

**VPDES MUNICIPAL SEPARATE STORM
SEWER SYSTEM (MS4)
PERMIT NO. VA040094**

**MS4 PROGRAM PLAN
PERIOD OF JULY 1, 2019 TO JUNE 30, 2020**

THE UNIVERSITY OF MARY WASHINGTON



**UNIVERSITY OF
MARY WASHINGTON**

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July 1, 2019

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1.0 INTRODUCTION

This MS4 Program plan has been prepared based on the University of Mary Washington General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) under General Permit No.: VAR040094. This document is intended to demonstrate compliance with the permits requirements for reporting the MS4 Program Plan. Included tables outline compliance for each section of the report. Associated documents have been included in the Appendix or can be provided upon request.

1.1 Summarization of Changes

In compliance with permit Part I.C.4, the following changes have been made since the last MS4 Program Plan:

- ◆ The format of the program plan has changed to clearly demonstrate compliance with permit compliance.

2.0 PART 1.C – THE MS4 PROGRAM PLAN

See Table 1 for outline of general permit compliance for Part I.C – The MS4 Program Plan:

Table 1: MS4 Program Plan Table – Part I.C – The MS4 Program Plan

MS4 Permit ID	Permit Requirement	Responsible Party	Compliance Action
Part I.C.1	The MS4 program plan shall include, at a minimum, the following written items		
Part I.C.1.a	The roles and responsibilities of each of the permittee's divisions and departments in the implementation of the requirements of the permit tasked with ensuring that the permit requirements are met;	Capital Outlay Les Johnson	See Appendix A for list of roles and responsibilities
Part I.C.1.b	If the permittee utilizes another entity to implement portions of the MS4 program, a copy of the written agreement. The description of each party's roles and responsibilities, including any written agreements with third parties, shall be updated as necessary	Capital Outlay Les Johnson	Draper Aden Associates contracted with the permittee. Written agreements available upon request
Part I.C.1.c	For each MCM in Part I.E, the following information shall be included		
Part I.C.1.c.1	Each specific requirement as listed in Part I.E for each MCM		See tables for each MCM
Part I.C.1.c.2	A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions in Part I.E	See tables for each MCM	See tables for each MCM
Part I.C.1.c.3	All standard operating procedures or policies necessary to implement the BMPs	See tables for each MCM	See tables for each MCM
Part I.C.1.c.4	The measurable goal by which each BMP or strategy will be evaluated; and	See tables for each MCM	See tables for each MCM
Part I.C.1.c.5	The persons, positions, or departments responsible for implementing each BMP or strategy; and	See tables for each MCM	See tables for each MCM
Part I.C.1.d	A list of documents incorporated by reference including the version and date of the document being incorporated.	See tables for each MCM	See tables for each MCM
Part I.C.2	If the permittee is receiving initial coverage under this general VPDES permit for the discharge of stormwater, the permittee shall:		
Part I.C.2.a	No later than six months following the date of permit coverage, submit to the department a schedule for the development of each component of the MS4 program plan in accordance with Part I.C.1 that does not exceed the expiration date of this permit; and	Les Johnson Capital Outlay Program Coordinator	MS4 Program Plan was submitted to DEQ on September 30, 2018
Part I.C.2.b	Provide to the department a copy of the MS4 program plan upon completion of development.	Les Johnson Capital Outlay Program Coordinator	MS4 Program Plan was submitted to DEQ on September 30, 2018
Part I.C.3	If the permittee was previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective July 1, 2013, the permittee shall update the MS4 program plan to meet the requirements of this permit no later than six months after the effective date of this permit unless otherwise specified in another permit condition and shall post the most up-to-date version of MS4 program plan on the permittee's website or location where the MS4 program plan can be obtained as required by Part I.E.2 within 30 days of updating the MS4 program plan. Until such time that the MS4 program plan is updated in accordance with Part I.E, the permittee shall continue to implement the MS4 program plan in effect at the time that coverage is issued under this general permit.	Les Johnson Capital Outlay Program Coordinator	MS4 Program Plan has been maintained and updated. The University website has been updated and contains links to the latest MS4 Program Plan.
Part I.C.4	Revisions to the MS4 program plan are expected throughout the life of this permit as part of the iterative process to reduce pollutant loading and protect water quality to the maximum extent practical. As such, revisions made in accordance with this permit as a result of the iterative process do not require modification of this permit. The permittee shall summarize revisions to the MS4 program plan as part of the annual report as described in Part I.D.2.	Les Johnson Capital Outlay Program Coordinator	Program plan will be updated and summarization of revisions will be provided.

