total Maximum Daily Load (TMDL) Wasteload Allocation (WLA) Planning and Implementation

4.10.1 Anacostia River Watershed Trash TMDL Implementation

The permittee shall attain removal of 103,188 pounds of trash annually, as determined in the Anacostia River Watershed Trash TMDL, as a specific single-year measure by the fifth year of this permit term.

Reductions must be made through a combination of the following approaches:

1. Direct removal from waterbodies, e.g., stream clean-ups, skimmers
2. Direct removal from the MS4, e.g., catch basin clean-out, trash racks

3. Direct removal prior to entry to the MS4, e.g., street sweeping
4. Prevention through additional disposal alternatives, e.g., public trash/recycling collection
5. Prevention through waste reduction practices, regulations and/or incentives, e.g., bag fees

At the end of the first year the permittee must submit the trash reduction calculation methodology with Annual Report to EPA for review and approval. The methodology should accurately account for trash prevention/removal methods beyond those already established when the TMDL was approved, which may mean crediting a percentage of certain approaches. The calculation methodology must be consistent with assumptions for weights and other characteristics of trash, as described in the 2010 Anacostia River Watershed Trash TMDL.

Annual reports must include the trash prevention/removal approaches utilized, as well as the overall total weight (in pounds) of trash captured for each type of approach.

The requirements of this Section, and related elements as appropriate, shall be included in the Consolidated TMDL Implementation Plan (Section 4.10.3).

4.10.2 Hickey Run TMDL Implementation

The permittee shall implement and complete the proposed replacement/rehabilitation, inspection and enforcement, and public education aspects of the strategy for Hickey Run as described in the updated Plan to satisfy the requirements of the oil and grease wasteload allocations for Hickey Run. If monitoring or other assessment determine it to be necessary, the permittee shall install or implement appropriate controls to address oil & grease in Hickey Run no later than the end of this permit term. As appropriate, any requirement of this Section not completed prior to finalization of the Consolidated TMDL Implementation Plan (Section 4.10.3) shall be included in that Plan.

4.10.3 Consolidated TMDL Implementation Plan

For all TMDL wasteload allocations assigned to District MS4 discharges, the District shall develop, public notice and submit to EPA for review and approval a consolidated TMDL Implementation Plan within 2 years of the effective date of this permit. This Plan shall include, at a minimum, the following TMDLs and any subsequent updates:

1. TMDL for Biochemical Oxygen Demand (BOD) in the Upper and Lower Anacostia River (2001)
2. TMDL for Total Suspended Solids (TSS) in the Upper and Lower Anacostia River (2002)
3. TMDL for Fecal Coliform Bacteria in the Upper and Lower Anacostia River (2003)
4. TMDL for Organics and Metals in the Anacostia River and Tributaries (2003)
5. TMDL for Fecal Coliform Bacteria in Kingman Lake (2003)
6. TMDL for Total Suspended Solids, Oil and Grease and Biochemical Oxygen Demand in Kingman Lake (2003)

7. TMDL for Fecal Coliform Bacteria in Rock Creek (2004)
8. TMDL for Organics and Metals in the Tributaries to Rock Creek (2004)
9. TMDL for Fecal Coliform Bacteria in the Upper, Middle and Lower Potomac River and Tributaries (2004)
10. TMDL for Organics, Metals and Bacteria in Oxon Run (2004)
11. TMDL for Organics in the Tidal Basin and Washington Ship Channel (2004)
12. TMDL for Sediment/Total Suspended Solids for the Anacostia River Basin in Maryland and the District (2007) [pending resolution of court vacature, *Anacostia Riverkeeper, Inc. v. Jackson*, No. 09-cv-97 (RCL)]
13. TMDL for PCBs for Tidal Portions of the Potomac and Anacostia Rivers in the District of Columbia, Maryland and Virginia (2007)
14. TMDL for Nutrients/Biochemical Oxygen Demand for the Anacostia River Basin in Maryland and the District (2008)
15. TMDL for Trash for the Anacostia River Watershed, Montgomery and Prince George's Counties, Maryland and the District of Columbia (2010)
16. TMDL for Nitrogen, Phosphorus and Sediment for the Chesapeake Bay Watershed (2010)

This Plan shall place particular emphasis on the pollutants in Table 4, but shall also evaluate other pollutants of concern for which relevant WLAs exist. The District shall fully implement the Plan upon EPA approval. This Plan shall preempt any existing TMDL implementation plans for the relevant WLAs. For any new or revised TMDL approved during the permit term with wasteload allocations assigned to District MS4 discharges, the District shall update this Plan within six months and include a description of revisions in the next regularly scheduled annual report. The Plan shall include:

1. A specified schedule for compliance with each TMDL that includes numeric benchmarks that specify annual pollutant load reductions and the extent of control actions to achieve these numeric benchmarks.
2. Interim numeric milestones for TMDLs where final attainment of applicable waste load allocations requires more than one permit cycle. These milestones shall originate with the third year of this permit term and every five years thereafter.
3. Demonstration using modeling of how each applicable WLA will be attained using the chosen controls, by the date for ultimate attainment.
4. The Consolidated TMDL Implementation Plan elements required in this section will become enforceable permit terms upon approval of such Plans, including the interim and final dates in this section for attainment of applicable WLAs.
5. Where data demonstrate that existing TMDLs are no longer appropriate or accurate, the Plan shall include recommended solutions, including, if appropriate, revising or withdrawing TMDLs.

4.10.4 Adjustments to TMDL Implementation Strategies

If evaluation data, as outlined in the monitoring strategy being developed per Part 5.1, indicate insufficient progress towards attaining any WLA covered in 4.10.1, 4.10.2 or 4.10.3, the

permittee shall adjust its management programs within 6 months to address the deficiencies, and document the modifications in the Consolidated TMDL Implementation Plan. The Plan modification shall include a reasonable assurance demonstration of the additional controls to achieve the necessary reductions. Annual reports must include a description of progress as evaluated against all implementation objectives, milestones and benchmarks, as relevant, outlined in Part 4.10.

4.11 Additional Pollutant Sources

For any additional pollutant sources not addressed in sections 4.1 through 4.9, the permittee shall continue to compile pertinent information on known or potential pollution sources, including significant changes in:

1. land use activities,
2. population estimates,
3. runoff characteristics,
4. major structural controls,
5. landfills,
6. publicly owned lands, and
7. industries impacting the MS4.

For purposes of this section, “significant changes” are changes that have the potential to revise, enhance, modify or otherwise affect the physical, legal, institutional, or administrative characteristics of the above-listed potential pollution sources. This information shall be submitted in each of the Annual Reports submitted to EPA pursuant to the procedures in Part 6.2 herein. For the Stormwater Model, analysis of data for these pollution sources shall be reported according to Part 7 herein.

The permittee shall implement controls to minimize and prevent discharges of pollutants from additional pollutant sources, including but not limited to Bacteria (*E. coli*), Total Nitrogen, Total Phosphorus, Total Suspended Solids, Cadmium, Copper, Lead, Zinc, and Trash, to receiving waters. Controls shall be designed to prevent and restrict priority pollutants from coming into contact with stormwater, *e.g.*, restricting the use of lawn fertilizers rather than end-of-pipe treatment. These strategies shall include program priorities and a schedule of activities to address those priorities and an outline of which agencies will be responsible for implementing those strategies. The strategies used to reduce or eliminate these pollutants shall be documented in updates to the Stormwater Management Program Plan.

5. **MONITORING AND ASSESSMENT OF CONTROLS**

5.1 Revised monitoring program

5.1.1 Design of the Revised Monitoring Program

Within two years of the effective date of this permit the District shall develop, public notice and submit to EPA for review and approval a revised monitoring program. The District shall fully implement the program upon EPA approval. The revised monitoring program shall meet the following objectives:

1. Make wet weather loading estimates of the parameters in Table 4 from the MS4 to receiving waters. Number of samples, sampling frequencies and number and locations of sampling stations must be adequate to ensure data are statistically significant and interpretable.
2. Evaluate the health of the receiving waters, to include biological and physical indicators such as macroinvertebrates and geomorphologic factors. Number of samples, frequencies and locations must be adequate to ensure data are statistically significant and interpretable for long-term trend purposes (not variation among individual years or seasons).
3. Include any additional necessary monitoring for purposes of source identification and wasteload allocation tracking. This strategy must align with the Consolidated TMDL Implementation Plan required in Part 4.10.3 For all pollutants in Table 4 monitoring must be adequate to determine if relevant WLAs are being attained within specified timeframes in order to make modifications to relevant management programs, as necessary.

Table 4
Monitoring Parameters

Parameter
<i>E. coli</i>
Total nitrogen
Total phosphorus
Total Suspended Solids
Cadmium
Copper
Lead
Zinc
Trash

4. All chemical analyses shall be performed in accordance with analytical methods approved under 40 C.F.R. Part 136. When there is not an approved analytical method, the applicant may use any suitable method as described in Section 5.7 herein, but must provide a description of the method.

5.1.2 Utilization of the Revised Monitoring Program

The permittee must use the information to evaluate the quality of the stormwater program and the health of the receiving waters at a minimum to include:

1. The permittee shall estimate annual cumulative pollutant loadings for pollutants listed in Table 4. Pollutant loadings and, as appropriate, event mean concentrations, will be reported in DMRs and annual reports on TMDL implementation for pollutants listed in Table 4 in discharges from the monitoring stations in Table 5.
2. The permittee shall perform the following activities at least once during the permit term, but no later than the fourth year of this permit:
 - a. Identify and prioritize additional efforts needed to address water quality exceedances, and receiving stream impairments and threats;
 - b. Identify water quality improvements or degradation

Upon approval of the Revised Monitoring Program by EPA Region III, or 2 years from the effective date of this permit, whichever comes first, the permittee shall begin implementation of the Revised Monitoring Program.

5.2 Interim Monitoring

Until such time as EPA has approved the Revised Monitoring Program, the permittee shall implement the following monitoring program:

5.2.1 Wet Weather Discharge Monitoring

The permittee shall monitor for the parameters identified in Table 4 herein, at the locations listed in Table 5 herein. Monitoring frequency for chemical/physical parameters shall be taken by at least three times per year at a minimum. This does not include a geomorphologic assessment and/or physical habitat assessment. The permittee shall conduct sampling as provided in 40 C.F.R. § 122.21(g)(7).

The permittee shall monitor and provide an annual Discharge Monitoring Report for the period of interim monitoring.

TABLE 5
Monitoring Stations

A. Anacostia River Sub Watershed Monitoring Sites
1. Gallatin Street & 14 th Street N.E. across from the intersection of 14 th St. and Gallatin St. in

an outfall (MS-2)
2. Anacostia High School/Anacostia Recreation Center – Corner of 17 th St and Minnesota Ave SE
B. Rock Creek Subwatershed Monitoring Sites
1. Walter Reed -- Fort Stevens Drive -- 16 th Street and Fort Stevens Road, N.W. at an outfall (MS-6)
2. Soapstone Creek -- Connecticut Avenue and Ablemarle Street N.W. at an outfall (MS-5)
C. Potomac River Subwatershed Monitoring Sites
1. Battery Kemble Creek-49th and Hawthorne Streets, N.W. at an outfall (MS-4)
2. Oxon Run-Mississippi Avenue and 15 th Street, S.E. into Oxon Run via an outfall (MS-1)

The District may revise this list of sites in accordance with its revised monitoring program in Section 5.1 herein. Otherwise, changes to the above MS4 monitoring stations and/or sites for any reason shall be considered a major modification to the permit subject to the reopening clause.

During the interim monitoring period for the pollutants listed in Table 4, demonstration of compliance will be calculated using the procedures identified in the SWMP, the approved Anacostia River TMDL Implementation Plan, and/or other appropriate modeling tools and data on management practices efficiencies. The annual report will provide all monitoring data, and a brief synthesis of whether the data indicate that relevant wasteload allocations and other relevant targets are being achieved.

5.2.2 Storm Event Data

In addition to the parameters listed above, the permittee shall continue to maintain records of the date and duration (in hours) of the storm events sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration (in hours) between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event; and a calculated flow estimate of the total volume (in gallons) and nature of the discharge sampled.

5.2.3 Sample Type, Collection, and Analysis

The following requirements apply only to samples collected for Part 5.2.1, Representative Monitoring.

1. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, (estimated by dividing the volume of the detention pond by the estimated volume of water discharged during the 24 hours previous to the time that the sample is collected) a minimum of one sample shall be taken for pollutants listed in Table 4 including temperature, DO, pH and specific conductivity. For all parameters, data shall be reported for the entire event of the discharge pursuant to 40 C.F.R. § 122.26(d)(2)(iii).
2. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge, with each aliquot being separated by a minimum period of fifteen minutes.
3. Analysis and collection of samples shall be done in accordance with the most recent EPA approved laboratory methods and procedures specified at 40 C.F.R. Part 136 and its subsequent amendments.

5.2.4 Sampling Waiver

When a discharger is unable to collect samples due to adverse climatic conditions, the discharger must submit in lieu of sampling data a description of why samples could not be collected, including available documentation of the event.

Adverse climatic conditions which may prohibit the collection of samples includes weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.).

5.3 Dry Weather Monitoring

5.3.1 Dry Weather Screening Program

The permittee shall continue with ongoing efforts to detect the presence of illicit connections and improper discharges to the MS4 pursuant to the District SWMP. The permittee shall perform the following: (1) continue to screen known problem sewersheds within the District based on past screening activities; (2) continue to inventory all MS4 outfalls in the District and inspect all outfalls by the end of the permit term; and (3) ensure that the dry weather screening program has addressed all watersheds within the permit term. The screening shall be sufficient to estimate the frequency and volume of dry weather discharges and their environmental impact.

5.3.2 Screening Procedures

Screening may be developed and/or modified based on experience gained during actual field screening activities. The permittee shall establish a protocol which requires screening to ensure that such procedures are occurring, but such protocol need not conform to the procedures published at 40 C.F.R. § 122.26(d)(1)(iv)(D). The permittee shall describe the protocol actually used in each Annual Report with a justification for its use. The procedures described in the SWMP shall be used as guidance.

5.3.3 Follow-up on Dry Weather Screening Results

The permittee shall continue to implement its enforcement program for locating and ensuring elimination of all suspected sources of illicit connections and improper disposal identified during dry weather screening activities. The permittee shall report the results of such implementation in each Annual Report.

5.4. Area and/or Source Identification Program

The permittee shall continue to implement a program to identify, investigate, and address areas and/or sources within its jurisdiction that may be contributing excessive levels of pollutants to the MS4 and receiving waters, including but not limited to those pollutants identified in Table 4 herein.

5.5 Flow Measurements

The permittee shall continue to select and use appropriate flow measurement devices and methods consistent with accepted scientific practices to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device.

5.6 Monitoring and Analysis Procedures

5.6.1 Monitoring must be conducted according to laboratory and test procedures approved under 40 C.F.R. Part 136 and subsequent amendments, unless other test procedures have been specified in the permit.

5.6.2 The permittee is authorized to use a more current or sensitive (i.e., lower) detection method than the one identified in 40 C.F.R. Part 136 exists for a particular parameter, including but not limited to PCBs (Method 1668B) and mercury (Method 1631E). If used, the permittee shall report using the more current and/or more sensitive method for compliance reporting and monitoring purposes.

5.6.3 EPA reserves the right to modify the permit in order to require a more sensitive method for measuring compliance with any pollutant contamination levels, consistent with 40 CFR, Part 136, should it become necessary.

5.7 Reporting of Monitoring Results

The permittee shall continue to report monitoring results annually in a Discharge Monitoring Report. If NetDMR (<http://www.epa.gov/netdmr/>) is unavailable to any of the following then the original and one copy of the Report are to be submitted at the following addresses:

NPDES Permits Branch
(3WP41)

U.S. EPA Region III
Water Protection Division
1650 Arch Street
Philadelphia, PA 19103-2029

National Marine Fisheries Service/Northeast Region
Protected Resource Division
55 Great Republic Drive

Gloucester, Massachusetts
01930-2276

Monitoring results obtained during the previous year shall be summarized and reported in the Annual Report.

