

George Washington Memorial Parkway Routing Slip

Title of Attached Document: 2018 MS4 GWMP

Sent by: Brenda Wassler

Date: 9/27/18

GWMP Routing ID # GWMP-15-XXXX David will provide a Routing ID #

Action Required

- Review/Comment
- Surname
- FYI
- Return to _____

Reply Due Date: 8/10/18

If your name is checked, initial and date on the line, then forward to the next person.

Please route to all levels of approval prior to the Superintendent, he will be the last to initial off on this.

Leadership Team

- Superintendent W Wassler 9/27/18
- Deputy Superintendent _____
- Administrative Officer _____
- Safety Officer _____
- Chief of Maintenance _____
- Chief of Resource Management _____
- Chief of Visitor Services _____
- Chief of Lands, Planning, and Design _____

Division of Administration

- Budget Analyst _____
- Contracting Specialist _____
- IT Specialist _____
- Admin. Prog Specialist _____
- Concessions Specialist _____
- Procurement Tech Contr. _____

Division of Lands, Planning, and Design

- ROW Permits Coord. _____
- Geo. Info Specialist _____
- Landscape Architect _____
- Civil Engineer _____
- Architect _____
- Historic Architect MYW

Division of Maintenance

- Supv Fac Mgmt Specialist _____

Division of Resource Management

- Natural Resource Mgr. _____
- Natural Resource Spec. _____
- Cultural Resource Mgr. _____
- Cultural Resource Spec. _____
- Museum Curator _____
- Museum Technician _____

Division of Visitor Services

- Supv Park Ranger (North) _____
- Supv. Park Ranger (South) _____
- Supv. Visitor Use Assistant _____
- Education Specialist _____
- Special Use Permits _____

Other

- _____
- _____
- _____

Notes:



United States Department of the Interior

NATIONAL PARK SERVICE
George Washington Memorial Parkway
c/o Turkey Run Park
McLean, Virginia 22101

IN REPLY REFER TO:
1.A.2 (GWMP)

September 28, 2018

Bryant Thomas
Regional Water Permit and Planning Manager
Virginia Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

Dear Mr. Thomas,

The George Washington Memorial Parkway (GWMP) is pleased to submit our 2018 MS4 Annual Report for George Washington Memorial Parkway (GWMP) (permit registration number VAR040111). The report is also located on our MS4 webpage located at <https://www.nps.gov/gwmp/learn/scienceresearch.htm>. Appendix 1 lists the documents referenced and used in support of our program implementation.

GWMP remains committed to maintaining a comprehensive MS4 Program. In addition, we continue to work collaboratively with our neighboring MS4s and other partners to improve stormwater issue and regulation awareness throughout the park and beyond. Should you need any additional information, please contact Brenda Wasler, Environmental Protection Specialist, at 571-289-6459 or at brenda_wasler@nps.gov.

Sincerely,

Alexcy Romero
Superintendent George Washington Memorial Parkway

Enclosures

cc:

Simone Monteleone, Chief, Division of Resource Management, GWMP
Blanca Stransky, Deputy Superintendent, GWMP
Brenda Wasler, Environmental Protection Specialist, GWMP
David Birney, Environmental Protection Specialist, NCR

George Washington Memorial Parkway
MS4 Permit Annual Report and Program Plan Update

Reporting Period October 1, 2017 -
September 30, 2018

Submitted to:
Virginia Department of Environmental Quality

Prepared by:
Brenda Wasler
Environmental Protection Specialist

National Park Service
George Washington Memorial Parkway
Division of Resource Management
700 George Washington Memorial Parkway
McLean, VA 22101

Background Information

1. Permittee name and permit number: George Washington Memorial Parkway, VAR040111
2. The annual report permit year and reporting period: 2018
3. Modifications to any operator's department's roles and responsibilities: none
4. Number of new MS4 outfalls and associated acreage by HUC added during the permit year: None
5. Signed certification: see enclosure

MCM #1: Public Education and Outreach on Stormwater Impacts

Responsible Position (s): Environmental Protection Specialist and GWMP Environmental Committee

Description

The public education and outreach program should be designed with consideration of the following goals:

1. Increasing target audience knowledge about the steps that can be taken to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;
2. Increasing target audience knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and
3. Implementing a diverse program with strategies that are targeted towards audiences most likely to have significant stormwater impacts.

