



September 24, 2018

Megan O'Gorek  
DEQ - Valley Regional Office  
4411 Early Road  
Harrisonburg, VA 22801

RE: MS4 Annual Report, Permit Number VAR040073, University of Virginia, Charlottesville, VA

Dear Megan:

As required under our MS4 Permit, attached is the annual report covering the actions conducted by the University of Virginia during the July 1, 2016 through June 30, 2020 reporting period. Updates on progress toward achieving Chesapeake Bay TMDL Action Plan goals and the Rivanna River Combined Benthic and Bacteria TMDL goals are included as an appendix to the annual report.

If you or your staff have any questions, please contact me at (434) 982-5540 or by email at [jsw6d@virginia.edu](mailto:jsw6d@virginia.edu)

Sincerely,

A handwritten signature in black ink that reads "Jessica S. Wenger".

Jessica S. Wenger  
Environmental Projects Manager


CC: Colette Sheehy, UVA Vice President for Management and Budget  
Kristin Carter, UVA Environmental Programs Manager  
Dawson Garrod, UVA Environmental Engineer

DOCUMENT CERTIFICATION

Facility Name: University of Virginia  
Facility Location: Charlottesville, Virginia  
Permit Number: VAR040073  
Type of Submittal Attached: Annual MS4 Report

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.

Name of Responsible Official (Print): Colette Sheehy  
Title: Senior Vice President for Operations

Signature:  Date: 9/24/20

**Minimum Control Measure No. 1: Public Education and Outreach**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
1.a. - The permittee shall implement a public education and outreach program designed to					
1.a.(1)-(3) - Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns; Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.	The Rivanna Stormwater Education Partnership (RSEP) was founded in 2003 to provide a regional approach to educating the public about stormwater pollution prevention and stormwater management. UVA will continue to participate in RSEP. RSEP will develop a Public Outreach and Education Plan which will include efforts to increase the public's awareness of the high priority stormwater issues, list of planned outreach and education programs, the public audience, the strategies to be used for communication, and the anticipated time periods the messages will be communicated or made available to the public. Cost and resource sharing allows RSEP members to participate in a more effective and robust approach to public outreach and education.	RSEP will meet at least 6 times per year and maintain a website with information about stormwater pollution prevention and management. RSEP will continue to provide general education to the public through brochures, ads, etc. Whenever possible, illegal discharge-related messages will be incorporated into greater outreach campaigns.	The RSEP website can be found at <a href="http://rivanna-stormwater.org">http://rivanna-stormwater.org</a> . UVA stormwater website can be found at <a href="https://www.fm.virginia.edu/depts/operations/environmental/stormwater.html">https://www.fm.virginia.edu/depts/operations/environmental/stormwater.html</a> . RSEP's Outreach and Education Plan is included in Appendix A.	Existing, Ongoing	FM, RSEP
1.a.(1)-(3) Annual Report Update: RSEP met 6 times during the permit cycle. In addition, the RSEP website was redesigned during the permit cycle to be more eye-catching and to align with new logos and campaigns. The RSEP website does not contain MS4 permit related information, but specifically focuses on outreach and education as a resource to the local community, such as the newly created Love Your Watershed campaign <a href="https://rivanna-stormwater.org/additional-resources/love-your-watershed/">https://rivanna-stormwater.org/additional-resources/love-your-watershed/</a> . RSEP also finalized the creation of a Story Map for the website, which explains how watersheds work and ways to keep them pollution free. <a href="https://rivanna-stormwater.org/local-watersheds/storymap/">https://rivanna-stormwater.org/local-watersheds/storymap/</a>					
1.b.- The permittee shall identify no less than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, and illicit discharges from commercial sites.					
(there are no sub sections to this requirement)	Through RSEP, local entities identified the three high priority water quality issues that are of greatest concern to the local community: runoff volume reductions, potential runoff pollutants, and TMDL impairments as the three high priority stormwater issues. The rationale for choosing these issues is described within the RSEP Outreach and Education Plan. In addition to participation in RSEP campaigns, UVA will undertake efforts to specifically target the University student population.	Number of stormwater education and outreach campaigns undertaken annually which target the identified high priority water quality issues.	Same documentation as described in 1.a.(1)-(3).	Existing, Ongoing	FM, RSEP