5.8 Additional Monitoring by the Permittee

If the permittee monitors (for the purposes of this permit) any pollutant more frequently than required by this permit, using laboratory and test procedures approved under 40 C.F.R. Part 136 and subsequent amendments or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the annual Discharge Monitoring Report. Such frequency shall also be indicated.

5.9 Retention of Monitoring Information

The permittee shall continue to retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation for a period of at least five(5) years from the date of the sample, measurement or report. This period may be extended by request of EPA at any time.

5.10 Record Content

Records of monitoring information shall include:

1. The date, exact location, time and methods of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and

6. The results of such analyses.

6. **REPORTING REQUIREMENTS**

The permittee shall comply with the reporting requirements identified in this section, including but not limited to the deliverables identified in Table 6 below.

TABLE 6
Reporting Requirements

Submittal	Deadline
Discharge Monitoring Report	Each year on the anniversary of the effective date of the permit (AEDOP)
Annual Report	Each year on the AEDOP.
MS4 Permit Application	Six months prior to the permit expiration date.

6.1 **Discharge Monitoring Reports**

The permittee shall provide discharge monitoring reports per Part 5.7 of this permit on the quality of stormwater discharges from the MS4 for all analytical chemical monitoring stipulated in Part 5 of this permit.

6.2 **Annual Reporting**

The permittee shall submit an Annual Report to EPA on or by the effective yearly date of the permit for the duration of the permitting cycle. At the same time the Annual Report it submitted to EPA it shall also be posted on the District's website at an easily accessible location. If the annual report is subsequently modified per EPA approval (part 6.2.3 of this permit) the updated report shall be posted on the District's website.

6.2.1 **Annual Report.**

The Annual Report shall follow the format of the permit as written, address each permit requirement, and also include the following elements:

- a. A review of the status of program implementation and compliance (or non-compliance) with all provisions and schedules of compliance contained in this permit, including documentation as to compliance with performance standards and other provisions and deliverables contained in Section 4 herein;
- b. A review of monitoring data and any trends in estimated cumulative annual pollutant loadings, including TMDL WLAs and TMDL implementation activities;

- c. An assessment of the effectiveness of controls established by the SWMP;
- d. An assessment of the projected cost of SWMP implementation for the upcoming year (or longer) and a description of the permittee's budget for existing stormwater programs, including: (i) an overview of the permittee's financial resources and budget, (ii) overall indebtedness and assets, (iii) sources for funds for stormwater programs; and (iv) a demonstration of adequate fiscal capacity to meet the requirements of this permit, subject to the (a) the federal Anti-Deficiency Act, 31 U.S.C. §§ 1341, 1342, 1349, 1351, (b) the District of Columbia Anti-Deficiency Act, D.C. Official Code §§ 47-355.01-355.08 (2001), (c) D.C. Official Code § 47-105 (2001), and (d) D.C. Official Code § 1-204.46 (2006 Supp.), as the foregoing statutes may be amended from time to time;
- e. A summary describing the number and nature of enforcement actions, inspections, and public education programs and installation of control systems;
- f. Identification of water quality improvements or degradation through application of a measurable performance standard as stated throughout this permit;
- g. Results of storm and water quality modeling and its use in planning installation of control systems and maintenance and other activities;
- h. An assessment of any SWMP modifications needed to meet the requirements of this permit;
- i. Revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application under 40 C.F.R. § 122.26(d)(2)(iv) and (v);
- j. Methodology to assess the effects of the Stormwater Management Program (SWMP);
- k. Annual expenditures and budget for the year following each annual report;
- l. A summary of commitments for the next year and evaluation of the commitments from the previous year;
- m. A summary of the monitoring data for stormwater and ambient sampling that is collected in the previous year and the plan, including identification of monitoring locations, to collect additional data for the next year;
- n. The amount of impervious cover within the District, and within the three major watersheds in the District (Anacostia, Potomac and Rock Creek);
- o. The percentage of effective impervious cover reduced annually, including but not limited to the number and square footage of green roofs installed in the District, including the square footage of drainage managed by practices that meet the performance standard in 4.1.1; and
- p. An analysis of the work to be performed in the next successive year, including performance measures for those tasks. In the following year, progress with those performance measures shall be part of the Annual Report. The basis for each of the performance standards, which will be used as tools for evaluating environmental results and determining the success of each MS4 activity, shall be described incorporating an integrated program approach that considers all programs and projects which have a direct as well as an indirect affect on stormwater management quantity and quality within the District. The report shall also provide an update of the fiscal analysis for each year of the permit as required by 40 C.F.R. § 122.26(d)(2)(vi).

6.2.2 Annual Report Meeting

Within 12 months of the effective date of this permit the District shall convene an annual report meeting with EPA to present annual progress and plans for the following year. In conjunction with this meeting the annual written report may consist of presentation materials summarizing all required elements of the annual report rather than a lengthy written report, as long as all required elements are included. Following this first annual reporting meeting EPA and the District shall determine if the meeting and associated presentation materials constitute an effective reporting mechanism. With the agreement of both EPA and the District the annual reporting meeting and the use of summarized presentation materials in lieu of a lengthy written report may be extended for the remainder of the permit term.

6.2.3 Annual Report Revisions

Each Annual Report may be revised with written approval by EPA. The revised Report will become effective after its approval.

6.2.4 Signature and Certification

The permittee shall sign and certify the Annual Report in accordance with 40 C.F.R §122.22(b), and include a statement or resolution that the permittee's governing body or agency (or delegated representative) has reviewed or been appraised of the content of such submissions. The permittee shall provide a description of the procedure used to meet the above requirement.

6.2.5 EPA Approval

In reviewing any submittal identified in Table 1 or 6, EPA may approve or disapprove each submittal. If EPA disapproves any submittal, EPA shall provide comments to the permittee. The permittee shall address such comments in writing within thirty (30) days of receipt of the disapproval from EPA. If EPA determines that the permittee has not adequately addressed the disapproval/comments, EPA may revise that submittal or portions of that submittal. Such revision by EPA is effective thirty (30) days from receipt by the permittee. Once approved by EPA, or in the event of EPA disapproval, as revised by EPA, each submission shall be an enforceable element of this permit.

6.3 MS4 Permit Application

The permittee develop a permit Application based on the findings presented in each of the Annual SWMP Reports submitted during the permitting cycle to be submitted six months prior to the expiration date of the permit. The permit application shall define the next iterative set of objectives for the program and provide an analysis to demonstrate that these objectives will be achieved in the subsequent permit term.

7. STORMWATER MODEL

The permittee shall continue to update and report all progress made in developing a Stormwater Model and Geographical Information System (GIS) to EPA on an annual basis as an attachment to each Annual Report required herein.

On an annual basis, the permittee shall report on pollutant load reductions throughout the area covered by this permit using the statistical model developed by DDOE or other appropriate model. In the annual update, the permittee shall include, at a minimum, other applicable components which are not only limited to those activities identified in Section 6 herein, but which are necessary to demonstrate the effectiveness of the permittee's Stormwater Management Program toward implementing a sustainable strategy for reducing stormwater pollution runoff to the impaired waters of the District of Columbia.

Assess performance of stormwater on-site retention projects through monitoring, modeling and/or estimating storm retention capacity to determine the volume of stormwater removed from the MS4 in a typical year of rainfall as a result of implementing stormwater controls. This provision does not require all practices to be individually monitored, only that a reasonable evaluation strategy must provide estimates of overall volume reductions by sewershed.

8. STANDARD PERMIT CONDITIONS FOR NPDES PERMITS

8.1 Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and may result in an enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application.

8.2 Inspection and Entry

The permittee shall allow EPA, or an authorized representative, and/or the District's contractor(s)/subcontractor(s), upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises at reasonable times where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), processes, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

8.3 Civil and Criminal Penalties for Violations of Permit Conditions

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

The Clean Water Act provides that any person who violates Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing such section, or any requirement imposed in an approved pretreatment program and any person who violates any Order issued by EPA under Section 301(a) of the Act, shall be subject to a civil penalty not to exceed \$25,000 per day for each violation. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, EPA has raised the statutory maximum penalty for such violations to \$37,500 per day for each such violation. 74 Fed. Reg. 626 (Jan. 7, 2009). The Clean Water Act also provides for an action for appropriate relief including a permanent or temporary injunction.

Any person who negligently violates Section 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act, any permit condition or limitation implementing any such section, shall be punished by a criminal fine of not less than \$5,000 nor more than \$50,000 per day of such violation, or by imprisonment for not more than 3 years, or by both. Any person who knowingly violates any permit condition or limitation implementing Section 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act, and who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000, or by imprisonment of not more than 15 years, or by both.

8.4 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

In the event that the permittee or permitting authority determines that discharges are causing or contributing to a violation of applicable WQS, the permittee shall take corrective action to eliminate the WQS exceedance or correct the issues and/or problems by requiring the party or parties responsible for the alleged violation(s) comply with Part I.C.1 (Limitations to Coverage) of this permit. The methods used to correct the WQS exceedances shall be documented in subsequent annual reports and in revisions to the Stormwater Management Program Plan.

8.5 Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

1. Violation of any terms or conditions of this permit;
2. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
3. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
4. Information newly acquired by the Agency, including but not limited to the results of the studies, planning, or monitoring described and/or required by this permit;
5. Material and substantial facility modifications, additions, and/or expansions;
6. Any anticipated change in the facility discharge, including any new significant industrial discharge or changes in the quantity or quality of existing industrial discharges that will result in new or increased discharges of pollutants; or
7. A determination that the permitted activity endangers human health or the environment and that it can only be regulated to acceptable levels by permit modification or termination.

The effluent limitations expressed in this permit are based on compliance with the District of Columbia's water quality standards in accordance with the Clean Water Act. In the event of a revision of the District of Columbia's water quality standards, this document may be modified by EPA to reflect this revision.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. When a permit is modified, only conditions subject to modification are reopened.

8.6 Retention of Records

The permittee shall continue to retain records of all documents pertinent to this permit not otherwise required herein, including but not limited copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the expiration date of this permit. This period may be extended by request of EPA at any time.

8.7 Signatory Requirements

All Discharge Monitoring Reports, plans, annual reports, certifications or information either submitted to EPA or that this permit requires be maintained by the permittee shall be signed by either a principal executive officer or ranking elected official, or a duly authorized representative of that person. A person is a duly authorized representative only if: (i) the

authorization is made in writing by a person described above and submitted to EPA; and (ii) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for an agency. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new notice satisfying the requirements of this paragraph must be submitted to EPA prior or together with any reports, information, or applications to be signed by an authorized representative.

8.8 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, 33 U.S.C. § 1321.

8.9 District Laws, Regulations and Ordinances

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable District law, regulation or ordinance identified in the SWMP. In the case of "exemptions and waivers" under District law, regulation or ordinance, Federal law and regulation shall be controlling.

8.10 Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

8.11 Severability

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

8.12 Transfer of Permit

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

1. The current permittee notifies the EPA, in writing of the proposed transfer at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
3. The EPA does not notify the current permittee and the new permittee of intent to modify, revoke and reissue, or terminate the permit and require that a new application be submitted.

8.13 Construction Authorization

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

8.14 Historic Preservation

During the design stage of any project by the Government of the District of Columbia within the scope of this permit that may include ground disturbance, new and existing or retrofit construction, or demolition of a structure, the Government of the District of Columbia shall notify the Historic Preservation liaison and provide the liaison planning documents for the proposed undertaking. The documents shall include project location; scope of work or conditions; photograph of the area/areas to be impacted and the methods and techniques for accomplishing the undertaking. Depending on the complexity of the undertaking, sketches, plans and specifications shall also be submitted for review. The documentation will enable the liaison to assess the applicability of compliance procedures associated with Section 106 of the National Historic Preservation Act. Among the steps in the process are included:

1. The determination of the presence or absence of significant historic properties (architectural, historic or prehistoric). This can include the evaluation of standing structures and the determination of the need for an archaeological survey of the project area.
2. The evaluation of these properties in terms of their eligibility for nomination to the National Register of Historic Places.
3. The determination of the effect that the proposed undertaking will have on these properties.
4. The development of mitigating measures in conjunction with any anticipated effects.

All such evaluations and determinations will be presented to the Government of the District of Columbia for its concurrence.

If an alternate Historic Preservation procedure is approved by EPA in writing during the term of this permit, the alternate procedure will become effective after its approval.

8.15 Endangered Species

The U.S. Fish and Wildlife Service (FWS) has indicated that Hay's Spring Amphipod, a Federally listed endangered species, occurs at several locations in the District of Columbia. The National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries) has indicated that the endangered shortnose sturgeon occurs in the Potomac River drainage and may occur within the District of Columbia. The FWS and NOAA Fisheries indicate that at the present time there is no evidence that the ongoing stormwater discharges covered by this permit are adversely affecting these Federally-listed species. Stormwater discharges, construction, or any other activity that adversely affects a Federally-listed endangered or threatened species are not authorized under the terms and conditions of this permit.

The monitoring required by this permit will allow further evaluation of potential effects on these threatened and endangered species once monitoring data has been collected and analyzed. EPA requires that the permittee submit to NOAA Fisheries, at the same time it submits to EPA, the Annual Outfall Discharge Monitoring Report of the monitoring data which will be used by EPA and NOAA Fisheries to further assess effects on endangered or threatened species. If this data indicates that it is appropriate, requirements of this NPDES permit may be modified to prevent adverse impacts on habitats of endangered and threatened species.

The above-referenced Report of monitoring data is required under this permit to be sent on an annual basis to:

The United States Environmental Protection Agency
Region III (3WP41)
Water Protection Division
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

National Marine Fisheries Service/Northeast Region
Protected Resource Division
55 Great Republic Drive
Gloucester, Massachusetts 01930-2276

8.16 Toxic Pollutants

If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under section 307(a) of the Act, 33 U.S.C. § 1317(a), for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, the permittee shall comply with such standard or prohibition even if the permit has not yet been modified to comply with the requirement.

8.17 Bypass

8.17.1 Bypass not exceeding limitations. In accordance with 40 C.F.R. § 122.41(m), the permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation.

8.17.2 Notice

1. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior notice at least ten days before the date of the bypass. See 40 C.F.R. § 122.41(m)(3)(i).
2. Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required by 40 C.F.R. § 122.41(l)(6) (24-hour notice). See 40 C.F.R. § 122.41(m)(3)(ii).

8.17.3 Prohibition of bypass. See 40 C.F.R. § 122.41(m)(4).

1. Bypass is prohibited, and EPA may take enforcement action against the permittee for bypass, unless:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage as defined herein;
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - c. The permittee submitted notices as required herein.
2. EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above.

8.18 Upset

Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of 40 C.F.R. § 122.41(n) are met.

8.19 Reopener Clause for Permits

The permit may be modified or revoked and reissued, including but not limited to, any of the following reasons:

1. To incorporate any applicable effluent standard or limitation issued or approved under Sections 301, 304, or 307 of the Clean Water Act, and any other applicable provision, such as provided for in the Chesapeake Bay Agreements based on water quality considerations, and if the effluent standard or limitation so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - b. Controls any pollutant not limited in the permit. The permit, as modified or reissued under this paragraph, shall also contain any other requirements of the Act then applicable; or
2. To incorporate additional controls that are necessary to ensure that the permit effluent limits are consistent with any applicable TMDL WLA allocated to the discharge of pollutants from the MS4; or
3. As specified in 40 C.F.R. §§ 122.44(c), 122.62, 122.63, 122.64, and 124.5.

8.20 Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, it must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. EPA may grant permission to submit an application less than 180 days in advance but no longer than the permit expiration date. In the event that a timely and complete reapplication has been submitted and EPA is unable through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

9. PERMIT DEFINITIONS

Terms that are not defined herein shall have the meaning accorded them under section 502 of the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*, or its implementing regulations, 40 C.F.R. Part 122.