High Priority Water Quality Issues:

1. Spill prevention and response was selected because there is a high potential for spills of products during the execution of every day duties. Spill prevention training is held regularly for Maintenance staff.
2. Stormwater pollution prevention was selected due to the number of stormwater outfalls located within GWMP boundaries.
3. Good housekeeping procedures were selected in order to cover many smaller water quality topics, such as tank operation and maintenance, PCB awareness, and incident response. Good housekeeping procedures were developed and training was held for Maintenance Staff on September 19, 2018. PCB Awareness is conducted yearly within each division. Aboveground Storage Tank (AST) training was held on September 19, 2018.

Target Audience

GWMP, in accordance with guidance from VADEQ staff, and p. 12 Section IIB, has established the target audience for the high priority issues to be the park staff of approximately 85 permanent staff. The population size of the target audience who is most likely to have a significant impacts for each water quality issue is our Maintenance staff of approximately **30**.

Educational and outreach materials

These include bulletin boards posted with information including relevant checklists, plans, spill response instructions, stormwater inlet mapping, and location of materials with the potential to spill. There are also tailgate safety talks, monthly safety talks, regular division meetings, and email distribution of information to staff. These activities are projected to continue next year. We have held several relevant trainings for park staff this year:

Training	Date	Staff reached	Target Audience	% Target audience
PCB Awareness training	Throughout 2018	85	85– All GWMP	100%
Stormwater Pollution Prevention Plan (SWP3)	9/19/2018	25	30 - Maintenance	83%
Spill Prevention Control and Countermeasures training	9/19/2018	25	30 - Maintenance	83%
IDDE training	9/19/2018	25	30- maintenance	
HAZWOPER training / refresher	Throughout year	16	30 - Maintenance	53%
Aboveground Storage Tank training	9/19/2018	25	30 - Maintenance	83%
HAZMAT cleanup	Quarterly	30	30	100%

GWMP Environmental Committee Activities

We continue GWMP Environmental Committee activities, which is comprised of staff from each division. Below is a list of our activities and accomplishments:

General Activities:

- Established in 2015 to take a collaborative approach to bring together different divisions and disciplines for the good of the park, the resources, the visitors, and the employees.
- Interdivisional Earth Day cleanup organization and logistics, including a new Weed Warrior at Glen Echo, invasive removal at Great Falls, and trash cleanup at Gravelly Point and Arlington National Cemetery
- Interagency staff cleanup day with Arlington National Cemetery.
- Working together to take action on long-standing environmental and safety issues.
- Work in conjunction with Safety Officer on joint issues.
- Bring in outside expertise from NPS to support initiatives.
- Institution of environmental committee bulletin board at Maintenance and Headquarters for information sharing.

- Hazardous waste pickup schedule instituted and followed up on in conjunction with Maintenance and Safety to help reduce our reporting requirements in advance of upcoming audit.

Environmental Audits

- Environmental Disposal Liability reporting as required by National Capital Region (NCR) and NPS HQ (WASO).
- Participated in 2018 environmental audit done by external contractors, Hitachi. Working through reviewing findings and resolving issues.
- Supporting development of new partner agreement by identifying issues to be addressed by partners and park prior to implementation of agreements.

Employee Concerns

Response to employee concerns to support leadership team's concerns of following up on reported issues. Prepared reports and action items with follow up for reported concerns.

Recycling and Environmental Collaboration

- Continued Keurig K-cup recycling program at four park locations, saving over 5000 K-cups from entering the landfill.
 - o Yearly interdivisional park cleanup day to incorporate Admin (property), Superintendent's Office (Safety), Resource Management, Lands, Planning, and Design, (LPD), and Maintenance to improve park cleanliness, orderliness, and safety while adhering to proper property disposal guidelines.

Training

- Established training schedule and delivered training for stormwater pollution prevention and spill control and countermeasures
Funding sought from NCR for:
- Stormwater pollution prevention / spill control & countermeasures plans and training – Plans were updated and employee training was held on September 19, 2018
- Regional AST training to be hosted by GWMP on September 19, 2018

MS4 Stormwater Permit

- Participated in 2017 MS4 audit by VADEQ staff.