MS4 Permit ID	Permit Requirement	Responsible Party	Compliance Action
Part I.C.5	The permittee may demonstrate compliance with one or more MCM in Part I.E through implementation of separate statutory or regulatory programs provided that the permittee's MS4 program identifies and fully describes any program that will be used to satisfy one or more of the minimum control measures of Part I E. If the program that the permittee is using requires the approval of a third party, the program shall be fully approved by the third party, or the permittee shall be working toward getting full approval. Documentation of the program's approval status, or the progress toward achieving full approval, shall be included in the annual report required by Part I D. The permittee shall remain responsible for compliance with the permit requirements if the other entity fails to implement one or more components of the control measures.	See tables for each MCM	See tables for each MCM
Part I.C.6	The permittee may rely on another entity to satisfy the permit requirements to implement a minimum control measure if:		No other entity is used to satisfy the permit requirements.
Part I.C.6.a	The other entity, in fact, implements the control measure;		
Part I.C.6.b	The particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement;		
Part I.C.6.c	The other entity agrees to implement the control measure on behalf of the permittee; and		
Part I.C.6.d	The agreement between the parties is documented in writing and retained by the permittee with the MS4 program plan for as long as the agreement is active		
Part I.C.6	The permittee shall remain responsible for compliance with requirements of the permit and shall document in the annual reports required in accordance with Part I D that another entity is being relied on to satisfy all or part of the state permit requirements. The permittee shall provide the information required in Part I D.		
Part I.C.7	If the permittee relies on another governmental entity regulated under 9VAC25-870-380 to satisfy all of the state permit obligations, including the obligation to file periodic reports required by Part I D, the permittee must note that fact in the registration statement, but is not required to file the periodic reports. The permittee remains responsible for compliance with the state permit requirements if the other entity fails to implement the control measures or components thereof.	Les Johnson Capital Outlay Program Coordinator	The University does not rely on another government entity to satisfy any parts

3.0 PART 1.E – MINIMUM CONTROL MEASURES (MCM)

3.1 Part I.E.1 – Public Education and Outreach

See Table 2 for outline of general permit compliance for Part I.E.1 – Public Education and Outreach:

Table 2: MS4 Program Plan – Part I.E.1 – Public Education and Outreach

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.1.F	The MS4 program plan shall include:					
Part I.E.1.f.1	A list of the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;	<ol style="list-style-type: none"> 1. Proper collection and disposal of pet waste 2. Proper disposal of human-generated litter 3. Stormwater reuse strategies which incorporate Virginia Native Plant Materials 	N/A	N/A	Richard Blair Landscape & Grounds Department Director	Refer to University MS4 webpage (https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/umw-local-chesapeake-bay-bacteria-tmdl-action-plan/)
Part I.E.1.f.2	The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;	<ol style="list-style-type: none"> 1. Proper collection and disposal of pet waste was selected due to the large areas of open land in the services area that pet owners like to visit. 2. Reduction of human generated waste was selected as means to address stormwater and aesthetics concerns within the service area. The reduction of human generated waste we allow for the facilities SMF to operate efficiently. 3. Incorporation of Virginia Native Plant Materials was selected as it aligns with the University's other goals and efforts. The use of native plants helps prevent the introduction of invasive specials and makes for a cohesive ecosystem. 	N/A	<ol style="list-style-type: none"> 1. Amount of waste disposal bags dispensed at waste stations. 2. Pounds of waste collected at waste collection events. 3. Reduction of non-native species of plant material. 	Richard Blair Landscape & Grounds Department Director	Refer to University MS4 webpage (https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/umw-local-chesapeake-bay-bacteria-tmdl-action-plan/)
Part I.E.1.f.3	Identification of the public audience to receive each high-priority stormwater message	<ol style="list-style-type: none"> 1. Pet owners. 2. Student body of the University 3. Surrounding home and business owners. 	N/A	% of audience reached	Richard Blair Landscape & Grounds Department Director	Refer to University MS4 webpage (https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/umw-local-chesapeake-bay-bacteria-tmdl-action-plan/)
Part I.E.1.f.4	The strategies from Table 1 of Part I E 1 d to be used to communicate each high-priority stormwater message; and	<ol style="list-style-type: none"> 1. Permanent signage has been installed to communicate with pet owners. 2. Radio and curriculum materials were used to communicate with the student body of the University 3. Speaking engagements and training material were used to communicate with surrounding home and business owners. 	N/A	<ol style="list-style-type: none"> 1. Number of signs 2. Length of radio information is broadcasted and number of curriculum material handed out. 3. Number of attendants at speaking engagements and number of training material handed out. 	Richard Blair Landscape & Grounds Department Director	See Appendix B for education and outreach event information

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.1.f.5	The anticipated time periods the messages will be communicated or made available to the public.	Refer to University MS4 webpage: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/public-education-and-outreach/	N/A	N/A	Richard Blair Landscape & Grounds Department Director	Refer to University MS4 webpage (https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/public-education-and-outreach/)