“Annual Report” refers to the consolidated Annual Report that the permittee is required to submit annually.

“Bypass” means the intentional diversion of waste streams from any portion of a treatment facility. See 40 C.F.R. § 122.41(m)(1)(i).

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (6-483 and Pub. L. 97-117, 33 U.S.C. §§ 1251 *et seq.*

"Development" is the undertaking of any activity that disturbs a surface area greater than or equal to 5,000 square feet, including new development projects and redevelopment projects. For purposes of Parts 4.1.1 through 4.1.4 of the permit the requirements apply to discharges from sites for which design or construction commenced after 18 months from the effective date of this permit or as required by District of Columbia law, whichever is sooner. The District may exempt development projects receiving site plan approval prior to this date from these requirements.

"Director" means the Regional Administrator of USEPA Region 3 or an authorized representative.

"Discharge" for the purpose of this permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).

"Discharge Monitoring Report", "DMR" or "Outfall Discharge Monitoring Report" includes the monitoring and assessment of controls identified in Section 5 herein.

"EPA" means USEPA Region 3.

"Green Roof" is a low-maintenance roof system that stores rainwater where the water is taken up by plants and/or transpired into the air.

"Green Technology Practices" means stormwater management practices that are used to mimic pre-development site hydrology by using site design techniques that retain stormwater on-site through infiltration, evapotranspiration, harvest and use.

"Guidance" means assistance in achieving a particular outcome or objective.

"Illicit connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to an NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities, pursuant to 40 C.F.R. § 122.26(b)(2).

"Impaired Water" (or "Water Quality Impaired Water" or "Water Quality Limited Segment"): A water is impaired for purposes of this permit if it has been identified by the District or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called "water quality limited segments" under 40 C.F.R. 30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established.

"Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit (i.e., an area where wastes are applied onto or incorporated into the soil surface [excluding manure spreading operations] for treatment or disposal), surface impoundment, injection well, or waste pile.

"Large or Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either: (1) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 C.F.R. Part 122); or (2) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 C.F.R. Part 122); or (3) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"MS4" refers to either a Large or Medium Municipal Separate Storm Sewer System.

"Municipal Separate Storm Sewer" means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (1) owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State Law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes; (2) Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.); (3) not a combined sewer; and (4) not part of a Publicly-Owned Treatment Works as defined at 40 C.F.R. § 122.2.

"Offset" means a unit of measurement, either used as monetary or non-monetary compensation, as a substitute or replacement for mitigation of a stormwater control practice that has been determined to be impracticable to implement.

"Performance measure" means for purposes of this permit, a minimum set of criteria for evaluating progress toward meeting a standard of performance.

"Performance standard" means for purposes of this permit, a cumulative measure or provision for attainment of an outcome or objective.

"Permittee" refers to the Government of the District of Columbia and all subordinate District and independent agencies, such as the District of Columbia Water and Sewer Authority, directly accountable and responsible to the City Council and Mayor as authorized under the Stormwater Permit Compliance Amendment Act of 2000 and any subsequent amendments for administering, coordinating, implementing, and managing stormwater for MS4 activities within the boundaries of the District of Columbia.

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other

floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

“Pollutant of concern” means a pollutant in an MS4 discharge that may cause or contribute to the violation of a water quality criterion for that pollutant downstream from the discharge.

“Pre-Development Condition” means the combination of runoff, infiltration and evapotranspiration rates, volumes, durations and temperatures that typically existed on the site with natural soils and vegetation before human-induced land disturbance occurred. In the context of requirements in this permit the environmental objective is a stable, natural hydrologic site condition that protects or restores to the degree relevant for that site, stable hydrology in the receiving water, which will not necessarily be the hydrologic regime of that receiving water prior to any human disturbance in the watershed.

“Retention” means the use of soils, vegetation, water harvesting and other mechanisms and practices to retain a target volume of stormwater on a given site through the functions of: pore space and surface ponding storage; infiltration; reuse, and/or evapotranspiration.

“Retrofit” means improvement in a previously developed area that results in reduced stormwater discharge volumes and pollutant loads and/or improvement in water quality over current conditions.

“Stormwater” means the flow of surface water which results from, and which occurs immediately following, a rainfall event, snow melt runoff, and surface runoff and drainage.

“Stormwater management” means (1) for quantitative control, a system of vegetative or structural measures, or both, which reduces the increased volume and rate of surface runoff caused by man-made changes to the land; and (2) for qualitative control, a system of vegetative, structural, and other measures which reduce or eliminate pollutants which might otherwise be carried by surface runoff.

“SWMP” is an acronym for Stormwater Management Program. For purposes of this permit, the term includes all stormwater activities described in the District’s SWMP Plan updated February 19, 2009, or any subsequent update, and all other strategies, plans, documents, reports, studies, agreements and related correspondences developed and used pursuant to the requirements of this permit.

“Severe property damage” means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 C.F.R. § 122.41(m)(1)(ii).

“Total Maximum Daily Load (TMDL) Units” means for purposes of this permit, the sum of individual waste load allocations (WLAs) and natural background. Unless specifically permitted otherwise in an EPA-approved TMDL report covered under the permit, TMDLs are expressed in

terms of mass per time, toxicity or other appropriate measure such as pollutant pounds of a total average annual load.

“TMDL Implementation Plan” means for purposes of this permit, a plan and subsequent revisions/updates to that plan that are designed to demonstrate how to achieve compliance with applicable waste load allocations as set forth in the permit requirements described in Section 8.1.4.

“Stormwater Management Program (SWMP)” is a modified and improved SWMP based on the existing SWMP and on information in each of the Annual Reports/Discharge Monitoring Reports. The purpose of the SWMP is to describe the list of activities that need to be done to meet the requirements of the Clean Water Act, an explanation as to why these activities will meet the Clean Water Act requirements, and a schedule for those activities.

“Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 C.F.R. § 122.41(n)(1).

“Waste pile” means any non-containerized accumulation of solid, nonflowing waste.

“Water quality standards” refers to the District of Columbia’s Surface and Ground Water Quality Standards codified at Code of District of Columbia Regulations §§ 21-1100 *et seq.*, which are effective on the date of issuance of the permit and any subsequent amendments which may be adopted during the life of this permit.

“Waters of the United States” is defined at 40 C.F.R. § 122.2.

Appendix B: EPA REGION 3 LETTERS

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. Hamid Karimi, Ph.D.
Deputy Director
District Department of the Environment
The Government of the District of Columbia
1200 First Street
NE 5th Floor
Washington, DC 20002

NOV 04 2011

Dear Dr. Karimi:

Part 4.3.5.3 of the District of Columbia's municipal separate storm sewer system (MS4) permit (Permit No. DC0000221, issued September 30, 2011, effective October 7, 2011) requires the District to "complete, public notice and submit to EPA for review and approval an outfall repair schedule" within 18 months of the effective date of the permit, and then to implement that repair schedule.

Per conversations on October 27, 2011, and November 2, 2011, with the District Department of the Environment, EPA clarifies expectations for Part 4.3.5.3 of the permit:

1. The District has 18 months from October 7, 2011, for completing and public-noticing a repair and assessment schedule for all verified MS4 outfalls to surface waters.
2. Though the District may include any type of repairs needed in this schedule, the repairs subject to EPA scrutiny and for which permit compliance will be assessed will be those disrepairs or malfunctions contributing to water quality degradation and/or hampering water quality improvements. The District may define "good repair" or use any other metric believed to adequately characterize outfall condition relevant to water quality.
3. Development of the schedule can include consideration of affordability and prioritizing repairs most needed for water quality improvement. The District may propose different interim and final deadlines than those included in the permit, so long as it supports those deadlines with information about their appropriateness.
4. EPA clarifies the following permit requirement: "The repair schedule shall be fully implemented upon EPA approval," means that the District shall *begin* implementation of the schedule when EPA grants approval.



If you have any additional questions please contact me or Jenny Molloy of my staff at (215) 837-8011.

Sincerely,


for Jon M. Capacasa, Director
Water Protection Division



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

DEC 20 2011

Dr. Hamid Karimi, Deputy Director
District Department of the Environment
1220 First Street N.E.
Washington, D.C. 20002

Re: Notification of Stayed Permit Conditions, District of Columbia
Municipal Separate Storm Sewer System Permit
NPDES Permit No. DC0000221
EAB Appeal Nos. NPDES 11-05, NPDES 11-06

Dear *Hamid* Dr. Karimi:

As you likely are aware, EPA reissued the National Pollutant Discharge Elimination System (NPDES) permit DC0000221 (the Permit) to the Government of the District of Columbia on September 30, 2011, with an effective date of October 7, 2011. On November 4, 2011, Friends of the Earth, Anacostia Riverkeeper, Potomac Riverkeeper and Natural Resources Defense Council filed a petition for review of the Permit with the Environmental Appeals Board (EAB). On the same date, the District of Columbia Water and Sewer Authority and the Wet Weather Partnership filed a separate petition for review.

This letter serves as notification pursuant to 40 C.F.R. § 124.16(a)(2) and 124.60(b) of those permit conditions that are stayed as a result of those Petitions for Review until final agency action under 40 C.F.R. § 124.19(f). Unless otherwise indicated, each of the below sections or subsections is stayed in its entirety, but the stay extends only to the section or subsection indicated (e.g., the stay of subsection 4.10.3 does not extend to other subsections such as 4.10.1, etc.):

Section 1.4 (Discharge Limitations) is stayed in part – specifically:

- Subsection 1.4.1 is stayed;
- Subsection 1.4.2 is stayed; and
- The last sentence of Section 1.4 (“Compliance with the performance standards and provisions contained in Parts 2 through 8 of this permit shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term.”) is stayed.

The remainder of Section 1.4 is not stayed.

Subsection 2.3.1 (Stormwater Management Program Administration/Permittee Responsibilities) is stayed only to the extent that it refers to the “DC Water and Sewer Authority (DC Water)”.

Subsection 4.3.1.3 (SSO reporting) is stayed only to the extent that it requires the Permittee to notify the public within 24 hours when the sanitary sewer overflows to the MS4.

Subsection 4.10.3 (Consolidated TMDL Implementation Plan) is stayed.

Section 4.11 (Additional Pollutant Sources) is stayed.

Subsection 5.1.1 (Design of the Revised Monitoring Program) One sentence of this provision is stayed, which sentence is indicated in strikethrough font as follows:
"3. Include any additional necessary monitoring for purposes of source identification and wasteload allocation tracking. ~~This strategy must align with the Consolidated TMDL Implementation Plan required in Part 4.10.3~~ For all pollutants in Table 4 monitoring must be adequate to determine if relevant WLAs are being attained within specified timeframes in order to make modifications to relevant management programs, as necessary."

The remainder of the Permit conditions are uncontested and severable from the contested conditions and, in accordance with 40 C.F.R. Sections 124.16(a)(2), 124.20(d), and 124.60(b)(5), will become fully effective and enforceable 33 days after this notice is mailed.

By way of its Order dated November 29, 2011, the EAB requested additional briefing on various questions related to who is representing the Government of the District of Columbia in this matter, DC Water's legal authority to file a petition challenging the Permit, and other related issues. Should EPA determine, as a result of that additional briefing, that Permit conditions other than those identified in this letter are contested and/or unseverable from contested Permit conditions, EPA will notify the EAB, the applicant, and all other interested parties of its determination as soon as possible.

Sincerely,



Jon M. Capacasa, Director
Water Protection Division

cc: Environmental Appeals Board
Alan Barak, Esq.
Paul Calamita, Esq.
Jennifer Chavez, Esq.
Rebecca Hammer, Esq.
Amy E. McDonnell, Esq.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Mr. Jeffrey Seltzer, Associate Director
Stormwater Management Division
District Department of the Environment
1200 First Street, N.E. 5th Floor
Washington, D.C. 20002

JAN 31 2012

Re: Clarification of Effective Dates of the Final District of Columbia Phase I Municipal Separate Storm Sewer System Permit, Subsequent to Notification of Stayed Permit Conditions
Permit Number DC0000221
EAB Appeal Nos. NPDES 11-05, NPDES 11-06

Dear Mr. Seltzer:

The U.S. Environmental Protection Agency (EPA) sent a letter dated December 20, 2011 to the District Department of the Environment (DDOE) outlining which conditions of the above-referenced DC MS4 Permit are stayed as a result of the pending petitions for review of that permit. This letter is to clarify the effective dates of the DC MS4 Permit, which may have been affected by the December 20, 2011 letter.

Pursuant to 40 C.F.R. Sections 124.16(a)(2), 124.20(d), and 124.60(b)(5), and as noted in the December 20, 2011 letter, all portions of the DC MS4 Permit that are not specifically identified in that letter as stayed will be effective thirty-three (33) days after the date of that letter. As thirty-three days from December 20, 2011 is January 22, 2012, all conditions of the DC MS4 Permit not specifically identified in the December 20, 2011 letter as stayed will become effective on January 22, 2012, and the deadlines contained in those conditions will run from that date. As a result, if a deadline in the DC MS4 Permit is triggered by the lapse of a certain amount of time (e.g., a permit deliverable is due "three months after the effective date of the permit"), then the due date for that provision will be calculated based on an effective date of January 22, 2012.

If you have any questions or comments regarding this letter, please do not hesitate to contact me or Jennifer Molloy of my staff at 214-837-8011.

Sincerely,


Evelyn S. MacKnight, Chief
NPDES Permits Branch



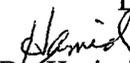


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

FEB 11 2013

Dr. Hamid Karimi, Deputy Director
District Department of the Environment
1200 First Street N.E., 5th Floor
Washington, D.C. 20002

Re: Notification of Stayed Permit Conditions, District of Columbia
Municipal Separate Storm Sewer System Permit,
NPDES Permit No. DC0000221
EAB Appeal Nos. NPDES 11-05, 11-06


Dear Dr. Karimi:

As you likely are aware, the Environmental Protection Agency (EPA) reissued the National Pollutant Discharge Elimination System (NPDES) permit DC0000221 (the Permit) to the Government of the District of Columbia on September 30, 2011, with an effective date of October 7, 2011. On November 4, 2011, Friends of the Earth, Anacostia Riverkeeper, Potomac Riverkeeper and Natural Resources Defense Council filed a petition for review of the Permit with EPA's Environmental Appeals Board (EAB), docketed as NPDES 11-06. On the same date, the District of Columbia Water and Sewer Authority and the Wet Weather Partnership filed a second petition for review, docketed as NPDES 11-05. As a result of these appeals, certain provisions of the reissued Permit were stayed, and the remaining provisions of the Permit became effective on January 22, 2012.¹

On November 9, 2012, the EPA issued a limited modification to the Permit in which certain of the stayed provisions were withdrawn and replaced, effective as of the same date. On November 16, 2012, the EAB dismissed NPDES 11-06. On January 14, 2013, the EAB also dismissed NPDES 11-05.

This letter serves as notification pursuant to 40 C.F.R. sections 124.16(a)(2) and 124.60(b) that all Permit provisions stayed as a result of the appeals are no longer stayed. In addition, this letter provides notification of the effective date of each such provision, as well as the effective date of the revised Permit provisions.

¹ See, Letter of December 20, 2011 to Dr. Hamid Karimi, Deputy Director, District Department of the Environment (DDOE), from Jon M. Capacasa, Director, EPA Region 3 Water Protection Division (WPD); Letter of December 22, 2011 to Jeffery Seltzer, Associate Director, Stormwater Management Division, DDOE, from Evelyn S. MacKnight, Chief, NPDES Permits Branch, WPD. These letters, and the Permit Modification of November 9, 2012, are available at <http://www.epa.gov/reg3wapd/npdes/dcpermits.htm>.