Emergency response and Oil Spills

- Improved emergency response by encouraging attendance at Incident Command Structure (ICS) training for Environmental Committee members, seeking out training opportunities, networking with outside agencies, etc. Brought particular NPS issues to the table for the many federal, state, and local agencies as sole NPS representative, and collaborated with Department of Interior (DOI) representative.
- Got involved in Regional Response team and Area Contingency Plan, attending meetings, training, and workshops, attended seminars with the US Coast Guard and agency and industry representatives in a tabletop exercise.

- Worked with WASO spill coordinator to secure \$15,000 in funding for oil spill readiness activities.
- Worked on NPS annex to Area Contingency Plan (ACP) to address particularities of spill response on NPS lands; brought together NCR park working group for the ACP review and annex development; holding work sessions and following up on deliverables.

The park continues to conduct education and outreach efforts through programming, partnerships, and volunteer events in the park. An assessment of the identified BMPs has determined that they are appropriately addressing the minimum control measures outlined in the MS4 general permit. The park's progress includes maintaining efforts and expanding as funding and capacity allows.

MCM2 – Public Involvement/Participation

GWMP excels at public involvement and participation, well-exceeding the requirements under the permit. The park meets its public involvement and participation goals through volunteer events held throughout the year. An assessment of the identified BMPs has determined that they are appropriately addressing the minimum control measures outlined in the MS4 general permit. The park's progress includes maintaining efforts and expanding as funding and capacity allows.

We have very active Friends' Groups, as well as many other volunteer groups that participate regularly in park activities, including Friends of Dyke Marsh, Weed Warriors, Friends of Fort Hunt, and more. GWMP Environmental Committee activities also overlap with this MCM. See MCM1 above for more information.

GWMP has posted the park's MS4 program plan and annual report on our website at <http://www.nps.gov/gwmp/learn/scienceresearch.htm>. This site also includes our water quality data.

GWMP Division of Visitor Services had the opportunity to support various core modules that were linked around the Bridging the Watershed (BTW) program. The BTW curricula helps builds on the constructivist thinking and uses – Engage, Explore, Explain, Elaborate, and Evaluate – as its format for learning. Their programs are student-directed, with the teacher acting as the guide/facilitator. All lessons are correlated to national, state, and local education standards. NPS has supported these programs for over twenty years in our parks both in the north and south districts.

Over 550 participants participated in the BTW program in 2018 at Great Falls Park. At least 16 on site activities and programs were conducted, with the modules focused on watersheds, water canaries and sediment river flows.

In addition, watershed walks and talks were also a regular part of the roving and program schedule at Great Falls during the weekends. During peak periods, these program provided rivers and watershed insight about the landscape and park.

This year special events were held that spotlighted resource conservation efforts in the south parts of the parkway. Additional efforts were reinforced to park visitors that helped to educate them on the parks significance and environmental footprint. So such parks conducted on site education at Ft. Hunt Park and Jones Point Park locations.

Education partnership groups also helped to support and sustain our programs. With their methods we were able to enhance our visitor experiences in Fairfax County and Alexandria City markets. At least three new outreach programs were piloted in the southern part of the parkway at Dyke Marsh Wildlife Preserve.

Teachers from Arlington County developed new curriculum based education programs in 2017-18. These programs highlighted water quality and study, scientific reasoning, and the study of ecosystems. We reached at least three new schools in underserved areas and in also in predominately Latin communities. New this year, was the follow-up with Peace Corps aftercare programs in Arlington County and the District of Columbia. Some of their programs highlight activities like invasive removals, and native plantings. In addition, pre- visitations were made in several area schools to support some of these concepts.

At least three new outreach programs were piloted in the southern part of the parkway at Dyke Marsh Wildlife Preserve. Teachers from Arlington County developed new curriculum based education programs in 2017-18. These programs highlighted water quality and study, scientific reasoning and the study of ecosystems. Teachers conducted on site teacher workshops and tours that helped educate them on park resources and history.

Kayak programs were also developed this year reaching 50 or more new visitors in the area. Six ranger staff received kayak certifications training from the River Wind which provides them with the opportunity to conduct river and watershed environmental and rescue training along the Potomac River.