**Minimum Control Measure No. 1: Public Education and Outreach**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>1.b. Annual Report Update: The RSEP Outreach and Education Plan with a UVA Addendum is included in Appendix A. The list of outreach and education campaigns undertaken during the reporting cycle is included in Appendix B. Some activities originally planned for spring 2020 were cancelled due to the COVID-19 outbreak. The Outreach and Education Plan was modified to note COVID-19 related impacts and potential impacts on future planning. Not captured in the report is the time RSEP spent planning a Love Your Watershed campaign. The goal of the campaign was to create an eye catching logo that could be printed on a sticker that people would want to add to their car, computer, water bottle, etc. RSEP would then hand out the stickers at events and include the logo on other signage and promotions to get people to understand their watershed and the ways they could love it. Efforts to fully implement this campaign were hindered by COVID-19, but a social media push in May is documented in Appendix B. Stickers are ready for future use at future in person events once they are allowed again. <a href="https://rivanna-stormwater.org/additional-resources/love-your-watershed/">https://rivanna-stormwater.org/additional-resources/love-your-watershed/</a></p>					
<p>1.c. - The high-priority public education and outreach program, as a whole, shall:</p>					
<p>1.c. (1)-(4) - Clearly identify the high-priority stormwater issues; Explain the importance of the high-priority stormwater issues; Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues; and Provide a contact and telephone number, website, or location where the public can find out more information.</p>	<p>The RSEP Outreach and Education Plan as described in 1.a.(1)-(3) includes a list of planned outreach and education programs, the public audience, the strategies to be used for communication, and the anticipated time periods the messages will be communicated or made available to the public. RSEP and UVA will ensure that the educational and outreach program includes the required information.</p>	<p>Number of educational efforts undertaken annually.</p>	<p>Same documentation as described in 1.a.(1)-(3).</p>	<p>Existing, Ongoing</p>	<p>FM, RSEP</p>
<p>1.c. (1)-(4) Annual Report Update: The RSEP Outreach and Education Plan with a UVA Addendum is included in Appendix A. The list of outreach and education campaigns undertaken during the reporting cycle is included in Appendix B. Some activities originally planned for spring 2020 were cancelled due to the COVID-19 outbreak. The Outreach and Education Plan was modified to note COVID-19 related impacts during this reporting period as well as potential impacts on future planning.</p>					
<p>1.d. - The permittee shall use two or more of the strategies listed in Table 1 below per year to communicate to the public the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.</p>					
<p>Table 1 Strategies: Traditional written materials; Alternative materials; Signage; Media Materials; Speaking engagements; Curriculum materials; Training materials</p>	<p>RSEP's Outreach and Education Plan (Appendix A) provides specifics on planned strategies to be used. The Plan will be updated during the permit cycle if new strategies are identified.</p>	<p>Utilize two or more strategies annually to communicate high priority stormwater issues either through RSEP or at UVA individually.</p>	<p>Same documentation as described in 1.a.(1)-(3).</p>	<p>Existing, Ongoing</p>	<p>FM, RSEP</p>
<p>1.d. Annual Report Update: The list of outreach and education campaigns undertaken during the reporting cycle is included in Appendix B. Some activities originally planned for spring 2020 were cancelled due to the COVID-19 outbreak.</p>					
<p>1.e. - The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.</p>					
<p>(there are no sub sections to this requirement)</p>		<p>Compliance with state permit requirements.</p>	<p>Same documentation as described in 1.a.(1)-(3).</p>	<p>Existing, Ongoing</p>	<p>FM, RSEP</p>
<p>1.e. Annual Report Update: The education and outreach activities listed in Appendix B indicate whether efforts were undertaken by RSEP or UVA.</p>					

**Minimum Control Measure No. 1: Public Education and Outreach**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p><b>Additional Comments on Public Education and Outreach</b></p>	<p>The MS4 Program Plan is a planning document to aid UVA staff in management of UVA's MS4 program. Revisions to the anticipated BMPs described in this 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. Each MCM will be reviewed and evaluated annually for effectiveness to determine whether or not changes to the MS4 Program Plan are necessary. Revisions required as a result of the iterative process or through evaluation of program effectiveness will be noted during the annual reporting process and appropriate updates will be made to the MS4 Program Plan. Internal documents, policies, and SOPs referenced in the Program Plan are intended to provide guidance and UVA reserves the right to change these documents at any time and in any manner. The MS4 General Permit requires these documents to be in place and the presence of the documents, not the details of their content, are the enforceable requirement of the permit. Revisions to the MS4 Program Plan or referenced documents will be made within 60 days upon discovery of the need for a change unless otherwise specified in the permit language. All BMPs and strategies are being implemented with consideration for the Chesapeake Bay and Local TMDLs and to support developing action plans to address such TMDLs in accordance with MS4 regulatory requirements. Unless otherwise stated, no monitoring data is collected for the MS4 program. Any documents noted as available upon request may be requested by emailing storm-water@virginia.edu.</p>				