3.2 Part I.E.2 – Public Involvement and Participation

See Table 2 for outline of general permit compliance for Part I.E.2 – Public Involvement and Participation:

Table 3: MS4 Program Plan – Part I.E.2 – Public Involvement and Participation

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.2.e	The MS4 program plan shall include:					
Part I.E.2.e.1	The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns	Required website: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/report-a-problem/	N/A	Web Page	Richard Blair Landscape & Grounds Department Director	Refer to University MS4 webpage: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/report-a-problem/
Part I.E.2.e.2	The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and	Webpage is currently under development.	N/A	Web Page	Richard Blair Landscape & Grounds Department Director	
Part I.E.2.e.3	A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup, the number of participants in a hazardous waste collection event, etc.	Refer to University MS4 webpage: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/public-involvement-opportunities/	N/A		Richard Blair Landscape & Grounds Department Director	Refer to University MS4 webpage: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/public-involvement-opportunities/

3.3 Part I.E.3 – Illicit Discharge Detection and Elimination

See Table 2 for outline of general permit compliance for Part I.E.3 – Illicit Discharge Detection and Elimination:

Table 4: MS4 Program Plan Table – Part I.E.3 – Illicit Discharge Detection and Elimination

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.3.d	The MS4 program plan shall include:					
Part I.E.3.d.1	The MS4 map and information table required by Part I E 3 a. The map and information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;	Map and required data have been developed. Maps can be found as part of the University of Mary Washington Stormwater Master Plan dated September 28, 2018. Interactive maps can also be located online at: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/umw-ms4-maps/	N/A	Maintain and update map as-needed	Les Johnson Capital Outlay Program Coordinator	Maps were included as part of the University of Mary Washington Stormwater Master Plan dated September 28, 2018
Part I.E.3.d.2	Copies of written notifications of new physical interconnections given by the permittee to other MS4s; and	No new interconnections have been established.	N/A	Maintain and update the list of interconnections.	Les Johnson Capital Outlay Program Coordinator	Letter of interconnections available upon request.
Part I.E.3.d.3	The IDDE procedures described in Part I.E.3.c	The Illicit Discharge Detection and Elimination (IDDE) written procedures are currently under development. Document will be submitted for review once complete	N/A	Maintain and update procedures as-need	Les Johnson Capital Outlay Program Coordinator	See Appendix C for Illicit Discharge Detection and Elimination (IDDE) written procedures.

3.4 Part I.E.4 – Construction Site Stormwater Runoff Control

See Table 2 for outline of general permit compliance for Part I.E.4 – Construction Site Stormwater Runoff Control:

Table 5: MS4 Program Plan – Part I.E.4 – Construction Site Stormwater Runoff Control

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.4.c	The permittee's MS4 program plan shall include:					
Part I.E.4.c.1	If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program;			Does not apply to the University		
Part I.E.4.c.2	If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (3):	The University implements construction site stormwater runoff control program in accordance with Part I E 4 a (3)				
Part I.E.4.c.2.a	The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and	The University has established standards and specifications in accordance with the Virginia Law. See Appendix D.	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain the Standards and Specifications.	Gary Hobson Capital Outlay Department Director	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management
Part I.E.4.c.2.b	A copy of the most recent standards and specifications approval letter from the department;	See Appendix E for most recent standard and specification approval letter.	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain DEQ approval of Standards and Specifications.	Gary Hobson Capital Outlay Department Director	See Appendix E for most recent standard and specification approval letter.
Part I.E.4.c.3	A description of the legal authorities utilized to ensure compliance with Part I E 4 a to control construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements			Does not apply to the University		
Part I.E.4.c.4	Written inspection procedures to ensure the erosion and sediment controls are properly implemented and all associated documents utilized during inspection including the inspection schedule	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain the Standards and Specifications.	Gary Hobson Capital Outlay Department Director	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management
Part I.E.4.c.5	Written procedures for requiring compliance through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain the Standards and Specifications.	Gary Hobson Capital Outlay Department Director	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management
Part I.E.4.c.6	The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the construction site stormwater runoff control requirements in Part I E 4.	See Appendix A for list of roles and responsibilities	N'A	Maintain the list of roles and responsibilities	Les Johnson Capital Outlay Program Coordinator	See Appendix A for list of roles and responsibilities

3.5 Part I.E.5 – Post-Construction Stormwater Management for New Development and Development On Prior Developed Lands

See Table 2 for outline of general permit compliance for Part I.E.5 – Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands:

Table 6: MS4 Program Plan Table – Part I.E.5 – Post-Construction Stormwater Management for New Development and Development On Prior Developed Lands