Public Involvement Events

The park conducted many activities throughout the year:

GWMP All Employee Trash Cleanup

50 participants	296 hours	423 bags	2688 pounds	Yearly event
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Volunteer Trash Cleanups this fiscal year

1076 volunteers	3189 hours	1342 bags		37 events
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2018 National Public Lands Day

52 volunteers	208 hours	12 bags of trash	7 bags of invasive weeds	Yearly event
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Invasive Species Removal by Volunteers

218 volunteers	764 hours	1342 bags		4 events
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Activity	Estimated number of people reached
Bridging the Watershed Program – Alice Ferguson Foundation	approx. 750 middle and high school aged students through 16 programs at Great Falls. 30 students at Dyke Marsh for a sediment program.
Advertise for, coordinate and lead volunteer cleanup efforts for streams, riverside and wetland areas throughout the Parkway	Volunteers contributed over 800 hours of work during riverside cleanup activities and invasive plant removal.
Partner with local environmental groups (Friends of Dyke Marsh)	A new agreement has been put in place with the Friends of Dyke Marsh, which will conduct weekly programs in the spring and summer which will establish estimated numbers for people to be reached in the future.
Every Kid in a Park and Rocks programs – water-based interpretation programs covering water conservation, protection, and pollution.	656 (4th grade) students on 15 scheduled Every Kid in a Park, River and the Rocks programs at Great Falls Park.
Multi-Sensory Nature Walks and Workshops – Theodore Roosevelt Island and Dyke Marsh	40 people participated in two 2 hour walks (Dyke Marsh and TRI), and 50 staff and participants in the workshop. It occurred at Great Falls and we were reaching the disabilities community specifically reaching out to blind and low vision visitors of our parks. We talked about our environment and conservation, the history of Theodore Roosevelt Island, TR’s impact on conservation, and how the island is an invaluable resource. We had 5 staff on the scene and 3 SCA interns as support for this event.
Campfire conservation programs at Great Falls	Weekly campfires over summer; ranges of attendance.

Dyke Marsh and Theodore Roosevelt Island kayak programs	We conducted 2 kayak programs in Dyke Marsh in October for a total of about 60 people. We conduct about 10 kayak programs around TRI for 60-100 people from August - October 2018. This involves 70 hours of staff time for implementation, plus 48 hours of staff time for training.
Theodore Island Safaris	Theodore Roosevelt theories of conservation, including clean water ecosystems for the benefit of all plant and animal habitats. Weekly; 10-12 participants each event.
Raptor Rapture in Dyke Marsh	16 staff hours; 225 participants. Significance of Dyke Marsh in the Potomac River watershed.
School and scout programs on water issues.	Four programs for approximately 30 students each at Dyke Marsh and Jones Point.
Dyke Marsh special request programs	3 events; 6 hours of staff time, and 56 participants.
Birding at Dyke Marsh	Weekly events by Friends of Dyke Marsh, including water quality and ecology topics.

Due to the nature of visitation and lack of visitor center counting mechanism, GWMP is unable to estimate target audiences. We conduct as many programs as possible within the constraints of staff time and budget.

MCM3 – Illicit Discharge Detection and Elimination

In most urban areas, the flow of water from a storm drain system is not a routine event during dry weather periods and, therefore, can be an indicator of illicit discharges (e.g., illegal dumping and unauthorized connections to a MS4). However, dry weather flows from an MS4 can be from other non-stormwater discharges that would not be considered an illicit discharge and are a normal event for some MS4 outfalls (depending on location). These non-stormwater discharges could include: groundwater infiltration into the storm sewer system, irrigation return flow, foundation drain discharges, etc.

Using the assumption that dry weather flows are not conclusive indicators of possible illicit discharges in George Washington Memorial Parkway, outfall inspections will be conducted focusing on visually conspicuous evidence of possible illicit discharges to the MS4. Water quality sampling and analyses will not be conducted.

Since our audit in early September 2017, we have recently developed procedures for dry weather field screening methodologies to detect, identify, and address potential illegal discharges within our MS4 permit area. We have recently trained our maintenance personnel on our procedures and have developed a methods and schedule of inspections.

No illicit discharge investigations were performed during the permit year, as no discharges were reported. Maintenance Division cleaned 60 drop inlets and conducted dry weather screenings on the associated outfalls. IDDE Dry weather inspection procedures have been developed and are in the process of being implemented.