A - University Athletics Department  
 EHS - UVA Office of Environmental Health and Safety  
 FM - UVA Facilities Management  
 PD - UVA Police Department  
 UBO - University Building Official  
 RSEP - Rivanna Stormwater Education Partnership

**Minimum Control Measure No. 2: Public Involvement and Participation**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
2.a. - The permittee shall develop and implement procedures for the following:					
2.a.(1)-(5) - The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns; The public to provide input on the permittee's MS4 program plan; Receiving public input or complaints; Responding to public input received on the MS4 program plan or complaints; and Maintaining documentation of public input received on the MS4 program and associated MS4 program plan and the permittee's response.	The public can report input on discharges or spills via the RSEP or UVA FM website. The public can provide input about UVA's program plan via the UVA FM website. UVA will maintain a spreadsheet of all public input or complaints received, responses provided, and how the comment was incorporated into the MS4 Program Plan or how the complaint was handled. Input received about the MS4 program will be provided with each annual report. Reported spills and illicit discharges will be tracked on a separate spreadsheet as described in 3.c.(1).	The public can easily find reporting information on UVA's MS4, illicit discharges or spills on the UVA FM website. The public can also easily report illicit discharge or spill information via the RSEP website. Both websites are regularly maintained.	<a href="http://rivanna-stormwater.org">http://rivanna-stormwater.org</a> . <a href="https://www.fm.virginia.edu/depts/operations/environmental/submitconcern.html">https://www.fm.virginia.edu/depts/operations/environmental/submitconcern.html</a>	Existing, Ongoing	FM, RSEP
2.a.(1)-(5) Annual Report Update: Both reporting websites were available during the reporting process. No reports of spills or illicit discharges came in through these means. Most reports came directly to FM staff, often by other FM staff who had been trained in spill response and illicit discharges. Two reports came in from the City of Charlottesville staff.					
2.b. - No later than three months after this permit's effective date, the permittee shall develop and maintain a webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:					
2.b.(1)-(5) - The effective MS4 permit and coverage letter; The most current MS4 program plan or location where the MS4 program plan can be obtained; The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department; A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1); and Methods for how the public can provide input on the permittee's MS4 program plan in accordance with Part I E 2 a (2).	All required MS4 permit related information, including a mechanism for the public to report environmental concerns, is posted on the FM website. The public can provide comments on UVA's MS4 program plan at any time during the permit cycle at the same website.	Copies of the plan, annual report, and opportunities to provide input are kept up to date and are readily available to the public. Any documents will be posted within 30 days of submittal or completion.	<a href="https://www.fm.virginia.edu/depts/operations/environmental/stormwater/index.html">https://www.fm.virginia.edu/depts/operations/environmental/stormwater/index.html</a> <a href="https://www.fm.virginia.edu/depts/operations/environmental/submitconcern.html">https://www.fm.virginia.edu/depts/operations/environmental/submitconcern.html</a>	Existing, Ongoing	FM
2.b.(1)-(5) Annual Report Update: UVA's MS4 website has been active since before the start of the previous permit cycle. The website was updated to take into account new requirements for this reporting cycle and is updated each year with the annual report as required.					