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.5.h	The MS4 program plan shall include:					
Part I.E.5.h.1	If the permittee implements a VSMP in accordance with Part I E 5 a (1) and (2):			Does not apply to the University		
Part I.E.5.h.1.a	A copy of the VSMP approval letter issued by the department			Does not apply to the University		
Part I.E.5.h.1.b	Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and			Does not apply to the University		
Part I.E.5.h.1.c	Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned BMPs			Does not apply to the University		
Part I.E.5.h.2	If the permittee implements a post-development stormwater runoff control program in accordance with Part I E 5 a (3):	The University implements a post-development stormwater runoff control program in accordance with Part I E 5 a (3)				
Part I.E.5.h.2.a	The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and	The University has established standards and specifications in accordance with the Virginia Law	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain the Standards and Specifications.	Gary Hobson Capital Outlay Department Director	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management
Part I.E.5.h.2.b	A copy of the most recent standards and specifications approval letter from the department.	See Appendix E for most recent standard and specification approval letter.	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain DEQ approval of Standards and Specifications.	Gary Hobson Capital Outlay Department Director	See Appendix E for most recent standard and specification approval letter.
Part I.E.5.h.3	A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements	The UMW Operations and Maintenance manual for SMF is currently under development. Manual will be shared with DEQ once it is complete.	UMW Operations and Maintenance manual for SMF	Maintain the Operation and Maintenance manual.	Richard Blair Landscape & Grounds Department Director	See the UMW Operations and Maintenance manual for SMF
Part I.E.5.h.4	Written inspection procedures and all associated documents utilized during inspection of stormwater management facilities owned or operated by the permittee	The UMW Operations and Maintenance manual for SMF is currently under development. Manual will be shared with DEQ once it is complete.	UMW Operations and Maintenance manual for SMF	Maintain the Operation and Maintenance manual.	Richard Blair Landscape & Grounds Department Director	See the UMW Operations and Maintenance manual for SMF
Part I.E.5.h.5	The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program; and	See Appendix A for list of roles and responsibilities	N'A	Maintain the list of roles and responsibilities	Richard Blair Landscape & Grounds Department Director	See Appendix A for list of roles and responsibilities

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.5.h.6	The stormwater management facility spreadsheet or database incorporated by reference and the location or webpage address where the spreadsheet or database can be reviewed.	No new facility has been installed since last reporting. Database has been incorporated into the interactive maps located at: https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/umw-ms4-maps/	N/A	Maintain and update map as-needed	Gary Hobson Capital Outlay Department Director	Maps were included as part of the University of Mary Washington Stormwater Master Plan dated September 28, 2018

3.7 Part I.E.6 – Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by the Permittee Within the MS4 Service Area

See Table 2 for outline of general permit compliance for Part I.E.6 – Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by the Permittee within the MS4 Service Area:

Table 7: MS4 Program Plan Table – Part I.E.6 – Pollution Prevention and Good Housekeeping for Facilities Owned or Operated by the Permittee Within the MS4 Service Area

MS4 Permit ID	Permit Requirement	Description of BMP'S Strategies	Standard Operation Procedure or Policies	Measurable Goal	Responsible Party	Associated Documents
Part I.E.6.p	The MS4 program plan shall include					
Part I.E.6.p.1	The written procedures for the operations and maintenance activities as required by Part I E 6 a;	The Universities Operations and Maintenance Manual is currently in development. Once completed manual will be submitted to DEQ for review	UMW Operations and Maintenance manual	Maintain and update the UMW operations and maintenance manual as needed	Gary Hobson Capital Outlay Department Director	See appendix F for The University of Mary Washington Stormwater Operations and Maintenance Manual.
Part I.E.6.p.2	A list of all high-priority facilities owned or operated by the permittee required in accordance with Part I E 6 c, and whether or not the facility has a high potential to discharge;	The Physical Plant on Hanover Street is the only site within the service area designated as a "high-priority facility". This facility does not have a high potential for discharge.	Physical Plant SWPPP	Maintain and update the Physical Plant SWPPP as needed	Gary Hobson Capital Outlay Department Director	The SWPPP for the Physical Plant is available at the front desk of the facility.
Part I.E.6.p.3	A list of lands for which turf and landscape nutrient management plans are required in accordance with Part I E 6 i and j, including the following information:	Nutrients are applied at: 1. Main Campus 2. Belmont 3. Athletic Fields	Nutrient Management plan	Maintain and update the Nutrient Management plan as needed.	Richard Blair Landscape & Grounds Department Director	See the Nutrient Management plan.
Part I.E.6.p.3.a	The total acreage on which nutrients are applied	Nutrients is applied to 63.62 acres	Nutrient Management plan	Maintain and update the Nutrient Management plan as needed.	Richard Blair Landscape & Grounds Department Director	See the Nutrient Management plan.
Part I.E.6.p.3.b	The date of the most recently approved nutrient management plan for the property; and		Nutrient Management plan	N/A	Richard Blair Landscape & Grounds Department Director	See the Nutrient Management plan.
Part I.E.6.p.3.c	The location in which the individual turf and landscape nutrient management plan is located;	The UMW Nutrient Management Plan is located in the office of the Landscape and Grounds Supervisor at the Physical Plant on Hanover Street.	Nutrient Management plan	N/A	Richard Blair Landscape & Grounds Department Director	See the Nutrient Management plan.
Part I.E.6.p.4	A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate; and	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management	Maintain the Standards and Specifications.	Richard Blair Landscape & Grounds Department Director	See Appendix D for Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management
Part I.E.6.p.5	The written training plan as required in Part I E 6 m	Written training plan is currently under development. Training plan will be shared with DEQ once complete.	UMW Training Plan	Maintain, update, and implement the UMW Training Plan	Richard Blair Landscape & Grounds Department Director	