We have active and interested park neighbors who report issues on our land to us. In addition, we receive National Response Center notifications, U.S. Park Police Reports, EPA Regional Response Teams III, and information from surrounding landowners and agencies for issues that may affect our park. We have an active Environmental Committee comprised of representatives from all divisions who are trained in spill identification, response, and initial cleanup. In addition, park staff are trained to notify the Environmental Committee if any issues are identified.

We have identified our adjacent regulated physically interconnected MS4s permittees and have notified all of them and provided our mapping data. This list includes, but is not limited to, Arlington National Cemetery, the Pentagon, the Central Intelligence Agency, Arlington County, Fairfax County, and the City of Alexandria. No illicit discharges were identified in the reporting period.

Outfall Mapping - MS4 Program Plan Update

GWMP has developed and maintained an interactive GIS map of our MS4 which is available online at <https://nps.maps.arcgis.com/apps/webappviewer/index.html?id=432f78f96f454d9186359ded43408c8b>. Each outfall displays an information box. The information table with the required information was submitted previously during the 2017 MS4 Audit. Responsibility for the operation and maintenance of the map rests with the GIS specialist in the Division of Lands, Planning, and Design.

MCM4 – Construction Site Stormwater Runoff Control

Current land-disturbing activities by the park during this reporting period include the Arlington House rehabilitation and inspections are conducted as required. Construction is anticipated to continue for the upcoming reporting period. For Arlington House, the rehabilitation project addresses the following:

- Redirect the flow of water throughout the entire site, into a newly designed and installed underground drainage system, that will be connected to the larger Arlington National Cemetery drainage system - positive drainage is mandated throughout the entire site
- Regrading and the installation of bonded aggregate pavement will also improve the flow of water and decrease the soil/loose particles from entering into the water system
- Rehabilitate the Kitchen and Flower Gardens as well as other key landscape areas that will improve water absorption, topsoil quality and the general vitality of the landscape.
- Erosion and sediment control measures are implemented and maintained, throughout the entire construction process.

Land Disturbing Permits and Inspections Completed.

The land-disturbing activities are in compliance with the permit conditions. An assessment of the identified BMPs has determined that they are appropriately addressing the minimum control measures outlined in the MS4 general permit.

A total of 8 land disturbance permits were issued for projects for this past fiscal year. These projects were monitored by the Right-of-Way / Permits Coordinator for the park. See Appendix 2 for descriptions of these projects.

Enforcement Actions

There were no enforcement actions taken the reporting period. Generally verbal notifications of erosion and stormwater violations are used as a first measure. If necessary, Stop Work Orders can be issued in writing for any land disturbance that occurs without an approved permit.

MCM5 – Post-Construction Stormwater Management

No new storm water management facilities within the park were brought online during the reporting period. Post-construction activities identified during this reporting period are described in Appendix 2. An assessment of the identified BMPs has determined that they are appropriately addressing the minimum control measures outlined in the MS4 general permit. Continuing construction at Arlington House is anticipated for the upcoming reporting period.

MCM6 – Pollution Prevention/Good Housekeeping for Municipal Operations

Description

This section includes measures, procedures, and processes that have been taken to ensure GWMP is in compliance with implementing pollution prevention and good housekeeping measures as the staff conducts daily work.

Stormwater pollution prevention training for maintenance staff occurred on September 19, 2018 for maintenance employees. A Spill Prevention Control and Countermeasures plan was finalized in 2014, updated in 2016, and employee training occurred on September 19, 2018. In addition, stormwater outfalls within the Maintenance Facility were mapped and identified as to the receiving facility – either the oil/water separator, or natural stream. Potential spill locations were also identified and mapped; spill kits were inventoried, replenished, mapped, and posted around the maintenance bays. Procedures for identifying pollution and responding to it were conveyed during the Sept 19 training, and a number of personnel have attended HAZWOPER training in order to increase the number of personnel qualified to respond to spill incidents.

GWMP has developed the required nutrient management plan (NMP) since the last report. We have obtained funding and are currently under contract with Hitachi to develop the NMP. GWMP did not fertilize any lands during this reporting period.