Effective Date: November 9, 2012

The following Permit provisions are no longer stayed because, by way of its limited Permit modification, the EPA withdrew them pursuant to 40 C.F.R. 124.19(d) and replaced them with modified provisions. Accordingly, the effective date for the following provisions is November 9, 2012:

- Section 1.4 (Discharge Limitations), last sentence (“Compliance with the provisions contained in Parts 2 through 8 of this permit, including milestones and final dates for attainment of applicable WLAs, shall constitute adequate progress toward compliance with DCWQS and WLAs for this permit term.”);
- Subsection 4.3.1.3 (SSO Reporting);
- Subsection 4.10.3 (Consolidated TMDL Implementation Plan); and
- Subsection 5.1.1 (Design of the Revised Monitoring Program).

Effective Date: November 16, 2012

The following Permit provisions are no longer stayed as a result of the EAB’s dismissal of NPDES 11-06, which qualifies as a final agency action under 40 C.F.R. 124.19(f)(1). Accordingly, the effective date for the following provisions is November 16, 2012:

- Subsection 1.4.1; and
- Subsection 1.4.2.

Effective Date: January 14, 2013

The following Permit provisions are no longer stayed as a result of the EAB’s dismissal of NPDES 11-05, which qualifies as a final agency action under 40 C.F.R. 124.19(f)(1). Accordingly, the effective date for the following provisions is January 14, 2013:

- Subsection 2.3.1 (Stormwater Management Program Administration/Permittee Responsibilities), to the extent that it refers to the “DC Water and Sewer Authority (DC Water)”; and
- Section 4.11 (Additional Pollutant Sources)

If you have any questions on this, please contact Kaitlyn Bendik of my staff or me.

Sincerely,



Jon M. Capacasa, Director
Water Protection Division

cc: Environmental Appeals Board
Alan Barak, Esq.
Paul Calamita, Esq.
Jennifer Chavez, Esq.
Rebecca Hammer, Esq.
Amy E. McDonnell, Esq.

Appendix C: INSPECTION FORM

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Outfall Repairs:

Describe Repair Approach:

Sketch outfall problem. Include critical dimensions for cost estimating:

Appendix D: FINAL INSPECTION SCHEDULE

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Attachment 1

TENTATIVE INSPECTION SCHEDULE

Week ¹	Week #	Location	Number of Outfalls	Status	Access Notification	GIS Drawing Sheet No.
11/5-11/9	1	Southeast DC	42	Done	No Restrictions	Subdivision H and G
11/12-11/16	2	Southern DC	22	Done	No Restrictions	Subdivision I
11/12-11/16	2	East DC	31	Done	No Restrictions	Subdivision F
11/19-11-21	3	East DC	11	Done	No Restrictions	Subdivision E
11/19-11-21	3	East DC	12	Done	No Restrictions	Subdivision C
11/19-11-21	4	North and West DC	17	Done	No Restrictions	Subdivisions A and B
12/3-12/7	5	North Portal Park	9	Done	ROCR	A4-A8
12/3-12/7	5	Beach Parkway	18	Done	ROCR	A1-A14
12/3-12/7	5	Rock Creek Park	4	Done	ROCR	A17 and A18
12/3-12/7	5	Rock Creek Park	1	Done	ROCR	A15
12/3-12/7	5	Pinehurst Parkway	14	Done	ROCR	A19-A22
12/3-12/7	5	Rock Creek Park	4	Done	ROCR	A23-A26
12/3-12/7	5	Rock Creek Park	16	Done	ROCR	A29-A40
12/10-12/14	6	Rock Creek Park	16	Done	ROCR	A27-B16
12/10-12/14	6	Soapstone Valley	9	Done	ROCR	B10-B20
12/10-12/14	6	Melvin C Hazen Park	11	Done	ROCR	B23-B26
12/10-12/14	6	Rock Creek Park	32	Done	ROCR	B29-B45
12/17-12/21	7	Rock Creek Park	1	Done	ROCR	B77
12/17-12/21	7	Rock Creek Park	31	Done	ROCR	B56-D7
12/17-12/21	7	Glover Park	12	Done	ROCR	B22-D1
12/17-12/21	7	Fort Circle Park	13	Done	ROCR	B60-C1
12/10 -12/14	9	NATIONAL ZOO ⁸	5	Done	Coordination Needed	B52-B63
12/10 -12/14	9	NATIONAL ARBORETUM ⁹	7	Done	Coordination Needed	E4-E5
12/10 -12/14	11	CATHOLIC UNIVERSITY	2	Done	Coordination Needed	C4
12/26 -1/4	8	In the canal ³	43	Done	CHOH	B43-D29
12/26 - 1/4	8	Whitehurst Fwy	1	Done	CHOH	D36
1/3	11	DC POLICE TRAINING	2	Done	Coordination Needed	I42 and I45
1/3	11	DC VILLAGE LN	3	Done	Coordination Needed	I49
1/3	11	HAMEL BUILDERS	1	Done	Coordination Needed	H54
1/3	11	LT J P KENNEDY INSTITUTE	1	Done	Coordination Needed	C3
1/4	11	MARSHALL ELEMENTARY	1	Done	Coordination Needed	C16
1/4	11	POLICE AND CONCRETE	1	Done	Coordination Needed	H30
1/7	9	BOLLING AFB - Site ²	3	Done	Coordination Needed	I24-I19
1/7	9	Tidal Pool	11	1 remains	NACC/NAMA ⁷	D50-D55
1/7	11	MARINA NEAR NAMA ⁵	15		Coordination Needed	D54-G14
1/7	11	DALECARLIA RESERVOIR	2	Done	Coordination Needed	B25 and B19
1/7	11	McMILLAN RESERVOIR	1	Done	Coordination Needed	C14
1/8-1/18	10	Oxon Run Parkway	12	Done	NACE ⁶	I39-I52
1/8-1/18	10	Anacostia Park	12	Done	NACE ⁶	E32-H7
1/8-1/18	10	Fort Dupont ⁴ and Circle Parks	29	Done	NACE ⁶	H1-H60
1/8-1/18	10	Fort Circle Park	4	Done	NACE ⁶	E36-E45
1/8-1/18	10	Anacostia Park	12	Done	NACE ⁶	E18-E19
1/8-1/18	10	Anacostia Park	5	Done	NACE ⁶	E8-E10
1/8-1/18	11	DDOT HIGHWAYS	28	2 remain	Need Access	I29-F1
1/28-2/1	9	BOLLING AFB - BOAT	15		Coordination Needed	I24-G27
1/28 - 2/1	12	BOAT INSPECTIONS	77	Partial	Various Park Units	D23-E33
	13	Redo inspections	50			
Scheduled Inspections Completed (of the original 680)			545			
Outfalls Added to Program			97			
Total Inspections Completed to Date			642	1/15/1013		
Outfall Inspections Remaining			135			

1. Dates are approximate and subject to change pending staff availability and weather conditions.

2. Ken to contact Jason Bullinger, Utility Branch Head, Joint Base Anacostia Bolling, 202-767-8617; they will need to set up someone to escort us around the base.
3. Ken to contact Mr. Leigh Zahm, Park Permits Coordinator, C&O Canal NHP, O: (301) 745-5815, C: (301) 491-6267. Wear uniforms, reflective vests and provide photo identification. Call US Park Police dispatch contact number to report incidents occurring in the park. Provide 5-day notice of when actual inspections will take place.
4. For location, Map search "Fort Dupont Drive, SE Washington D.C." This will put you in the Park on Fort Dupont Drive. The Activity Center is the only building on Fort Dupont Drive. Ken to contact Kevin F. Barry, Park Ranger, National Capital Parks-East, Fort Dupont Park, 3600 F St SE, Washington, D.C. 20020, Phone 202-426-7723
5. Jonas to get contact information from the marina and let Ken know to whom and where to send letter.
6. The visual inspection of DC Water outfalls on lands of National Capital Parks-East ("NACE") as shown on the attached plans, is APPROVED under "blanket" permit NCR-HOH-NAMA-NACE-ROCR-6000-11-001, subject to the conditions detailed below. Ken to coordinate these field visits with park staff. For NACE sites within Fort Dupont Park and Fort Circle Park, Ken to coordinate with Kevin F. Barry, phone 202-426-7723. For Oxon Run Parkway and Anacostia Park sites, Ken to contact Jim Rosenstock, Park Ranger, 202-690-5161. No vehicles off of paved surfaces, no soil disturbance or cutting of vegetation. Any access requiring minor exceptions to this standard MUST be directly coordinated with on-site park staff. Prior to the start of inspections, I want to meet briefly with you, Ranger Barry, and the field representative who will be supervising the on-site work. Project personnel MUST have a copy of the "blanket" permit as well as the authorizing email on hand whenever working on park land.
7. Ken to contact Alice McLarty to coordinate site visits. If crews will be simply walking around, using a camera and other handheld equipment, not opening manholes, not digging in the ground, not stopping traffic, and not being in any road, then you don't need a permit. If you find you need help removing vegetation in order to do your work at any particular outfall, let Alice know and she will get someone to assist. Vehicles must be parked in legal, publicly available parking spaces. Do NOT simply pull up into grass areas! If you need help in this regard, let Alice or Jorge Alvarez know and they will advise.
8. Ken to contact Marc Muller prior to access at mullerm@si.edu, Office 202.633.4410 Cell 202.345.9007.
9. Ken Craft to provide notification to Sue Greely, US National Arboretum prior to inspections

Appendix E: SAMPLE ACCESS NOTIFICATION LETTER AND NPS BLANKET PERMIT

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DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY | 5000 OVERLOOK AVENUE, SW | WASHINGTON, DC 20032

November 16, 2012

Mr. Jim Rosenstock, Park Ranger
U.S. Department of the Interior
National Capital Parks – East
1900 Anacostia Dr., SE
Washington, DC 20020-6722

Re: Inspections of Storm Water Outfalls on National Park Services Properties

Dear Mr. Rosenstock:

DC Water is required to inspect and develop a repair schedule for the District of Columbia's storm water outfalls located in the MS4 area by June 2013, (see attachment 2 for the outfall overview map), as part of provisions 4.3.5.3 under NPDES Permit DC0000221 – Municipal Separate Storm Sewer System (MS4). As shown on attachment 2, many of the storm water outfalls are located on National Park Service Properties (NPS). This letter is to give advance notice and to respectfully request permission from the NPS to inspect the outfalls located on NPS property. DC Water has also attached to this letter a tentative schedule of when we plan to inspect the storm water outfalls located on the associated areas (see attachment 1). In addition, a number of outfalls are located on the Potomac and Anacostia water bodies in which DC Water plans to inspect by use of a boat (see attachment 3).

Upon receipt of your general approval, we will provide 5-days advanced notice prior to beginning the outfall inspections so that arrangements can be made for a National Park Service representative to be present if required. We would also like to note in this letter, many of the outfalls may be covered by vines, shrubs, etc. In order for DC Water to get an accurate assessment of the storm water outfall structures, (i.e., photographs), the vines and shrubs will need to be cleared. We would like a National Park Service representative to be present to help facilitate this effort if required. As the inspections occur, we will compile a list of outfalls that require minor clearing or hand trimming of any vegetation and will return to that outfall after proper coordination with NPS representative.

Please let me know if you have any questions. Planning staff are available to meet with you and you colleagues in the field. Please contact Kenneth G. Craft, Jr for follow-up. Kenneth is working with William Elledge (also of Planning) on this task. Kenneth can be reached at 202-787-2483 or by email at Kenneth.craft@dcwater.com. William can be reached at 202-787-2730 or by email at William.elledge@dcwater.com.

Sincerely,

Jodye Levy Russell
Manager
Planning Branch

Encl.: Attachment 1 – Tentative Inspection Schedule

Attachment 2 – MS4 Inspections Overview Map of Outfalls
Attachment 3 – Boat Inspection Map