APENDIX A
ROLES AND RESPONSIBILITIES OF PERMITTEE'S DIVISIONS AND DEPARTMENTS

MS4 Program Plan Roles & Responsibilities Table

Title	Department	Contact	Responsibility
Vice President	Administration & Finance	Paul Messplay pmesspla@umw.edu 540-654-1410	Executive administration of the MS4 program, authorizing UMW policy related to the program.
Associate Vice President	Facilities Services	John Wiltenmuth jwiltenm@umw.edu 540-654-2080	Administration of MS4 program, directing personnel and program objectives to maximize available resources. Executive administration of UMW Annual Standards and Specification for construction.
Department Director	Capital Outlay	Gary Hobson ghobson@umw.edu 540-654-1292	Administration and revision of UMW Annual Standards and Specifications. Administration of construction E&S regulation, inspection, and enforcement. Responsible for E&S inspector training and certification.
Department Director	Landscape & Grounds	4. Richard Blair rblair@umw.edu 540-654-2091	Administration of Stormwater Management Facilities (SMF) inspection and maintenance. Manages contract maintenance service providers. Advises APV of Facilities Services on BMP changes in SMF operations. Provides operational information, and opportunities for Education and Outreach programs, to MS4 Program Coordinator for inclusion in Annual report.
Program Coordinator	Capital Outlay	Les Johnson ajohnso3@umw.edu 540-654-2100	Collects data from the MCM elements of the MS4 Program Plan for inclusion in the Annual report. Arranges meeting times and places for regional MS4 operator quarterly meetings. Helps the UMW community in Education, and Outreach, opportunities through engagement with university departments and local riverine and water quality organizations.
Project Inspector	Capital Outlay	Tanasha Whittaker twhittak@umw.edu 540-654-2077	Performs inspections and issues reports for construction E&S work, providing an annual summary report to Program Coordinator. Collects data on IDDE events, providing an annual summary report to the Program Coordinator. Advises Department Directors and Program Coordinator on site conditions resulting from implementation of BMP.
Third Party	Draper Aden Associates	Meaghan O'Brien 804-264-2228 mobrien@daa.com	Provides 3rd party SMF inspections. Provides assistance preparing / updating MS4-related programs and forms as may be deemed necessary by UMW. Provides other services as required by UMW.

APENDIX B

EDUCATION AND OUTREACH EVENT INFORMATION

Public Education and Outreach

Rappahannock River Report Card

Issued June 2018

UMW has cosponsored a *Report Card for Health of the Rappahannock River* with Friends of the Rappahannock. The Middle Rappahannock Report Card is an effort to quantify observations and conditions of this waterway in order to help the community of Planning District 16 understand the condition of their waterways and the land that surrounds them, and to identify how the Rappahannock River watershed is performing within its specific context and geography.

This report card will be distributed both in print and through electronic media to people throughout the greater Fredericksburg area.

<https://riverfriends.org/wp-content/uploads/2018/12/Report-Card-Final-Draft-1.pdf>

MCM1A

MCM1D

Public Education and Outreach

Butts are Litter Too

November 16, 2019

Downtown Fredericksburg

The University of Mary Washington is teaming up with the City of Fredericksburg's Clean and Green Commission again this November for the *Butts are Litter Too* campaign. This year's campaign will kick off with a downtown clean-up on November 16th, where UMW Students will participate along with others from throughout the city to remove cigarette butts and other litter from the downtown Fredericksburg area.

UMW Office of Sustainability will also place temporary signage throughout campus, as well as post information on social media sites such as UMW's Sustainability Facebook page and Instagram. Additionally, we will refresh any decals/stickers on any University fleet vehicles.

MCM1C-D
Social Media and Bumper Stickers

MCM2B
Downtown Clean Up

Public Education and Outreach

2020 UMW Earth Day Event

April 22, 2020

Ball Circle

As part of the annual UMW Earth Day Event, Landscape and Grounds distributes information on pet waste, details on our (cigarette) *Butts Are Litter Too* campaign, UMW stormwater management initiatives, information on native trees, and details about ongoing projects such as mapping UMW's urban forest and identifying and reporting illicit discharge into our stormwater systems. Additionally, temporary signage will be placed at strategic trees on campus explaining each tree's specific benefits regarding stormwater runoff interception, energy conservation, carbon reduction and benefits to wildlife.