GWMP held several park-specific training sessions during the current reporting period. On September 20, 2017, training was offered to all employees who utilize GWMP’s maintenance facility to educate employees about the facility’s responsibilities to ensure compliance with its MS4 permit, including best practices to reduce pollution in stormwater run-off. The training included the SWP3 plan as well as Spill Prevention Control and Countermeasures plan. Forty individuals attended this training. PCB Awareness training is also being given to the entirety of the GWMP staff, partners, and concessioners.

The park has improved its good housekeeping efforts through implementation of an internal environmental audit procedure by the Environmental Committee. We have conducted audits at our Maintenance facility, Great Falls Park, Glen Echo Park, and a marina, and we have been working to correct deficiencies found during those audits. We have developed written good housekeeping procedures and trained staff on them on September 19, 2018.

An assessment of the identified BMPs has determined that they are appropriately addressing the minimum control measures outlined in the MS4 general permit. Planning and response documents are assessed regularly and updated to reflect current staffing and requirements. We provide training on a regular basis. All pesticide operator licenses, certifications, water operator certifications are current and up to date. GWMP Maintenance continues to clean up spills, protect drainage structures, and cover open trash receptacles as noted in our Spill Containment and Countermeasure Plan.

GWMP adapted Maryland State Highway Administration Salt Management Plan BMPs to reduce use of products for pretreatment and de-icers. The applications of these products has been reduced significantly since adopting this methodology.

Storm water runoff control activities are conducted as necessary. GWMP repaired severe erosion on shoulder of Crest Lane using gabion baskets, class I RipRap and Geotextile to stabilize erosion channel and restore roadway. Trail repairs, including reduction of erosion, stabilization of trails is conducted as necessary. GWMP installed and repaired water bars, resurfaced trails and addressed erosion along our unpaved trails.

GWMP Maintenance conducts regular roadside litter pickup, averaging 75-100 thirty gallon bags every 10-15 days between April 1 and November 30 and 25-50 bags monthly between December 1 and March 31. Approximately 44 curb miles of roadway were swept in 2018.

Snow Removal (number events for FY17-18)	11
Salt and deicer applications (Tons of salt and gallons of deicer used) were reduced since the last reporting period.	
Salt Brine 23% Solution used as pre-treat for anti icing: (decreased since 2017)	18,500 gallons

Non Chloride Liquid Deicers used as pretreat/deicer (decreased since 2017)	1350 Gallons
Road Salt	858 Tons
Road Sweeping (increased since 2017)	44 Miles
Trash cleanup (Hours spend in Sanitation)	4000 Hours
Drop Inlets Cleaned	60
Good housekeeping - Maintain neat and orderly facilities, contain and cleanup any spills promptly.	250 hours
Fertilization of trees and turf	0 acres fertilized
Disposed of pet waste into solid waste stream	Daily

GWMP conducts significant invasive species removal and native species plantings throughout our park. A total of 4 acres throughout the park was controlled for invasive species and restored with native species. Additionally, two larger sites (Dyke Marsh – 1.7 acre) and Rosslyn Circle (1.5 acre) were controlled and restored by the park’s natural resource specialist. Approximately **240 acres** of parkland has been managed for invasive species and restored to date, with more of it planned through the fall of 2018. This work is accomplished by our natural resources staff, as well as contractors and the NPS Exotic Plant Management Team. Much of what is accomplished so far is from Great Falls wavy leaf & the river trail, but also the shoreline of the Lyndon B. Johnson Grove. We treated the Lyndon B. Johnson meadow for Canada thistle, as well as Jones Point Park, Donaldson Run, and various areas along the Potomac Heritage Trail and the Mount Vernon Trail.

Ronald Reagan Washington National Airport has a NPS Special Use Permit for Canada goose management at Gravelly Point Park and Roaches Run Waterfowl Sanctuary within GWMP. To date in this reporting period, the USDA wildlife biologists report that 4029 birds have been dispersed from the two park properties. The dispersal of birds reduces the bird waste that gets washed into the Potomac River and ultimately the Chesapeake Bay.