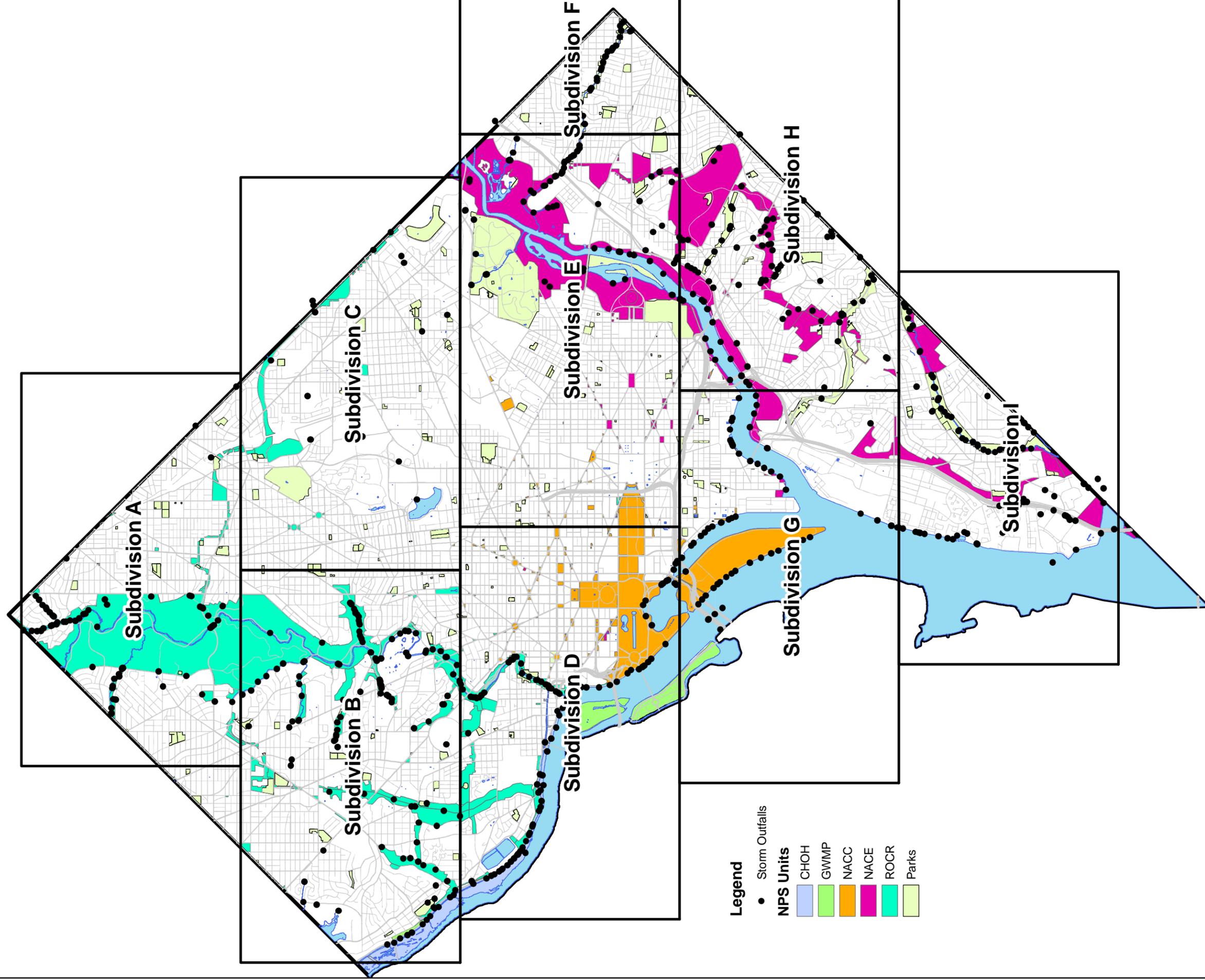
cc: K.Craft, Jr
W. Elledge
B. Lucas

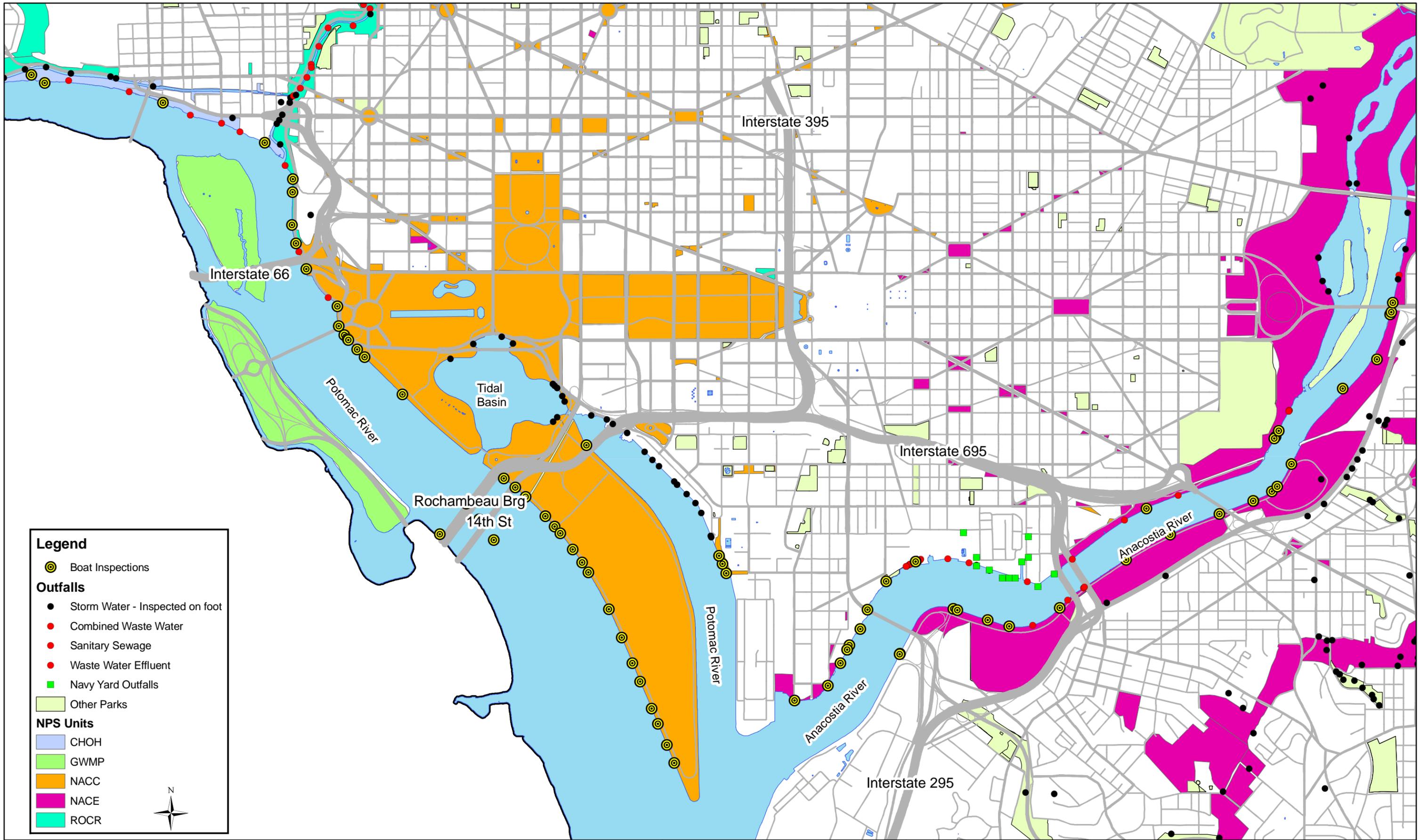
Attachment 1

TENTATIVE INSPECTION SCHEDULE

Week *	Location	Number of Outfalls	Category	Sheets
11/5-11/9	Southeast DC	46	No Restrictions	Subdivision H and G
11/12-11/16	Southern DC	27	No Restrictions	Subdivision I
11/12-11/16	East DC	31	No Restrictions	Subdivision F
11/19-11-21	East DC	11	No Restrictions	Subdivision E
11/19-11-21	East DC	14	No Restrictions	Subdivision C
11/19-11-21	North and West DC	22	No Restrictions	Subdivisions A and B
12/3-12/7	North Portal Park	9	ROCR	A4-A8
12/3-12/7	Beach Parkway	18	ROCR	A1-A14
12/3-12/7	Rock Creek Park	4	ROCR	A17 and A18
12/3-12/7	Rock Creek Park	1	ROCR	A15
12/3-12/7	Pinehurst Parkwat	14	ROCR	A19-A22
12/3-12/7	Rock Creek Park	4	ROCR	A23-A26
12/3-12/7	Rock Creek Park	16	ROCR	A29-A40
12/10-12/14	Rock Creek Park	16	ROCR	A27-B16
12/10-12/14	Soapstone Valley	9	ROCR	B10-B20
12/10-12/14	Melvin C Hazen Park	11	ROCR	B23-B26
12/10-12/14	Rock Creek Park	32	ROCR	B29-B45
12/17-12/21	Rock Creek Park	1	ROCR	B77
12/17-12/21	Rock Creek Park	31	ROCR	B56-D7
12/17-12/21	Glover Park	12	ROCR	B22-D1
12/17-12/21	Fort Circle Park	13	ROCR	B60-C1
12/26-1/4	Oxon Run Parkway	12	NACE	I39-I52
12/26-1/4	Anacostia Park	12	NACE	E32-H7
12/26-1/4	Fort Dupont and Circle Parks	29	NACE	H1-H60
12/26-1/4	Fort Circle Park	4	NACE	E36-E45
12/26-1/4	Anacostia Park	12	NACE	E18-E19
12/26-1/4	Anacostia Park	5	NACE	E8-E10
1/7-1/11	In the canal	43	CHOH	B43-D29
1/7-1/11	Whitehurst Fwy	1	CHOH	D36
1/14-1/18	Tidal Pool	11	NACC/NAMA	D50-D55
1/14-1/18	NATIONAL ZOO	5	Coordination Needed	B52-B63
1/14-1/18	MARINA NEAR NAMA	15	Coordination Needed	D54-G14
1/14-1/18	NATIONAL ARBORETUM	7	Coordination Needed	E4-E5
1/14-1/18	CATHOLIC UNIVERSITY	2	Coordination Needed	C4
1/14-1/18	MARSHALL ELEMENTARY	1	Coordination Needed	C16
11/26-11/30	BOAT INSPECTIONS	77	Various Park Units	D23-E33
1/21-1/25	DDOT HIGHWAYS	30	Need Access	I29-F1
	BOLLING AFB - Site	3	Coordination Needed	I24-I19
	BOLLING AFB - BOAT	15	Coordination Needed	I24-G27
	Inspections Completed	46		

* Dates are approximate and subject to change pending staff availability and weather conditions.





Legend

- ⊙ Boat Inspections

Outfalls

- Storm Water - Inspected on foot
- Combined Waste Water
- Sanitary Sewage
- Waste Water Effluent
- Navy Yard Outfalls

NPS Units

- Other Parks
- CHOH
- GWMP
- NACC
- NACE
- ROCR



Attachment 3
MS4 Outfall Boat Inspections

DATE: Oct 25, 2012
 SCALE: 1 in = 2,100 ft

DRAWN BY: NSJ

REV NO	DESCRIPTION	BY	DATE

UNITED STATES DEPARTMENT OF THE INTERIOR
National Park Service
National Capital Region
Special Use Permit

NAME: Leonard R. Benson, Chief Engineer
ORGANIZATION: District of Columbia Water and Sewer Authority (dba DC Water)
ADDRESS: 5000 Overlook Avenue, S.W. Washington, D.C. 20032
TELEPHONE: 202-787-2000 (main number) 202-787-2358 (direct line)

Park Alpha Code:
3100/3300/3400/3953/3450/3500
Type of Use: Other
Permit No: NCR-6000-11-001

Is hereby authorized to use the following described land or facilities:

Chesapeake and Ohio Canal National Historical Park (CHOH)
George Washington Memorial Parkway (GWMP)
National Mall and Memorial Parks (NAMA)
President's Park (PRPA)
National Capital Parks-East (NACE)
Rock Creek Park (ROCR)

The permit begins at 12:01 am on June 30, 2011

The permit expires at 12:00 am on June 30, 2016

For the Purpose of: Surveying, inspecting and monitoring existing water and sewer infrastructure on specified parklands, to include manhole/pipeline inspections, condition assessments, and installation of flow meters for below-grade facilities. The location of related structures and facilities are depicted in NPS Drawing Nos. 802_108057 and 802_108058 (attached herein). Infrastructure includes catch basins/inlets, pipelines, manholes, valve casings and other water and sewer structures. **Note:** all activities are subject to the attached conditions and require advance scheduling with staff of the affected parkland.

Permittee Point of Contact: Persons named below are responsible for adherence to permit conditions and have authority to direct all individuals, groups, contractors, or others involved with the permit.

DC Water Primary Contact: **Barry Lucas, Sewer Program Manager, 202-787-2396**

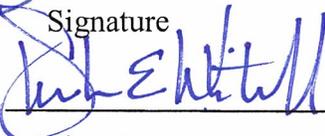
DC Water Secondary Contact: **Getachew Melsew, Water Program Manager, 202-787-2132**

Authorizing legislation or other authority: 16 USC § 1 et seq.

NEPA Compliance: CATEGORICALLY EXCLUDED EA/FONSI EIS

APPLICATION FEE Received Not Required Amount \$ _____
PERFORMANCE BOND: Required Not Required Amount \$ _____
LIABILITY INSURANCE: Required Not Required Amount \$ see condition 8
COST RECOVERY: Required Not Required Amount \$ see condition 9
FACILITY USE FEE: Required Not Required Amount \$ _____
LOCATION FEE: Required Not Required Amount \$ _____

ISSUANCE of this permit is subject to the attached conditions. The undersigned hereby accepts this permit subject to the terms, covenants, obligations and reservations, expressed or implied herein.

PERMITTEE		<u>Chf Engr</u>	<u>10-27-11</u>
	Signature	Title	Date
Authorizing NPS Official		Regional Director	<u>10.21.11</u>
	Signature	Regional Director	Date

[Permit conditions to follow on subsequent page(s)]

GENERAL CONDITIONS

1. Privilege - The Permittee shall exercise this privilege subject to the supervision of the Regional Director, and shall comply with all applicable laws and regulations of the area.
2. Damages - The Permittee shall pay the United States for any damage resulting from this use which would not reasonably be inherent in the use which the Permittee is authorized as described in this permit.
3. Benefit – Neither Members of, nor Delegates to Congress, or Resident Commissioners shall be admitted to any share or part of this permit or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this grant if made with a corporation for its general benefit.
4. Assignment - This permit may not be transferred or assigned without the written consent of the Regional Director (or delegate).
5. Revocation - This permit may be terminated upon breach of any of the conditions herein or at the discretion of the Regional Director (or delegate).
6. Full disclosure - The Permittee is prohibited from giving false information; to do so will be considered a breach of conditions and be grounds for revocation [Re: 36 CFR 2.32(a)(3)].
7. Health code - The Permittee will comply with applicable public health and sanitation standards and codes.
8. Hold Harmless/Indemnification - This agreement is made upon the express condition that the United States, its agents and employees shall be free from all liabilities and claims for damages and/or suits for or by reason of any injury, injuries, or death to any person or persons or property of any kind whatsoever, whether to the person or property of the Permittee, its agents or employees, or third parties, from any cause or causes whatsoever while in or upon said premises or any part thereof during the term of this agreement or occasioned by any occupancy or use of said premises or any activity carried on by the Permittee in connection herewith, and the Permittee hereby covenants and agrees to indemnify, defend, save and hold harmless the United States, its agents, and employees from all liabilities, charges, expenses and costs on account of or by reason of any such injuries, deaths, liabilities, claims, suits or losses however occurring or damages growing out of the same.
To the extent that the work is performed by other than DC Water personnel, the Permittee shall require such persons or organizations to:
 - a) Procure public and employee liability insurance from responsible companies with a minimum limitation of \$1,000,000 (one million dollars) per person for any one claim and an aggregate limit of \$3,000,000 (three million dollars) for any number of claims arising from any one

incident, or the minimum required by law, if any, whichever amount is greater. The United States of America shall be named as an additional insured on all policies. The permit number (NCR-9500-11-001) will be included on said policy. All such policies shall specify that the insured shall have no right of subrogation against the United States for payments of any premiums or deductibles, thereunder, and such insurance policies shall be obtained by, be for the account of and be at the insured's sole risk. Copies of certificates of insurance shall be provided to the NPS at the time of the corresponding project.

- b) Pay the United States the full value for all damages to the lands or other property of the United States caused by the said person or organization, its representatives, or employees.
- c) Indemnify, save and hold harmless and defend the United States against all fines, claims, damages, losses, judgments and expenses arising out of, or from any omission or activity in connection with activity of the said person or organization, its representatives, or employees.

9. Anti-Deficiency Limitations: The obligations of DC Water to fulfill financial obligations pursuant to this Permit (including DC Water's indemnity) are and shall remain subject to the provisions of (i) the federal Anti-Deficiency Act, 31 U.S.C. §§ 1341, 1342, 1349-1351, 1511-1519 (2004), and D.C. Official Code §§ 1-206.03 (e) and 47-105 (2001); (ii) the District of Columbia Anti-Deficiency Act, D.C. Official Code §§ 47-355.01-355.08 (2006 Repl.) ((i) and (ii) collectively, as amended from time to time, the "Anti-Deficiency Acts"); and (iii) Section 446 of the District of Columbia Home Rule Act, D.C. Official Code §§ 1-204.46 (2001). Pursuant to the Anti-Deficiency Acts, nothing in this Permit shall create an obligation of DC Water in anticipation of an appropriation by Congress for such purpose, and DC Water's legal liability for the payment of any amounts under this Permit shall not arise or obtain in advance of the lawful availability of appropriated funds for the applicable fiscal year as approved by Congress. This Permit shall not constitute an indebtedness of DC Water nor shall it constitute an obligation for which DC Water is obligated to levy or pledge any form of taxation or for which DC Water has pledged any form of taxation. No DC Water official or employee is authorized to obligate or expend any amount under this Permit unless such amount has been appropriated by act of Congress and is lawfully available.

10. Cost Recovery - The Permittee is responsible for costs incurred by the NPS for providing necessary services associated with activities authorized under this permit. The NPS will notify the Permittee in advance if there is a need for cost recovery. Under the authority to recover and retain costs associated with managing special park uses (16 U.S.C. 3a), charges are intended to recover costs associated with managing the activity and not to generate revenue beyond actual cost. The Permittee shall make such payments for cost recovery, as directed by the NPS at the time of the corresponding project.

ADDITIONAL TERMS AND CONDITIONS OF THIS PERMIT

11. No construction is authorized under this permit.
12. This permit authorizes *non-intrusive* activities only. Any disturbance of soils requires advance authorization; more than minimal disturbance shall require separate permitting. The determination regarding the extent of any disturbance shall be in the sole discretion of the respective park Superintendent (or delegate).
13. No vegetation on parkland may be cut or destroyed without first obtaining advance written authorization from the respective park Superintendent (or delegate). If authorized, work impacting vegetation shall be mitigated as follows:
 - a) Each tree located within the limits of disturbance, or in the immediate vicinity, with a diameter at breast height (dbh) of three-inches (3") or more will be encircled with wooden snow fencing along its drip line. Only hand tools may be used within the drip lines of these trees. Note, however, that for parklands in the downtown area (NAMA parklands) - there shall be no digging of any kind permitted within these drip lines, unless specifically authorized in writing by the NPS.
 - b) Damaged shrubs or trees will be replaced in kind. Tree size replacement will be on a one-to-one basis, dbh. Only trees approved by the NPS can be used. Permittee will be responsible for the maintenance of such replacement vegetation for one (1) year, following project completion.
 - c) All damaged turf areas will be restored with clean fill (including at a minimum a 6-inch (6") layer of top soil) and sod to establish a uniform stand of turf in accordance with the NPS-NCR "Turf Maintenance Specification" (available upon request).
14. Work is permitted between 8:00 am and 5:00 pm, Monday-Friday, excluding Federal holidays, unless otherwise authorized by respective park Superintendent (or delegate).
15. All survey stakes or markings shall be removed after needed data is recorded. No permanent or semi-permanent markings are authorized; temporary flagging is permitted.
16. Vehicles shall be kept to a minimum and restricted to paved surfaces or other areas designated by the NPS. For designated parking areas off-road, the NPS will notify the Permittee of any requirements for rigid decking, such as DuraDeck or similar material. Parked vehicles shall not block access to park areas and parkland. Employees' personal vehicles shall not be parked on parkland.
17. Any nearby bicycle/pedestrian trail or parking lot must remain open at all times.