**Minimum Control Measure No. 2: Public Involvement and Participation**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
2.c. - The permittee shall implement no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.					
Table 2 Public Involvement Opportunities - Monitoring, restoration, educational events, disposal or collection events, pollution prevention.	As part of the RSEP Education and Outreach plan described in 1.a.(1)-(3), activities have been identified for public involvement. In addition to participation in RSEP campaigns, UVA will undertake efforts to specifically target the University student population via efforts with UVA's Office for Sustainability and the Clean Water Working Group.	Participate in a minimum of four activities annually either through RSEP or as UVA individually.	Same documentation as described in 1.a.(1)-(3).	Existing, Ongoing	FM, RSEP
2.c. Annual Report Update: A table documenting all of UVA's public involvement activities have been included in Appendix B. Some activities originally planned for spring 2020 were cancelled due to the COVID-19 outbreak.					
2.d. - The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.					
(there are no sub sections to this requirement)	UVA partners with other RSEP members, including Albemarle County and the City of Charlottesville, on its public involvement and participation efforts. However, each permittee reports compliance with the permit requirements individually in their annual report. In addition, UVA may undertake additional public involvement opportunities beyond those planned with RSEP.	Compliance with state permit requirements.	Same documentation as described in 1.a.(1)-(3).	Existing, Ongoing	FM, RSEP
2.d. Annual Report Update: The public involvement activities listed in Appendix B indicate whether efforts were undertaken by RSEP or UVA.					
<b>Additional Comments on Public Involvement and Participation</b>	The MS4 Program Plan is a planning document to aid UVA staff in management of UVA's MS4 program. Revisions to the anticipated BMPs described in this 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. Each MCM will be reviewed and evaluated annually for effectiveness to determine whether or not changes to the MS4 Program Plan are necessary. Revisions required as a result of the iterative process or through evaluation of program effectiveness will be noted during the annual reporting process and appropriate updates will be made to the MS4 Program Plan. Internal documents, policies, and SOPs referenced in the Program Plan are intended to provide guidance and UVA reserves the right to change these documents at any time and in any manner. The MS4 General Permit requires these documents to be in place and the presence of the documents, not the details of their content, are the enforceable requirement of the permit. Revisions to the MS4 Program Plan or referenced documents will be made within 60 days upon discovery of the need for a change unless otherwise specified in the permit language. All BMPs and strategies are being implemented with consideration for the Chesapeake Bay and Local TMDLs and to support developing action plans to address such TMDLs in accordance with MS4 regulatory requirements. Unless otherwise stated, no monitoring data is collected for the MS4 program. Any documents noted as available upon request may be requested by emailing storm-water@virginia.edu.				

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**Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p><b>3.a. The permittee shall develop and maintain an accurate MS4 map and information table as follows:</b></p>					
<p>3.a.(1) - A map of the storm sewer system owned or operated by the permittee within the census urbanized area identified by the 2010 decennial census that includes, at a minimum: (a) MS4 outfalls discharging to surface waters, except as follows: In cases where the outfall is located outside of the MS4 permittee's legal responsibility, the permittee may elect to map the known point of discharge location closest to the actual outfall; and In cases where the MS4 outfall discharges to receiving water channelized underground, the permittee may elect to map the point downstream at which the receiving water emerges above ground as an outfall discharge location. If there are multiple outfalls discharging to an underground channelized receiving water, the map shall identify that an outfall discharge location represents more than one outfall. This is an option a permittee may choose to use and recognizes the difficulties in accessing outfalls to underground channelized stream conveyances for purposes of mapping, screening, or monitoring. (b) A unique identifier for each mapped item required in Part I E 3; (c) The name and location of receiving waters to which the MS4 outfall or point of discharge discharges; (d) MS4 regulated service area; and (e) stormwater management facilities owned or operated by the permittee.</p>	<p>GIS technology is used to accurately map all stormwater discharge outfall locations and associated required information. All stormwater outfalls or points of discharge have been identified for annual inspection and illicit discharge tracking. Maps are updated as outfall locations change due to construction projects. The map will be maintained and updated as soon as possible after changes occur but no later than October 1 of each year for changes occurring through June 30 of that same year.</p>	<p>Accurate, up-to-date inventory of UVA's storm sewer system, including all outfalls and points of discharge.</p>	<p>A GIS map and associated information table is stored on a secure UVA site and may be made available upon request.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>3.a.(1) Annual Report Update: UVA's stormwater map was up to date by October 1 for changes occurring through June 30. UVA's GIS allows objects to be identified as planned or installed. UVA updates the map with planned changes as soon as they are known, which allows the updates to be easily made once items are installed. In addition, the map is updated based on field observations and new survey technology as needed.</p>					



**Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>3.a.(2) - The permittee shall maintain an information table associated with the storm sewer system map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a): (a) A unique identifier as specified on the storm sewer system map; (b) The latitude and longitude of the outfall or point of discharge; (c) The estimated regulated acreage draining to the outfall or point of discharge; (d) The name of the receiving water; (e) The 6th Order Hydrologic Unit Code of the receiving water; (f) An indication as to whether the receiving water is listed as impaired in the Virginia 2016 305(b)/303(d) Water Quality Assessment Integrated Report; (g) The predominant land use for each outfall discharging to an impaired water; and (h) The name of any EPA approved TMDLs for which the permittee is assigned a waste load allocation.</p>	<p>UVA will continue to utilize GIS technology to accurately map all stormwater discharge outfall locations and associated required information. New information that was not previously required, such as predominant land use, will be added during this permit cycle. The information table will be maintained and updated as changes occur.</p>	<p>Accurate, up-to-date inventory of UVA's storm sewer system.</p>	<p>Same map and information table as described in 3.a.(1).</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.a.(2) Annual Report Update: UVA's GIS map includes an accurate, up to date map and table for identified outfalls and points of discharge as required.</b></p>					
<p>3.a.(3) - No later than July 1, 2019, the permittee shall submit to DEQ a GIS-compatible shape file of the permittee's MS4 map as described in Part I E 3 a. If the permittee does not have an MS4 map in a GIS format, the permittee shall provide the map as a PDF document.</p>	<p>As described in 3.a(1)-(2), UVA maintains an accurate GIS map and associated information table with information about UVA's storm sewer system and outfalls. This shape file will be shared with DEQ by the stated deadline.</p>	<p>Submittal of GIS shape file of UVA's MS4 map to DEQ by the specified deadline.</p>	<p>Same map and information table as described in 3.a.(1).</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.a.(3) Annual Report Update: UVA's GIS map shape files were submitted to Megan O'Gorek on June 4, 2019.</b></p>					
<p>3.a.(4) - No later than October 1 of each year, the permittee shall update the storm sewer system map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.</p>	<p>As described in 3.a(1)-(2), UVA maintains an accurate GIS map and associated information table with information about UVA's storm sewer system and outfalls. These are updated as changes are made but, at minimum, will be updated no later than October 1 annually.</p>	<p>Accurate, up-to-date inventory of UVA's storm sewer system, updated by the specified deadline.</p>	<p>Same map and information table as described in 3.a.(1).</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.a.(4) Annual Report Update: No new TMDLs were approved during the reporting period. One new outfall was added both to the GIS map and the outfall inspection.</b></p>					

**Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
3.a.(5) - The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.	UVA has provided written notification to the City of Charlottesville regarding physical interconnections to their MS4. Letters were also sent to Albemarle County and VDOT, though no physical interconnections have been identified to date. UVA will continue to maintain an up-to-date GIS map to identify any physical interconnections that may be made in the future.	Neighboring MS4s are informed of physical interconnections with UVA.	Copies of the written notification letters are available upon request.	Existing, Ongoing	FM
<b>3.a.(5) Annual Report Update: No additional notifications regarding physical interconnections were required to be made during the reporting period.</b>					
3.b. - The permittee shall prohibit, through ordinance, policy, standard operating procedures, or other legal mechanism, to the extent allowable under federal, state, or local law, regulations, or ordinances, unauthorized nonstormwater discharges into the storm sewer system. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.					
(there are no sub sections to this requirement)	UVA has a policy specifically stating the University will prevent University activities from polluting the environment. All SOPs developed for activities which could create unauthorized nonstormwater discharges, reference illicit discharges as the reason the SOP is required. In addition, UVA has control of all activities occurring on UVA property and is able to stop any illicit discharge causing activity as soon as possible upon discovery.	Number of illicit discharges each year.	UVA's environmental policy is available here: <a href="https://uvapolicy.virginia.edu/policy/SEC-002">https://uvapolicy.virginia.edu/policy/SEC-002</a> UVA's SOPs are available here: <a href="https://www.fm.virginia.edu/depts/operations/environmental/procedures.html">https://www.fm.virginia.edu/depts/operations/environmental/procedures.html</a>	Existing, Ongoing	FM
3.b. Annual Report Update: UVA had 6 reportable nonstormwater discharges that were reported to DEQ. The individual discharges are included in Appendix C. Effective July 2, 2020, UVA entered into an Executive Compliance Agreement with DEQ to address these discharges, among other items. Since most of the discharges originated from contractors working on construction sites, UVA has revised contract language and is working to develop SOPs and training documents regarding handling of materials from construction sites with a particular focus on liquid wastes.					
3.c. The permittee shall maintain, implement, and enforce illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping, to the small MS4 to effectively eliminate the unauthorized discharge. Written procedures shall include:					

**Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>3.c.(1) - A description of the legal authorities, policies, standard operating procedures or other legal mechanisms available to the permittee to eliminate identified sources of ongoing illicit discharges including procedures for using legal enforcement authorities.</p>	<p>UVA has developed an SOP for Illicit Discharge Detection, for Sanitary Sewer Overflows, for responding to Bacteria Response related to RCA stream monitoring, and also for conducting Outfall Inspections. Since UVA owns the property on which its MS4 is located, illicit discharges on UVA property can be eliminated by ceasing the activity causing the illicit discharge. UVA will continue to follow procedure for reporting and tracking illicit discharges and procedures for enforcing policies.</p>	<p>Follow SOPs and document number of spills, SSOs, and illicit discharge investigations annually.</p>	<p>UVA maintains a spreadsheet of all spills, illicit discharges, and incidents that had the potential to become illicit discharges. This spreadsheet is available upon request. SOPs are reviewed at least annually and the most recent version is available on the UVA website: <a href="https://www.fm.virginia.edu/depts/operations/environmental/procedures.html">https://www.fm.virginia.edu/depts/operations/environmental/procedures.html</a></p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.c.(1) Annual Report Update: No SSOs occurred during the reporting period.</b></p>					
<p>3.c.(2) - Dry weather field screening protocols to detect, identify, and eliminate illicit discharges to the MS4. The protocol shall include: (a) A prioritized schedule of field screening activities and rationale for prioritization determined by the permittee based on such criteria as age of the infrastructure, land use, historical illegal discharges, dumping or cross connections; (b) If the total number of MS4 outfalls is equal to or less than 50, a schedule to screen all outfalls annually; (c) If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years; and (d) A mechanism to track the following information: The unique outfall identifier; Time since the last precipitation event; The estimated quantity of the last precipitation event; Site descriptions; Whether or not a discharge was observed; and If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge.</p>	<p>Utilize written IDDE procedures to detect illicit discharges, report them, investigate them, and document the investigation. Procedures were revised and updated to ensure compliance with new MS4 program requirements. UVA currently has more than 50 but less than 100 outfalls and plans to screen all outfalls annually. Outfalls that had problems during past inspections or that have a high potential for illicit discharges may be visited more frequently.</p>	<p>Number of outfalls screened annually.</p>	<p>UVA has a written SOP for outfall inspections as well as a form used to document outfall inspections. The outfall inspection form has been incorporated into UVA's maintenance tracking system, AiM, which allows the outfall inspections to be recorded and stored electronically.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.c.(2) Annual Report Update: All 77 UVA outfalls were screened during the reporting period using the outfall inspection SOP. One illicit discharge was discovered during an outfall inspection; follow-up efforts are described in Appendix C.</b></p>					

**Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>3.c.(3) - A timeframe upon which to conduct an investigation to identify and locate the source of any observed unauthorized nonstormwater discharge. Priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety. Discharges authorized under a separate VPDES or state permit require no further action under this permit.</p>	<p>UVA SOPs for illicit discharge detection and sanitary sewer overflows (SSOs) require staff to respond immediately to reports received.</p>	<p>Maintain staffing and equipment to respond to reports of illicit discharges, spills, and sanitary sewer overflows immediately upon notification.</p>	<p>Same spreadsheet as described in 3.c.(1)</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.c.(3) Annual Report Update: UVA has adequate staff available to respond to illicit discharges and SSOs. The UVA Operator and FM Systems Control are available 24/7 to answer incoming calls and contact appropriate personnel to respond to illicit discharges or SSOs.</b></p>					
<p>3.c.(4) - Methodologies to determine the source of all illicit discharges. If the permittee is unable to identify the source of an illicit discharge within six months of beginning the investigation then the permittee shall document that the source remains unidentified. If the observed discharge is intermittent, the permittee shall document that attempts to observe the discharge flowing were unsuccessful.</p>	<p>As stated in 3.c.(1), UVA has SOPs with methodologies to track illicit discharge investigations and will document if a source is unable to be identified.</p>	<p>Same goal as described in 3.c.(1)</p>	<p>Same spreadsheet as described in 3.c.(1)</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.c.(4) Annual Report Update: UVA staff follow SOPs to track illicit discharges. During the reporting period, the source of all surface spills and illicit discharges were able to be determined except one. Following SOP protocols, repeat visits to the site were made for the one undetermined discharge. This discharge was not observed to repeat over multiple visits thereafter, nor was the source of the original discharge ever determined.</b></p>					
<p>3.c.(5) - Methodologies for conducting a follow-up investigation for illicit discharges that are continuous or that permittees expect to occur more frequently than a one-time discharge to verify that the discharge has been eliminated except as provided for in Part I E 3 c (4);</p>	<p>As stated in 3.c.(1), UVA has SOPs with methodologies to track illicit discharge investigations.</p>	<p>Same goal as described in 3.c.(1)</p>	<p>Same spreadsheet as described in 3.c.(1)</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>3.c.(5) Annual Report Update: There were no continuous or more frequent than a one-time discharge that occurred during the reporting period.</b></p>					
<p>3.c.(6)(a)-(e) -A mechanism to track all illicit discharge investigations to document the following: (a) The dates that the illicit discharge was initially observed, reported, or both; (b) The results of the investigation, including the source, if identified; (c) Any follow-up to the investigation; (d) Resolution of the investigation; and (e) The date that the investigation was closed.</p>	<p>As stated in 3.c.(1), UVA has a spreadsheet to track illicit discharge investigations which documents the required information.</p>	<p>Same goal as described in 3.c.(1)</p>	<p>Same spreadsheet as described in 3.c.(1)</p>	<p>Existing, Ongoing</p>	<p>FM</p>