Appendix 1: MS4 Program Implementation Documents

1. Illicit Discharge Detection and Elimination (IDDE) Dry Weather Screening Procedures
2. Good Housekeeping Procedures
3. Chesapeake Bay Action Plan
4. Consolidated TMDL Action Plan
5. NCR GWMP 9500-17-204 2018 Goose Harassment Report from Ronald Reagan National Airport
6. GWMP Stormwater Pollution Prevention Plan – Maintenance Complex
7. GWMP Stormwater Pollution Prevention Plan – Daingerfield Island
8. 2018 Program Plan

Appendix 2: GWMP permitted areas of construction monitoring for erosion and sediment controls and after observation during heavy rainfall events. (Permits/ ROW Coordinator)

A. Projects:

- 1. Arlington National Cemetery Millennium expansion project**
Project finished but monitored during heavy rainfall events for any failures. None observed.
- 2. USACE Washington Aqueduct Authority emergency water main rupture**
Daily monitoring while emergency repair of waterline was fixed January 9, 2018 to January 19, 2018
- 3. Washington Gas cathodic protection_ near Ronald Reagan Washington National Airport**
Daily monitoring while construction activity was taking place March 5, 2018 to March 16, 2018
- 4. Windy Run Bridge Project**
Reported from PM the erosion and sediment controls intact throughout project.
- 5. Arlington Potomac Interceptor**
Replanting of 14 White Oak trees near Memorial Avenue
- 6. DDOT Key Bridge Rehabilitation / Staging area under Key Bridge**
Daily monitoring by DDOT inspectors and NPS for stormwater and sediment control of improved construction entrance and staging area. All problems reported by NPS inspection have been immediately addressed by DDOT project team.
- 7. MWAA Stormwater Repair / replacement of collapsed pipe**
MWAA has applied to the park for permit to make repairs. PEPC 82806 Repair is under compliance review. When permitted, MWAA and NPS will monitor for stormwater and sediment control devices are in working order and maintained daily.
- 8. Arlington County DES Stormwater Outfall Maintenance / 4121 North Randolph St.**
Arlington County has submitted application for permit to make repairs. PEPC 79855 Repair in under compliance review. When permitted, Arlington County and NPS will monitor for stormwater and sediment control devices are in working order and maintained daily.

Permit language included into all construction and right of way permits:

Erosion control methods shall be used to prevent silt-laden water from entering the stream and watershed. These may include, but are not limited to, silt fencing, filter fabric, excelsior or fumigated straw filter logs, temporary sediment ponds, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas. In order to prevent import of non-native plants, straw bales or non-fumigated products shall not be permitted. This measure is designed to keep fine and coarse sediments from reaching flowing waters where they can be transported downstream and may affect spawning gravels, substrate embeddedness, pool frequency/quality and the development of large pools. Silt protection structures should be inspected and cleaned out periodically.

Both during and upon completion of the construction phase of the project, Permittee agrees to take all measures necessary to curtail erosion and sedimentation caused by the excavation, and further to restore and re-vegetate the area to its original condition. Furthermore, Permittee agrees to meet, at a minimum, all state and local erosion and sedimentation regulations.

The Permittee shall take all necessary measures to prevent air, noise and water pollution by managing all products, material and/or equipment used during this permitted construction, and these include:

- Any waste or erosion materials entering on park land shall be removed and the affected property cleaned, stabilized, or restored, to the satisfaction of NPS. This restoration shall take place within the time period directed by NPS.
- Only NPS / park approved native seed mixtures and plant species shall be used to re-vegetate areas specified by NPS.
- As a part of the initial construction activity under this permit, the Permittee accepts responsibility for cleaning of accumulated silt and debris from the existing culverts and open drainage channels as directed by NPS.
- Silt barriers shall be installed on parkland in a manner directed by NPS to minimize associated impacts.
- All paved and unpaved areas that are damaged as a result of this permit will be restored to the satisfaction of NPS.
- Construction activities shall be restricted during saturated soil conditions and halted involving a single rain event of more than ½ inch or severe weather conditions to avoid damage to soils and vegetation.
- Avoid use of heavy equipment where soils are wet or extensive compaction could occur.

Certification Statement and Requirements

As required by 9VAC25-870-370 B, all reports required by state permits, and other information requested by the board shall be signed by a responsible official or by a duly authorized representative of that person. A responsible official is:

1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Duly Authorized Representatives

A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above;

2. 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 plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

3. The written authorization is submitted to the department.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 10/1/18
Responsible Official Signature Date

VA040111 George Washington Memorial Parkway
Permit Number MS4 Name