18. Access to parkland shall not be undertaken during wet conditions or within forty-eight (48) hours after a rain event, unless authorized by respective park Superintendent (or delegate).
19. All work and access areas that are disturbed as a result of work performed under this Permit shall be immediately restored to the satisfaction of respective park Superintendent (or delegate) at the Permittee's expense.
20. The Permittee shall be responsible for the provision and maintenance of proper signs, barricades or other means of warning motorists and pedestrians of danger during all periods of activity on parkland. Any traffic control measures shall be in accord with the Manual of Uniform Traffic Control Devices.
21. The Permittee will be responsible for locating all utility lines on NPS property in the vicinity of the Permittee's water and sewer infrastructure in advance of the work, to avoid damages to the facilities. If any underground utilities are damaged or disrupted by the work, they shall be repaired or restored by the Permittee, at its expense. Initiation of repairs shall begin within four (4) hours and completed as rapidly as is technically feasible.
22. Use of pesticides and/or herbicides on parklands is prohibited without prior written approval by respective park Superintendent (or delegate).
23. The Permittee shall exercise this privilege subject to the supervision of the respective park Superintendent (or delegate) with all applicable Federal, State, county and municipal laws, ordinances, regulations, and the terms and conditions of this permit. Failure to do so may result in the immediate suspension of the permitted activity or the termination of the permit.
24. The Permittee shall have received all necessary permits required by outside agencies for work to be performed under this permit, and copies shall be available to the NPS upon request.
25. Authority to carry out activities in any one of the affected parks may be revoked at the discretion of that park's Superintendent (or delegate), upon twenty-four (24) hour notice, or without notice if damage to resources or facilities occurs or is threatened, notwithstanding any other term or condition of the permit to the contrary. All costs associated with clean up or damage repairs in conjunction with a terminated permit will be the responsibility of the Permittee.
26. Permittee hereby agrees to be fully responsible for the management, performance, use and safety of all operations conducted by or on behalf of the Permittee upon NPS administered property. All reasonable safety measures shall be installed and maintained where risks or potential hazards are likely or evident. If unsafe conditions or unexpected damages to park resources are evident,

the NPS reserves the right to halt all project work occurring on parkland until appropriate corrective measures can be taken.

27. All waste, litter and debris generated by the Permittee will be removed from parkland daily so that the park and work area are maintained in a clean and presentable condition at all times.
28. No temporary toilet facility (e.g., portable toilet) or orange fencing shall be present on park property, unless expressly requested by Permittee and respective park Superintendent (or delegate).
29. Spills - The Permittee assumes liability for all activities, releases, incidents and events caused by or associated with any permitted activity, including any and all releases and/or discharges of hazardous substances, petroleum products, and non-hazardous wastes into the environment resulting from project activities. The Permittee will assume responsibility for cost, repairs, and/or restoration to areas damaged by any such releases and discharges.
 - a) No refueling or maintenance of equipment on park property is permitted; neither is the storage of hazardous materials. To operate equipment requiring hazardous material (e.g., gasoline) on-site, an approved Spill Response Kit must be present at all times, and any personnel working at the site shall be trained in the use of the Kit. All spills of a contaminant or hazardous material must be immediately addressed, as outlined below.
 - b) In the event of any action or occurrence during the performance of the permitted activities, which causes or threatens a release of a hazardous substance into the environment that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, the Permittee shall immediately take all appropriate action to prevent, abate or minimize such release or threat of release, and shall immediately notify the U.S. Park Police Dispatch and the NPS Point of Contact (POC).
 - c) Nothing in the preceding paragraphs shall be deemed to limit any authority of the United States to take all appropriate action to protect human health and the environment or to prevent, abate, respond to or minimize an actual or threatened release of hazardous substances on, at or from the affected site. Nor to direct or order such action, or seek an order from the requisite Court, to protect human health and the environment or to prevent, abate, respond to or minimize an actual or threatened release of hazardous substances on, at or from the affected site.
 - d) "Hazardous substance" shall, for purposes of this Permit, be defined as including any material containing a "hazardous substance" pursuant to CERCLA section 101 (14), 42 USC section 9601 (14) or any petroleum product or waste.
30. The Permittee will provide to the NPS a copy of all Geographic Information System (GIS) information or any other survey information gathered on NPS lands, upon request.

31. Unanticipated Discoveries - throughout the term of this permit, the Permittee shall halt any activities and notify the respective park Superintendent (or delegate) upon discovery of threatened or endangered species or archeological, paleontological or historical findings. All artifacts unearthed shall remain the property of the NPS. Should the Permittee uncover what appears to be something of archeological significance, work will cease in the affected area to permit proper investigation of the find. The NPS will determine when work may resume.
32. The Permittee will maintain a copy of this Permit at the work site at all times.
33. Work not specified in this Permit shall not be performed without additional written permission from the respective park Superintendent (or delegate). Conducting any activities at sites not identified prior to the commencement of work, or performing activities outside the scope of this permit, is prohibited. Communication and scheduling information follows on the subsequent pages.
34. Communication and scheduling shall be as follows:
 - a) The NPS POC for the relevant park shall be notified in writing at least five (5) business days prior to the anticipated commencement of fieldwork. Greater advance notice (more than five (5) business days in advance) is encouraged to allow sufficient time for NPS review of the request prior to the anticipated start date. The DC Water project manager will provide a work schedule, contact information, and description of the activity.
 - b) The NPS POC will respond to the request. The NPS POC will inform DC Water of potential cost recovery charges. Prior to granting access, the NPS POC may require a pre-activity meeting to discuss equipment needs and options, staging, and access requirements. For access, consideration of unique circumstances, timing, or other factors may impact the decision of the NPS POC; however, the NPS will not unreasonably withhold permission for access. Examples of constraints on access include, but are not limited to, the following: President's Park will require security clearance arrangements, as well as a pre-activity meeting. Parklands of Rock Creek (ROCR) will also always require a pre-activity meeting. For some parklands (NAMA and ROCR), timing of access may be affected by the large volume of special events and/or ongoing construction.
 - c) The NPS POC will be notified upon completion of the work and, depending on the project, may require a post-project inspection, which DC Water must attend, and post-project mitigation to restore damaged resources, which DC Water must complete with all deliberate speed
 - d) DC Water shall provide oversight of all activities authorized under this permit, and shall ensure adherence to conditions by individuals, groups, contractors, or others acting on behalf of DC Water. The DC Water primary or secondary contact (below), or a delegate with the same authority (and contact information provided to the NPS), shall be available by phone during work on parkland.

DC Water contacts:

Primary contact: Barry Lucas, Sewer Program Manager (email: Barry.Lucas@dcwater.com, office 202-787-2396, cell 202-251-8588)

Secondary contact: Getachew Melsew, Water Program Manager (email: gmelsew@dcwater.com office 202-787-2132, Cell 240 441 2335)

NPS POCs:

C&O Canal (CHOH): Leigh Zahm (Leigh_Zahm@nps.gov, office 301-745-5815), additional contact Lynne Wigfield (Lynne_Wigfield@nps.gov, office 301-745-5802)
George Washington Memorial Parkway (GWMP): Pete McCallum (Pete_McCallum@nps.gov, office 703-289-2516, or GWMP HQ 703-289-2500)
National Mall and Memorial Parks (NAMA): Alice McLarty (Alice_McLarty@nps.gov, office 202-245-4686)
President's Park (PRPA): Scott Tucker (Scott_Tucker@nps.gov, office 202-208-1638)
National Capital Parks–East (NACE): Jim Rosenstock (James_Rosenstock@nps.gov, office 202-690-5161)
Rock Creek Park (ROCR): Michael Buckler (Michael_Buckler@nps.gov, office 202-895-6076)

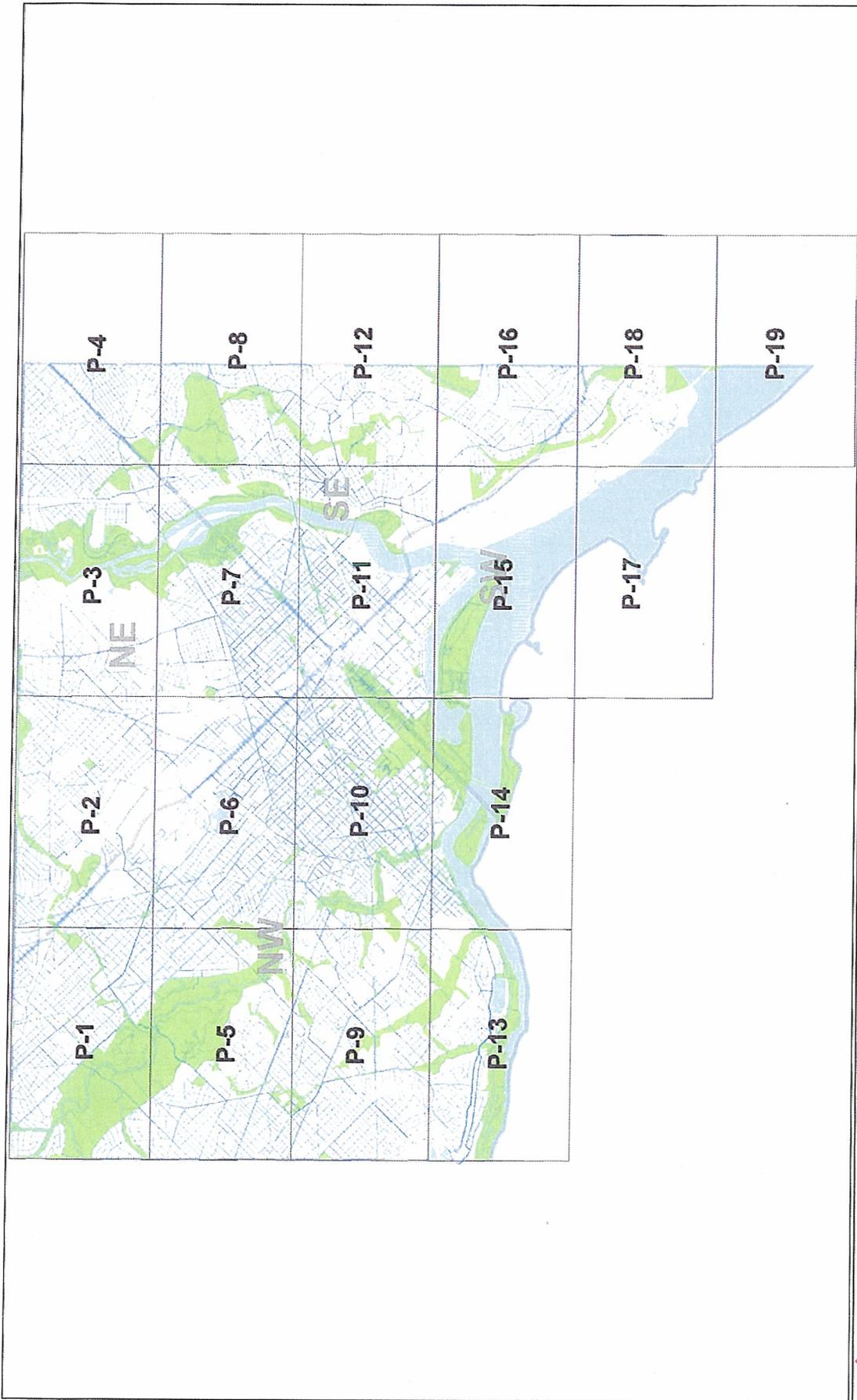
The Permittee shall comply with all instructions issued by the U.S. Park Police and the Superintendent (or delegate). Notify the U.S. Park Police, and then the NPS POC, in the event of emergencies, accidents, or injuries: **U.S. Park Police Dispatch at 202-610-7500.**

[End of permit conditions]

NPS DRAWING NUMBER 802_108057

WATER MAINS

on NPS lands in the District of Columbia
March 2010



CREATED BY : DC WASA / EPIC 3B
 DATE : March, 2010
 TITLE : DC WASA Water Mains on National Park Service Property

0 6,000 12,000 Feet

Water Mains
 National Capitol Region - NPS Property

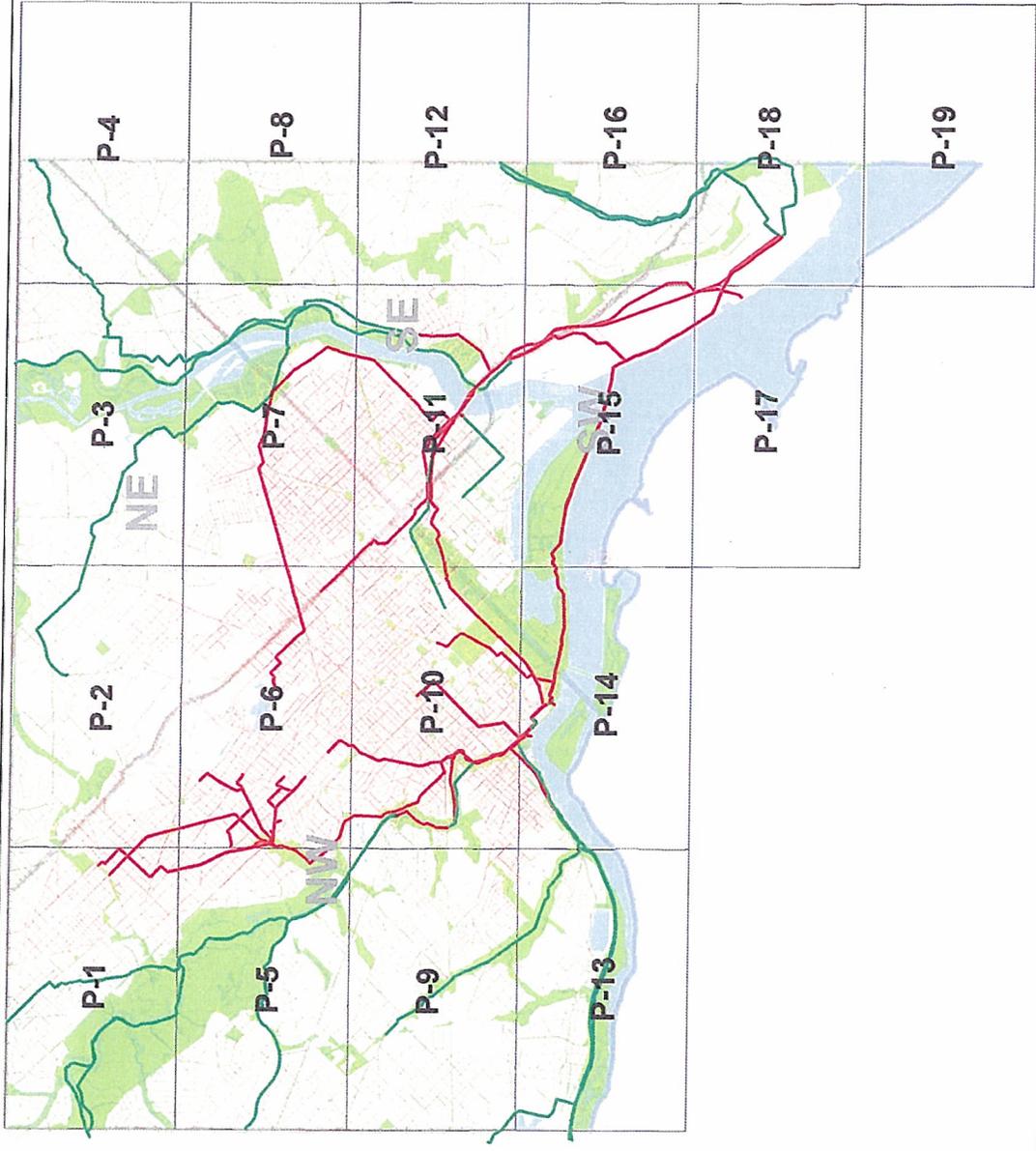
COVER SHEET

*NPS Drawing No
 802 - 108057*

NPS DRAWING NUMBER 802_108058

SEWER LINES

on NPS lands in the District of Columbia
March 2010



	CREATED BY : DC WASA / EPMC 3B DATE : March, 2010 TITLE : DC WASA Sewer Lines on National Park Service Property	0 6,000 12,000 Feet	Combined Interceptor Sewer Sanitary Interceptor Sewer National Capitol Region - NPS Property	COVER SHEET
	Scale bar showing 0, 6,000, and 12,000 feet.			
	Legend: <ul style="list-style-type: none"> Red line: Combined Interceptor Sewer Green line: Sanitary Interceptor Sewer Light green area: National Capitol Region - NPS Property 			

NPS Drawing No
802-108058

Appendix F: DDOE/DC WATER SCOPE OF WORK
AND MEMORANDUM OF UNDERSTANDING
(MOU)

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**MEMORANDUM OF UNDERSTANDING
BETWEEN
THE DISTRICT DEPARTMENT OF THE ENVIRONMENT
AND
THE DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY**

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I. INTRODUCTION AND PURPOSE

This Memorandum of Understanding (“MOU”) is entered into by and between the District Department of the Environment (“DDOE”) and the District of Columbia Water and Sewer Authority (“DC Water”) collectively referred to herein as the “Parties.”