Earth day participants may include:

Virginia Department of Forestry

Tri County/City Soil and Water Conservation District

UMW ADOPTA Club

UMW Bee Club

UMW B.E.A.M. Club

UMW Ecology Club

UMW Eco Village and Garden Squad

UMW Campus and Recreation Department

UMW Office of Sustainability

UMW Landscape and Grounds

UMW President's Council on Sustainability

Dr. Alan Griffith

Tree Fredericksburg

Friends of the Rappahannock

Virginia Master Naturalists

Virginia Cooperative Extension Master Gardeners

Fredericksburg Food Coop

Bartlett Tree Experts

Wood Workers

Rappahannock Area Community Services Board

And other vendors....

MCM1A

Public Education and Outreach

2019 UMW Tree Festival

October 3, 2019

Ball Circle

Nearly doubling the numbers of the inaugural event, nearly 350 students, faculty and staff attended the second annual ***UMW Tree Festival*** this year, held in Ball Circle and in a tree nearby. Yes, in a tree.

The Virginia Department of Forestry presented UMW's President, Dr. Troy Paino, with our fourth National Arbor Day Foundation Tree Campus USA designation, recognizing UMW's commitment to maintaining a healthy urban forest.

Local agencies, student groups, and organizations gathered to celebrate and disseminate information about sustainable activities and opportunities on the UMW campus and within the community. Bartlett Tree Experts set up a tree climbing demonstration in a mature willow oak on the eastern side of the green, allowing students—and Dr. Paino—to sport safety and climbing gear and get a bird's eye view of Ball Circle and surrounds.

UMW Landscape and Grounds distributed information on pet waste, details on our (cigarette) *Butts Are Litter Too* campaign, UMW stormwater management initiatives, information on native trees, and details about ongoing projects like mapping UMW's Trees and identifying and reporting illicit discharge into our stormwater systems. Additionally, temporary signage was placed at strategic trees on campus explaining each tree's specific benefits regarding stormwater runoff interception, energy conservation, carbon reduction and benefits to wildlife.

Festival participants included:

Virginia Department of Forestry

Tri County/City Soil and Water Conservation District

UMW ADOPTA Club

UMW Bee Club

UMW B.E.A.M. Club

UMW Ecology Club

UMW Eco Village and Garden Squad

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MCM1A

Public Involvement Opportunities

Friends of the Rappahannock Big River Clean Up

Fall 2019

Students from the University of Mary Washington and volunteers for Friends of the Rappahannock Teamed up on _____ for a water shed Restoration program. **(Insert blurb here)**

UMW also co-sponsored the Friends of the Rappahannock Big River Clean Up

MCM2B

Public Involvement Opportunities

Good Neighbor Day

March 21, 2020

Ball Circle / Fredericksburg Campus

UMW Landscape and Grounds will team up with UMW's COAR (Community Engagement) for the annual *Good Neighbor Day* event. Event options include: Litter clean-up, stormwater facility restoration, or pollution prevention.

MCM2B/2E

Public Involvement Opportunities

Into the Streets

September 28, 2019

Ball Circle / Fredericksburg Campus

UMW Landscape and Grounds teamed up with UMW's COAR (Community Engagement) for the annual *Into the Streets* program. 30 students participated in a campus wide litter clean up event.

Three teams of approximately 10 students each dispersed across campus collecting litter and debris from the grounds. 15 other Students participated in the sanding and painting of outdoor recycling containers, while the remaining 15 students removed invasive ivy from campus trees.

MCM2B

Public Involvement Opportunities

Pet Waste Stations

Ongoing

Fredericksburg Campus

UMW Landscape and Grounds maintains four Pet Waste Stations on campus and routinely monitors / refreshes supplies. Bag usage is tallied at end of permit year to determine program success.

MCM2E

Public Involvement Opportunities

Wild & Scenic Film Festival

March 2020

UMW will once again co-sponsor the *Wild & Scenic Film Festival* along with the Friends of the Rappahannock and others.

Wild & Scenic Film Festival showcases the best and most inspiring environmental and adventure films of the past year. The festival celebrates the wild and fragile beauty of our environment, the animals and plants that populate it and the people who work to preserve it. Through these stunningly beautiful films you will be inspired to explore the wild places in your own backyard and around the world. Join us and become a partner in protecting the health and scenic beauty of the Rappahannock for future generations.