DDOE has requested the services of DC Water to clean and maintain water quality catch basins, develop an outfall inspection and repair schedule, and develop an optimized catch basin cleaning and maintenance plan, as described in Attachments A, B, C, and D (each called a “Project,” and collectively called the “Projects”). DC Water requests funding assistance from the MS4 Enterprise Fund. Operating funding will solely be used for these projects.

II. PROGRAM GOALS AND OBJECTIVES

The goal of this MOU is to improve water quality in the Anacostia and Potomac Rivers for the benefit of District residents, visitors, wildlife and the environment.

The objectives of this MOU are to reduce stormwater pollutants entering the local waters (i.e., rivers, streams, estuaries) of the District of Columbia as required under the current applicable US

MOU DDOE and DC Water beginning in FY 2012

Environmental Protection Agency National Pollutant Discharge Elimination System (“NPDES”) Permit for the District’s municipal separate storm sewer system, (hereinafter “MS4 Permit”). The MS4 Permit obligates the District to clean and maintain catch basins; develop an optimal catch basin inspection, cleaning, and repair plan; and develop a MS4 outfall inspection and repair schedule to assist the District in meeting local surface water quality goals.

The strategies for implementing objectives for this MOU include DC Water serving as the service provider for the services identified in Section III.B.1. of this MOU. DDOE will serve as the funder and a technical consultant. DC Water will implement the Projects.

III. SCOPE OF SERVICES

DDOE and DC Water agree to do the following. The following are required in order to carry out the purposes of the MOU expeditiously and economically. Subsection A summarizes the services required of the parties, which are described in detail in subsection B:

A. Summary of Services

1. Services of DC Water

- a. Provide water quality catch basin maintenance services and reports.
- b. Develop an optimal catch basin inspection, cleaning, and repair plan.
- c. Develop stormwater outfall repair scope and schedule.
- d. Participate in and support the District’s MS4 Technical Working Group activities.

2. Services of DDOE

- a. Provide updated list of water quality catch basins.
- b. Provide funding.
- c. Act as technical consultants.
- d. Timely review reports and other transmittals.
- e. Coordinate with DC Water on the type and location of water quality catch basins installed within the MS4 area to ensure standardization to the maximum extent possible.

B. Services of the parties

1. Services of DC Water:

MOU DDOE and DC Water beginning in FY 2012

- a. Service #1: Provide water quality catch basin maintenance services and reports.
 - (1) DC Water shall clean and inspect each DDOE-identified water quality catch basin within the MS4 area at least once during each fiscal year. Cleaning and inspection shall be conducted in accordance with DDOE's standard operating procedure provided in Attachment B. DC Water shall provide at least 72 hours notice to DDOE prior to performing these services.
 - (2) Within one month of the end of the fiscal year DC Water shall provide a report of dates of cleaning and inspection and amount of sediment collected from each water quality catch basin cleaned and maintained under this MOU.
 - b. Service #2: Develop an optimal catch basin inspection, cleaning, and repair plan.
 - (1) DC Water shall develop a plan for optimal catch basin inspection, cleaning and repairs in accordance with the Project Scope of Work provided in Attachment C.
 - (2) DC Water shall provide DDOE with monthly updates of project status and budget.
 - c. Service #3: Develop stormwater outfall repair scope and schedule.
 - (1) DC Water shall develop a plan for stormwater outfall inspection and an outfall repair schedule in accordance with the Project Scope of Work provided in Attachment D.
 - (2) DC Water shall provide DDOE with monthly updates of project status and budget, by the 14th day of each month.
 - d. Service #4: DC Water shall participate in and support the District's MS4 Technical Working Group activities.
2. Services of DDOE
- a. Service # 1: Provide updated list of water quality catch basins: DDOE shall provide DC Water with an updated list of water quality catch basins located in the MS4 area by October 1st of each year.

MOU DDOE and DC Water beginning in FY 2012

- b. Service #2: Provide funding: DDOE shall provide DC Water with funding for the Projects listed in Attachment A, as stated in Part VI.
- c. Service #3: Act as technical consultants.
- d. Service #4: Timely review reports and other transmittals.
- e. Service #5: Coordinate with DC Water on water quality catch basins: DDOE shall coordinate with DC Water on installation of new water quality catch basins, specifically with respect to the number and type of water quality catch basins to be installed, as well as where, when, and how the installations will take place. DDOE shall also coordinate with DC Water regarding the purchase of truck(s) and related equipment in advance of the transition to DC Water of the responsibility for funding water quality catch basin cleaning and inspection in FY 15.

IV. DURATION OF MOU

- A. The period of this MOU shall be from the signing of this MOU, through September 30, 2013, unless terminated in writing by a Party prior to the expiration.
- B. The duration may be extended only in writing.
- C. The extension of this MOU shall be subject to the availability of funds at the time.
- D. The Parties contemplate extending this MOU.

V. AUTHORITY FOR MOU

- A. D.C. Official Code § 1-301.01(k) (District agencies) (2012) authorizes the parties to enter into this MOU for orders placed with other departments, at actual cost.
- B. DDOE is further authorized to enter into this MOU pursuant to:
 - I. The Water Pollution Control Act of 1984, effective March 16, 1985 (D.C. Law 5-188, as amended), D.C. Official Code §8-103.01 *et seq.*, including: §8-103.13 (2012) (Mayor regulates construction bearing upon water quality);

MOU DDOE and DC Water beginning in FY 2012

2. The District Department of the Environment Establishment Act of 2005, effective February 15, 2006 (D.C. Law 16-51, §§101 *et seq.*, as amended), including: D.C. Official Code §8-151.03 (2012) (establishment of DDOE and consolidation of environmental functions); § 8-151.03(b)(2) (stormwater administration, including the monitoring and coordinating the activities of all District agencies that are required to maintain compliance with the storm water permit, receiving and expending funds from the Storm Water Permit Compliance Enterprise Fund); §8-151.07 (2011 Supp.) (Director guides and enforces environmental services and federal actions, promulgates and enforces rules and programs, liaises with other agencies);
3. The Comprehensive Stormwater Management Enhancement Amendment Act of 2008, effective March 25, 2009 (D.C. Law 17-371, §2(b), as amended), including: D.C. Official Code §8-152.01 (2012) (monitor, coordinate and secure information from District agencies required to comply with the Stormwater Permit and administer the stormwater program within DDOE); §8-152.03 (2012) (stormwater fee discount program); §8-152.04 (2012) (establish an enterprise grant fund program);
4. Mayor's Order 2006-61, dated June 14, 2006 (delegation and transfer of authority to DDOE Director); and
5. 21 DCMR 553-56 (stormwater fee rules).

VI. FUNDING PROVISIONS

A. COST OF SERVICES, if any

1. Unless DDOE specifically authorizes a change in funding in writing, total cost for services under this MOU for all Project items listed in Attachment A shall not exceed:
 - a. Three hundred seventy-one thousand dollars (\$371,000) for Fiscal Year 2012; and
 - b. Six hundred ninety-eight thousand six hundred dollars (\$698,600) for Fiscal Year 2013, subject to availability of funds.
2. Funding for the Project items listed in Attachment A shall not exceed the actual costs of the goods or services.
3. Funding for each Project item shall not exceed the cost specified in Attachment A, unless DDOE specifically authorizes a change in writing.

MOU DDOE and DC Water beginning in FY 2012

4. Overhead costs for DC Water staff are not funded, unless DDOE specifically authorizes in writing.

B. PAYMENT

1. DDOE shall pay DC Water for services detailed in this MOU by check or electronic funds transfer based on itemized invoices, within 45 days of receipt of each invoice.
2. DC Water shall submit a monthly budget and project status update, a management report which compares budget to actuals and includes:
 - a. Description of the activity that was performed;
 - b. List of materials and their costs; and
 - c. DC Water staff and consultant services costs.
3. Payment to DC Water shall not exceed the total amount of this MOU.

VII. DISPUTE RESOLUTION

The Parties shall resolve adjustments and/or disputes arising from services between agencies under this MOU with the following procedures:

A. DC Water and DDOE will make every effort to resolve any disputes concerning this MOU at the project staff level.

B. In the event that the Parties' staff is unable to resolve a dispute, the matter will be elevated to the Director of DDOE and the General Manager of DC Water, as appropriate, for resolution within thirty (30) days.

C. If the DDOE Director and DC Water General Manager are unable to resolve the dispute then the aggrieved party may invoke the Termination procedures unless the Director and General Manager agree on an alternate dispute resolution procedure such as submitting the dispute to a third party for resolution.

VIII. COMPLIANCE AND MONITORING

Since this MOU's funds include District of Columbia funds, DC Water will be subject to scheduled and unscheduled monitoring reviews by the District of Columbia to ensure compliance

MOU DDOE and DC Water beginning in FY 2012

with all applicable requirements. If funding is federal, in whole or in part, DC Water will be subject to monitoring reviews of the District and the federal government.

IX. RECORDS AND REPORTS

Since this MOU's funding includes District of Columbia funds, DC Water and each of its contractors/grantees paid under this MOU shall maintain records and receipts for the expenditure of all funds provided for a period of no less than three (3) years from the date of expiration or termination of each Project. DC Water shall arrange with its contractors to make these documents immediately available for inspection by request of representatives of DDOE or the District. If funding is federal, in whole or in part, documents must be made similarly available to representatives of the District or the federal government.

X. SPECIAL PROVISIONS FOR TERMINATION OF THE MOU

Any party may terminate this MOU in whole or in part by giving 28 days advance written notice to the other party on one of the following grounds:

- A. Lack of funding;
- B. Changes in applicable law;
- C. Changes in the structure or nature of the program;
- D. Elimination of the program or service;
- E. Failure of either Party to follow Federal or District laws, rules, or regulations; or
- F. Failure of either Party to follow the terms of this MOU.

However, DC Water shall be reimbursed for costs incurred (or irreversibly committed to) performing the above approved services as of the day following the date on which DC Water received written notice of termination. DC Water shall not be obligated to perform any services for which it is to be reimbursed under this MOU following receipt of any notice of termination from DDOE.

XI. NOTICE

The following individuals are the official contacts for each Party under the MOU:

For DDOE:

MOU DDOE and DC Water beginning in FY 2012

Mr. Jeffrey Seltzer, P.E.
Associate Director
Stormwater Management Division
District Department of the Environment
1200 First Street, NE, 5th Floor
Washington, DC 20002
Phone 202-535-1603
Fax 202-535-1364
Email jeffrey.seltzer@dc.gov

For DC Water:

Dr. Mohsin Siddique
Supervisor, Environmental Planning
District of Columbia Water and Sewer Authority
5000 Overlook Avenue, SW
Washington, DC 20032
Phone 202-787-2634
Email mohsin.siddique@dewater.com

XII. MODIFICATIONS

The terms and conditions of this MOU may be modified only upon prior written agreement by the Parties.

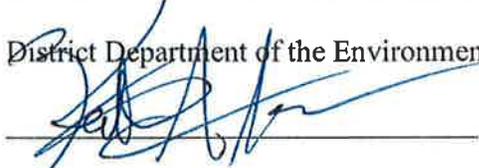
MOU DDOE and DC Water beginning in FY 2012

XIII. MISCELLANEOUS – FOLLOW DISTRICT LAW

The Parties shall comply with all applicable laws, rules and regulations whether now in force or hereafter enacted or promulgated.

IN WITNESS WHEREOF, the Parties hereto have executed this MOU as follows:

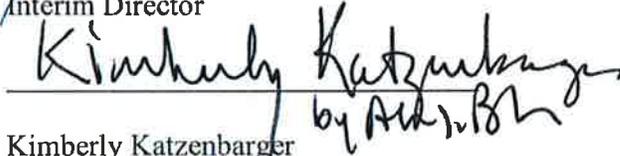
District Department of the Environment



Keith A. Anderson
Interim Director

09/27/12

Date

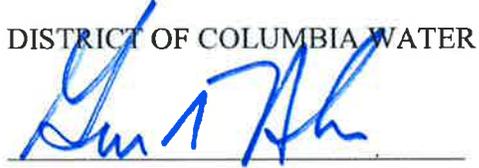


Kimberly Katzenbarger
General Counsel, for legal sufficiency

9/26/12

Date

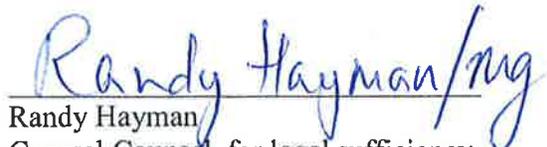
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY



George S. Hawkins
General Manager

9/27/12

Date



Randy Hayman
General Counsel, for legal sufficiency

9/27/12

Date

MOU DDOE and DC Water beginning in FY 2012

**ATTACHMENT A
DDOE Funding for Projects**

This MOU addresses the following activities.

By signing this MOU, DDOE and DC Water have agreed to the cost of project items listed below.

COST OF SERVICES

	Project	Type of Service	FY 2012 Amount (Dollars)	FY 2013 Amount (Dollars)*
1	Water quality catch basin cleaning and maintenance	Provide water quality catch basin maintenance services and reports.	\$212,000	\$212,000
2	Optimal catch basin inspection, cleaning, and repair plan	Develop an optimal catch basin inspection, cleaning, and repair plan.	\$54,000	\$161,700
3	Storm water outfall inspection plan and repair schedule	Develop a stormwater outfall repair scope and schedule.	\$85,000	\$304,900
4	DC Water MS4 Technical Workgroup Staff Activities	Participate in and support the District's MS4 Technical Working Group activities.	\$20,000	\$20,000
		Total Funding for Projects in FY 2012	\$371,000	
		Total Funding for Projects in FY 2013		\$698,600

* FY 2013 Funding amounts subject to availability of funds

Attachment B

DDOE STANDARD OPERATING PROCEDURE FOR WATER QUALITY CATCH BASINS MAINTENANCE SERVICE

1. All chambers of the water quality catch basin (WQCB) are to be vacuumed with a vacuum truck or similar type piece of equipment, all standing water, grit and debris are to be evacuated. All large debris (construction materials, lumber, and those too large to vacuum) are to be bagged and disposed of at approved district disposal facility.
2. After evacuation of the bulk of the trash and debris from the WQCB, the vacuum truck should then be positioned at the storage chamber or clear well outlet chamber of the WQCB while the other chambers are power washed and the remaining debris and sediment and wash water is recovered by vacuuming .
3. All wash water should then be recovered by the vacuum truck at the clear well chamber, the WQCB should be inspected at this time for cracks or physical damage that may require repair. If the WQCB grit, storage or weir chambers are dry (no standing water) upon inspection at the beginning of the maintenance service, then the joint and corners require re-sealing with caulk, hydraulic cement or similar approved material that will create a water tight seal within these chambers.
4. After power washing and vacuuming the wash water, the WQCB should be recharged with clean water to the elevation of the over flow weirs in the grit, storage and weir chambers.
5. A standard WASA service sticker should then be placed on the WQCB indicating the date and type of service.
6. The District Department of the Environment Watershed Protection Division, Inspection and Enforcement Branch should be notified at least 72 hours before service to WQCB are to begin at (202) 535-2240.

Attachment C



September 24, 2012

Statement of Work
Catch Basin Inspection, Cleaning, and Repair Schedule
Municipal Separate Stormwater System (MS4)
Permit No. DC0021199 – Provision 4.3.5.1

Under provision 4.3.5.1 of the Municipal Separate Stormwater System (MS4) NPDES Permit, the District is required to submit a plan to EPA for optimal catch basin inspection, cleaning, and repair. The goal of this optimization plan is to ensure the District's program is compliant with the MS4 regulations and at the same time consistent with its mission and resources.

An estimated total of 25,000 catch basins are in consideration as a part of this initiative. The 25,000 catch basins may include many that are on private properties such as federal complexes, educational institutions, commercial establishments, etc. Distinguishing catch basins on public vs. private properties is also an important objective of this optimization plan. In recent years, DC Water has developed a comprehensive inventory of fire hydrants that includes the following information: GPS coordinates type of hydrant, public vs. private domain, fire flow, date last maintained, etc. DC Water envisions that the optimization plan for catch basin cleaning, inspection, and repair will involve the development of a comprehensive data management tool similar to that developed for fire hydrants. Due to the immensity of the inventory, ease of implementation through a GIS based asset management inventory is imperative to this program. Establishment of this plan includes the following tasks:

Task 1: Interviews, Literature Review and Regulatory Review

DC Water will perform a review of existing literature and regulatory to determine the industry standards for catch basin cleaning, inspection, and repair. The following sources will be used but not limited to:

- District of Columbia MS4 Permit
- District of Columbia Enhanced Street Sweeping and Fine Particle Removal Strategy
- District of Columbia's MOU
- Anacostia River TMDL

DC Water will conduct interviews with the following groups:

- a) GIS team and related staff - to develop of a scope, cost, and schedule associated with catch basin data management system.
- b) Department of Sewer Services (DSS) - to determine the following existing practices:
 - Cleaning schedule and procedure
 - Inspection procedure
 - Problems encountered
 - High debris areas
 - Cleaning and hauling contracts

- Recordkeeping
 - Crew size
 - Type of cleaning equipment
 - Others
- c) Other Utility Companies and/or Municipalities - to determine their current catch basin inspection, cleaning, and repair plan. This includes but is not limited to review of their respective plans and comparison of data gathered with DC Water's existing plan.

Task 2: *Inventory Gathering and Establishment*

An accurate and complete inventory of storm water catch basins is the keystone of an optimal catch basin cleaning and maintenance program. In as much, under this task, DC Water will develop a plan to compile a complete inventory of storm water catch basins. Compiling an inventory will require developing an inspection process, as well as a process for internally updating the system based on new construction and mandates for the installation of water quality catch basins in the MS4 system. DC Water will evaluate options for collecting and maintaining an accurate inventory of the catch basins with the goal of completing the inventory in five (5) years from the implementation of the Plan.

DC Water currently has two options for updating the catch basin inventory: 1) DC Water Customer Service Operations updating the inventory during the course of scheduled cleaning and maintenance; and 2) hiring a consultant to inventory the Districts storm water catch basins in a focused and concerted effort. DC Water will conduct internal working groups to determine the optimal method for obtaining and maintaining an accurate catch basin inventory. Drivers for designing and selecting a sustainable process include (but are not limited to):

- Ability to maintain a dynamic and accurate GIS;
- Data Requirements: catch basin structural information, precision of data, amount of data; and
- Timeframe for inventory completion.

Task 3: *Develop GIS Data Management Tool*

DC Water will develop and test aspects of a GIS data management prototype for DSS to track daily cleaning activities. The tool will have a map centric application that will enable crews to report the following catch basin cleaning, maintenance and repair activities from the field.

- Date and Time of Cleaning
- Crew Member Identification, Truck, On-the-Job Time, Duration of Cleaning Activities
- Cleaning Status (cleaned, not found/removed, blocked, construction no access)
- Debris Level Prior to Cleaning (i.e. 100%, 75%, 50%, 25%, 0%)
- Debris level After Cleaning (i.e. 100%, 75%, 50%, 25%, 0%)
- Description of Repairs (scheduled in DC Water's work-order system, Maximo)
- Observed Defects (i.e. broken top, tree roots in basin, top slab gap)
- Suggested Rehabilitation (i.e. wall repairs, reset, replace cheek block, repair masonry) or Follow-On Work (i.e. vacuuming, flush alley grate, jetting, CCTV),
- Application of Complete Sticker (which signifies to residents that the catch basin was cleaned),
- Comments; and
- Updates to the Catch Basin Inventory. Crew members will be able to directly update the GIS with the following fields in addition to the items listed above:
 - Location Description (address)

- Un-locatable Catch Basins
- New Catch Basins
- New Catch Basins
- Catch Basins that no longer exist
- Ownership and Responsibility of Cleaning and Maintenance
- Type (Single, Double, Triple, Quadruple, Elongated, Grate, Double Grate, Water Quality)

Task 4: Establish Catch Basin Prioritization Framework, Condition Assessment Ranking System, and Basis of Rehabilitation

Under this task, DC Water will establish a framework to prioritize service areas for cleaning and inspection; develop a catch basin cleaning and inspection schedule and strategy; and develop a form that will be used for condition assessment. In addition, a Physical Condition Assessment (PCA) ranking system and Basis of Rehabilitation (BOR) philosophy will be completed as part of the optimization plan.

DC Water will also create an inspection protocol to govern catch basin inspections. The protocol will include instructions and data requirements to be collected by inspection and/or cleaning crews such as: photos, GPS location, the location and elevation of influent and effluent pipes, grate dimensions, catch basin type and dimensions. This task will also require coordination with DC Water’s Information Technology and GIS Department’s to synthesize the GIS data management tool (Task 4.2) with the approved data collection requirements.

Task 5: Preparation of Report

DC Water will prepare a report for the optimization plan for inspection, cleaning, and repair of catch basins. A draft report will be initially prepared for the team and DDOE to review. Once comments are received, a final report will be prepared and submitted to DDOE.

Project Budget:

TASK NUMBER	TASK DESCRIPTION	DCW	CONSULTANT	TOTAL
Task 1	Interviews, Literature Review and Regulatory Review	\$25,000	\$40,800	\$65,800
Task 2	Inventory gathering and establishment	\$19,100	\$7,100	\$26,200
Task 3	Develop GIS Data Management Tool	\$102,000*	\$6,200	\$108,200
Task 4	Establish Catch Basin Prioritization Framework, Condition Assessment Ranking System, and Basis of Rehabilitation	\$13,900	\$23,900	\$37,800
Task 5	Preparation of Report	\$6,400	\$16,100	\$22,500
Task 6	DDOE Status Reports		\$6,200	\$6,200
TOTAL		\$166,400	\$100,300	\$266,700

*DC Water will pay 50% resulting in estimated cost to DDOE of \$51,000

Attachment D



June 21, 2012

**Scope of Work for DC Water Outfall Inspection and Repair Schedule
Municipal Separate Storm Sewer System (MS4), NPDES Permit DC0000221
Provision 4.3.5.3**

This scope of work and cost estimate reflects the work required to inspect and develop a repair schedule for the District's storm water outfalls, per provision 4.3.5.3 of NPDES Permit DC0000221. The District is required to develop a repair schedule for all of its outfalls in the MS4 area by June 2013.

Over the last two (2) weeks, DC Water and District Department of Environment (DDOE) has merged our databases of outfall inventory and have conducted pilot field inspections to categorize representative outfall types, determine typical methods of access to each, and identify representative structural defects that could have a negative impact on water quality. This work was also conducted to develop a methodology for a two-person crew to conduct the inspections and to create an inspection reporting form that would clearly document field and infrastructure conditions observed during each inspection. The pilot field inspections also determined the time required per outfall inspection in order to develop a realistic cost estimate for inspecting the inventory of 680 estimated outfalls.

Task 1 - Sort Inventory, Plan and Conduct Inspections

DC Water will review the current inventories of outfalls as documented in DDOE and DC Water records. DC Water will scrub and check the inventory for inaccuracies. DC Water consulted the following sources to develop a preliminary list of outfalls that should be inspected to meet the permit requirement:

- DC Water 2006 Outfall Survey (provided Jan 2012 by DC Water);
- DDOE Outfall Inventory (provided May 2012 by DDOE Storm Water Management Division); and
- District of Columbia NPDES Permits (mined from www.epa.gov).

Based on these sources, DC Water compiled a GIS featureclass of outfall locations. Our preliminary count of outfalls owned and/or maintained by DC Water is provided in Table 1.

Outfall Type/Source	Estimated No. of Outfalls
Outfalls Identified in DC Water GIS and DDOE Survey:	760
CSO Outfalls (covered under DC0021199):	(60)
Outfalls Owned by External Agencies	(20)
Storm Water Outfalls Owned or Maintained by DC Water:	680

Table 1: Storm Water Outfalls Owned or Maintained by DC Water

DC Water will create and later carry out an inspection strategy to cost-effectively direct the inspection efforts of the field crews. This will include parcelizing and prioritizing inspection areas and pulling copies of location maps, creating field forms for each location, identifying access points to each site and coordinating with property owners as applicable, including the National Park Service. This scope of work will not cover the inspection or repair of: 1) outfalls covered by other NPDES permits; and 2) outfalls that convey water from non-public property (e.g. outfalls owned or maintained by external agencies).

Deliverables:

- 1) GIS featureclass with approximately 680 outfalls
- 2) Preliminary outfall inspection methodology to be used by field crews
- 3) Draft standard inspection form and standard photo documentation procedures
- 4) Completed field forms and photo documentation for sample outfalls (approximately 30)
- 5) Paper copies of inspection areas, each noting the estimated location of the outfalls to be inspected by a given field crew on a particular day and appropriate access points

Task 2 – Review of Rehabilitation Techniques

DC Water will research alternative repair and rehabilitation techniques for outfall structures with emphasis on bioengineering options, wherein we avoid rebuilding hard outfall infrastructure that is likely to erode and be undermined in a repetitious fashion thus winding up with the same deteriorated condition over time. DC Water will present the findings to DDOE and external stakeholders and build consensus on the type and level of repair and rehabilitation that is appropriate to meet the permit provisions. Based on these discussions, DC Water will develop several “typical” repair and/or rehabilitation concept designs. The objective of this approach is to help inspection crews identify a concept approach to rehabilitation based on a single site visit. These concepts will be finalized by design engineers after EPA approval of the outfall repair/rehabilitation plan and schedule.

Deliverables:

- 1) Presentation that documents “typical” outfall repair/rehabilitation options

Task 3 – Coordination with National Park Service under DC Water Permit

Approximately 370 of the District’s 680 outfalls are located on National Park Service (NPS) lands (see Table 2). Inspection of these outfalls will require coordination with NPS in accordance with DC Water’s NPS Special Use Permit (NCR-6000-11-001) which includes:

- Pre-Activity Meetings,
- Pre-Activity Written Notices,
- Post-Project Inspections,

- Post-Activity Written Notices, and
- Security Clearance (applicable for NAMA inspections).

DC Water will complete the permit notification and communication requirements, as required by the administration of each NPS park, during the pre-activity meeting. We have developed our level of effort based on two (2) meetings for each park (one pre and a post-activity meeting); developing four (4) pre- and post-activity written notices that will require one day of effort each; and three (3) days of coordination effort to obtain security clearance at appropriate park locations where various agencies police forces have jurisdiction.

Acronym	Park Division	Estimated No. of Outfalls
CHOH	C&O Canal	47
NACC	National Mall & Memorial Parks	26
NACE	National Capital Parks – East	95
ROCR	Rock Creek Park	202
Total No. of Outfalls		370

Table 2: Storm Water Outfalls Located on NPS Lands

Task 4 – Finalize Inspection Protocol and Conduct Outfall Inspections

Based on information and input gathered from the above tasks, DC Water will finalize an inspection protocol and list of data requirements to be collected during each outfall inspection. DC Water will also develop a database for storing inspection data that comes in from the field. DC Water will perform inspections of the outfalls included in the inventory developed under Task 1 using the refined methodology.

Deliverables:

- 1) Final Inspection Protocol
- 2) Completed Inspection Forms
- 3) Updated GIS feature class and photograph catalog

Task 5 – Determine Rehabilitation Techniques and Present Rehabilitation Recommendations

Following the completion of the inspections, DC Water will sort outfalls needing repair/rehabilitation into categories based on the type of repair/rehab needed. DC Water will develop preliminary “typical” design approaches and develop a cost estimate for implementing each “typical.” DC Water will then develop a preliminary engineer’s estimate of construction costs and duration (e.g. time to complete construction) for all outfalls needing improvements.

Task 6 – Develop Outfall Repair Schedule

DC Water will develop a schedule strategy that will determine the order in which outfalls will be repaired. The strategy will be developed with the intention of addressing those outfalls with the greatest impact to water quality (e.g. sensitivity of water body, scale of impact, risk of causing environmental impact) first. However, factors that could potentially cause the delay of “high impact” repairs (e.g. ease of access, permitting requirements, NEPA compliance, constructability) will also be incorporated into

the strategy. DC Water will conduct a workshop with DDOE to share schedule strategy and incorporate comments and revisions as directed.

Based on the finalized strategy, DC Water will populate an outfall repair schedule. Our goal will be to schedule the repair of 10% of the District's outfalls per year; however, the schedule may propose different or interim deadlines based on the cost, constructability, accessibility or permitting requirements. Deviations in the schedule from the 10% annual requirement will be supported with information about their appropriateness (November 4, 2011 letter from EPA to DDOE).

Deliverable:

- 1) Table of complete inventory of all outfalls with recommended "typical" repair/rehabilitation, year in which construction is scheduled, permitting required for each, and estimated cost associated with each outfall location.

Task 7 - Public Notice

DC Water will provide eighty (80) hours of as-needed support to DDOE to comply with public notice requirements.

Task 8 - DDOE Status Reports

DC Water will provide monthly status reports (1 -2 page briefs) of project progress.

PROJECT BUDGET & ESTIMATED HOURS

The task budgets for the project have been developed based on a time and materials basis using the rates for Malcolm Pirnie Engineers (WSA #437).

No.	TASK	DCW	CONSULTANT	TOTAL
1	Sort Inventory, Plan and Conduct Inspections	7,700	28,000	35,700
2	Review of Rehabilitation Techniques	9,400	27,000	36,400
3	Coordination with National Park Service under DC Water Permit	18,400	34,000	52,400
4	Finalize Inspection Protocol and Conduct Outfall Inspections	10,700	110,000	120,700
5	Determine Rehabilitation Techniques and Present Rehabilitation	15,500	64,000	79,500
6	Develop Outfall Repair Schedule	13,600	29,000	42,600
7	Public Notice	6,400	10,000	16,400
8	DDOE Status Reports	---	6,200	6,200
TOTAL BUDGET		\$81,700	\$ 308,200	\$389,900