MCM2E

APENDIX C

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROCEDURES

LEGAL AUTHORITIES:

The University of Mary Washington (UMW) has a permit to operate a Municipal Separate Storm Sewer System (MS4) issued by the Virginia Department of Environmental Quality. This permit authorizes UMW to discharge stormwater pursuant to the Virginia Stormwater Management Program and the Virginia Stormwater Management Act. These procedures are developed as part of MS4 permit part I-E-3-c.

Since storm drain systems are not connected to a sanitary sewer treatment plant, water traveling through the storm drain system flows directly to local streams, rivers and lakes untreated. An illicit discharge to the storm system is generally defined as any discharge that is not composed entirely of stormwater. A list of approved non-stormwater discharge can be found in 9VAC25-890-20 D 3. UMW's MS4 Program "shall include all procedures developed by the operator to detect, identify, and address unauthorized non-stormwater discharges, including illegal dumping to the MS4."

1.0 RESPONSIBILITIES:

1. Capital Outlay E&S Inspector and the Landscape and Grounds Manager
 - a. Responsible for reporting any illicit discharges discovered during outfall inspections to the MS4 Program Manager, or to the appropriate Facilities Management leadership if the MS4 Program Manager is unavailable.

2. MS4 Program Manager
 - a. Maintains the Illicit Discharge Log
 - b. Prepares the annual Illicit Discharge Summary report and posts it to the FM MS4 web page.
 - c. Provides annual training to Facilities staff.
 - d. Provides annual program review and update, as appropriate.

3. Director, Emergency Management & Safety

- a. Responsible for reporting the illicit discharge to the appropriate regulatory agencies as required, and to the MS4 Program Manager.
- b. Provides technical assistance to emergency responders for hazardous materials spills.

4. Facilities Directors

- a. All Facilities directors are responsible for ensuring that employees are properly informed of and trained on how to prevent illicit discharges from their operations and understand how to trace an illicit discharge upon discovery.
- b. Managers and supervisors are responsible for ensuring training is conducted with the most recent version of the IDDE Standard Operating Procedures.

5. Personnel Performing the Job

- a. Facilities Maintenance & Operations staff, and Landscape & Grounds staff, are required to understand and follow these procedures upon receipt of proper training.

2.0 PROCEDURES

The purpose of this procedure is to identify and address any illicit discharges detected during storm sewer outfall inspections, dry weather screening, or other reported illicit discharges impacting the storm sewer system.

1. Initial Notification

- a. The MS4 Program Manager will be notified of any illicit discharge detected during any storm sewer-related inspection. A complete description of the discharge and as much information as possible will be provided in the notification. Any time the MS4 Program Manager or other Facilities staff are notified of an illicit discharge, the Director of Emergency Management and Safety shall also be notified of the illicit discharge. EM&S staff shall immediately follow up on the illicit discharge report.

- b. When contaminant is discovered, the MS4 Program Manager will enter information about the incident in the Illicit Discharge Investigation log. The log will describe the nature of the contamination and all response and follow-up measures taken to mitigate discharge.

2. Discharge Identified — Primary Option

- a. If the contaminant is identified as a sanitary sewer overflow, Facilities staff will install emergency containment such as sandbags or other means. An emergency contractor will then be called to clean the spill using a vacuum truck or other appropriate means.
- b. Petroleum spills are to be cleaned up in accordance with the UMW Emergency Operations Plan and Fredericksburg Fire Department's oversight.
- c. If the contaminant is identified as dangerous, immediately call the UMW Police at 540-654-4444 and notify the Office of Emergency Management & Safety (OEMS) 540-654-2108 for technical assistance on the clean-up. For more information on hazardous materials spill response, refer to the UMW Emergency Operation Plan and the Stormwater Pollution Prevention Plan.
- d. If the source of the discharge can be immediately identified (such as improper trench dewatering, wash water, or improper disposal of liquids), the staff causing the illicit discharge shall be immediately notified to cease operations. Their supervisor shall be contacted, and re-training of appropriate staff shall take place as soon as possible, but not less than one week.
 - i. If a contractor is causing the illicit discharge on the UMW property, the UMW Staff responsible for contractor oversight must also be contacted. The illicit discharge must be brought to the contractor's attention and the contractor must be made aware of appropriate means for handling trench dewatering, wash water, or other liquids on UMW property.

3. Discharge Not Identified —Secondary Option

If the nature and source of the discharge is not immediately obvious, use strategies to test the discharge and locate the source of contamination.

- a. Use GIS map (<https://adminfinance.umw.edu/facilities/storm-water-management-ms4-program/umw-ms4-maps/>) to strategically check manholes in the upstream tributary storm sewer system for contamination.
 - i. Visual observations should be used to look for presence of flow, colors, odors, floatable materials, or deposits or stains. The GIS map can then be used to trace the path of manholes back to the potential source
 - ii. Manholes closest to the outfall should be investigated first, with staff progressively moving up the sewer network and inspecting manholes until it can be determined either the specific entry point where the source is coming in, or the general entry between two manholes where the source is coming in.
- b. Dye testing may be conducted to determine if there are any improper connections between the sanitary sewer and the storm sewer. Dye tests can also provide valuable information as to whether stormwater systems are malfunctioning, and can confirm water flow direction.
- c. Camera equipment may also be used to locate the source of contamination, by exploring the storm sewer system and looking for pollution between manholes.
- d. Smoke testing may be used to identify cross-connections with the sanitary sewer or other underground sources caused by damage to the storm drain. Smoke testing should be used as a last resort. If smoke testing is used, adequate notification shall be provided so as not to cause alarm.

Once the source of an illicit discharge is confirmed, response personnel will fix or eliminate the discharge. If the source of the illicit discharge is not UMW, the UMW OEMS Director shall forward information on the illicit discharge to appropriate offices of the City of Fredericksburg.

3.0 DRY WEATHER FIELD SCREENING:

Procedures

1. Field observations of MS4 outfalls shall be conducted at least once per year during dry weather conditions. Observations shall be recorded using the current inspection form and information entered into a tracking database. If flow is observed, or evidence suggests that illicit discharges may exist, further investigation shall be conducted by any of the following methods:
 - a. Tracing discharge upstream of storm sewer system
 - i. Visual observations should be used to look for presence of flow, colors, odors, floatable materials, or deposits or stains. The GIS map can then be used to trace the path of manholes back to the potential source
 - ii. Manholes closest to the outfall should be investigated first, with staff progressively moving up the sewer network and inspecting manholes until it can be determined either the specific entry point where the source is coming in, or the general entry between two manholes where the source is coming in.
 - b. Taking a sample of discharge for analysis in order to determine if a pollutant is present and identify the pollutant;
 - c. Implement best management practices to eliminate illicit discharges;
 - d. Scheduling follow up observations;
 - e. Any other appropriate measures deemed necessary.

Notification

- a. The MS4 Program Manager will be notified of any illicit discharge detected during any storm sewer-related inspection. A complete description of the discharge and as much information as possible will be provided. Any time the MS4 Program Coordinator or other Facilities staff are notified of an illicit discharge, the Director of

Emergency Management and Safety shall also be notified of the illicit discharge. Office of Emergency Management and Safety (OEMS) staff shall immediately follow up on the illicit discharge report.

- b. When the contaminant is discovered, the MS4 Program Coordinator will enter information about the incident in the Illicit Discharge Investigation log. The log will describe the nature of the contamination and all response and follow-up measures taken to mitigate discharge.

Discharge Identified — Primary Option

- c. If the contaminant is identified as a sanitary sewer overflow, Facilities Services Plumbing staff will install emergency containment such as sandbags or other means. An emergency contractor will then be called to clean the spill using a vacuum truck or other appropriate means.
- d. Petroleum spills are to be cleaned up in accordance with the UMW Emergency Operation. If the contaminant is identified as dangerous, immediately call the UMW Police at 540-654-4444 and notify the Office of Emergency Management & Safety (OEMS) for technical assistance on the clean-up. For more information on hazardous materials spill response, refer to UMW Emergency Operations Plan and the Pollution Prevention Plan.

If the source of the discharge can be immediately identified such as improper trench dewatering, wash water, or improper disposal of liquids, the staff causing the illicit discharge should be immediately notified to cease operations.

4.0 **PRIORITIZED SCHEDULE**

Interconnection points between the Fredericksburg campus and the surrounding city of Fredericksburg MS4.

Stormwater connections to stream restorations.

Outfalls to UMW stormwater management facilities (SMFs).

5.0 **FOLLOW-UP**

Upon confirmation that the illicit discharge has been eliminated, either the Capital Outlay E&S Inspector or the Landscape and Grounds Manager should follow up within 48 hours to revisit the site and ensure the illicit discharge has been completely eliminated and that additional issues have not occurred as a result of clean-up efforts. Follow up should be documented on the Illicit Discharge Investigation log for the site.

6.0 **ANNUAL REVIEW OF PROCEDURE/TRAINING**

The MS4 Program Coordinator is responsible for conducting annual training and annual review of these procedures with the appropriate staff.

APENDIX D

ANNUAL STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT

[CLICK HERE TO BE REDIRECTED TO APENDIX D](#)

APENDIX E

**DEQ APPROVAL LETTER OF THE UNIVERSITY OF MARY WASHINGTON
CONSTRUCTION STANDARDS AND SPECIFICATIONS**

[CLICK HERE TO BE REDIRECTED TO APENDIX E](#)

APENDIX F
**THE UNIVERSITY OF MARY WASHINGTON STORMWATER OPERATIONS
AND MAINTENANCE MANUAL**

[CLICK HERE TO BE REDIRECTED TO APENDIX F](#)