**Minimum Control Measure No. 3: Illicit Discharge Detection and Elimination**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>3.c.(6)(a)-(e) Annual Report Update: UVA has a spreadsheet to track all surface spills, discharges, and illicit discharges which includes all of the required information. Reportable illicit discharges are included as Appendix C. The full spreadsheet, which includes surface spills and other near misses is available upon request.</p>					
<p><b>Additional Comments on Illicit Discharge Detection and Elimination</b></p>	<p>The MS4 Program Plan is a planning document to aid UVA staff in management of UVA's MS4 program. Revisions to the anticipated BMPs described in this 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. Each MCM will be reviewed and evaluated annually for effectiveness to determine whether or not changes to the MS4 Program Plan are necessary. Revisions required as a result of the iterative process or through evaluation of program effectiveness will be noted during the annual reporting process and appropriate updates will be made to the MS4 Program Plan. Internal documents, policies, and SOPs referenced in the Program Plan are intended to provide guidance and UVA reserves the right to change these documents at any time and in any manner. The MS4 General Permit requires these documents to be in place and the presence of the documents, not the details of their content, are the enforceable requirement of the permit. Revisions to the MS4 Program Plan or referenced documents will be made within 60 days upon discovery of the need for a change unless otherwise specified in the permit language. All BMPs and strategies are being implemented with consideration for the Chesapeake Bay and Local TMDLs and to support developing action plans to address such TMDLs in accordance with MS4 regulatory requirements. Unless otherwise stated, no monitoring data is collected for the MS4 program. Any documents noted as available upon request may be requested by emailing storm-water@virginia.edu.</p>				

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**Minimum Control Measure No. 4: Construction Site Stormwater Runoff Control**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>4.a. The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The permittee shall control construction site stormwater runoff as follows:                      *only requirements pertaining to state agencies are listed below</p>					
<p>4.a.(3) -If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications;</p>	<p>As a state agency of higher education, UVA is legally required to follow the DEQ approved Annual Standards and Specifications (AS&amp;S) for Stormwater Management (SWM) and Erosion and Sediment Control (E&amp;SC) for all regulated land disturbing activities undertaken on UVA property, either by its internal workforce or contracted to external entities. DEQ approved Standards and Specifications include a description of the legal authorities utilized to ensure compliance with SWM and E&amp;SC regulations, personnel certification requirements, plan review and permitting requirements, inspection schedule, inspection and enforcement procedures (including all associated documents utilized during inspections), and reporting and recordkeeping requirements. The University Building Official will not issue a building permit for a project without documented approval of E&amp;SC and SWM Plans, if applicable. E&amp;SC plans must be approved by a certified plan reviewer prior to the commencement of land disturbing activities. Currently UVA has an MOU with the Thomas Jefferson Soil and Water Conservation District (TJSWCD) to conduct plan review, but UVA also retains authority and has staff certified to perform the reviews.</p>	<p>Number of inspections conducted annually.</p>	<p>The latest UVA AS&amp;S for SWM and E&amp;SC and associated approval letter from DEQ is available on the FM website at:  <a href="https://www.fm.virginia.edu/depts/operations/environmental/erosion.html">https://www.fm.virginia.edu/depts/operations/environmental/erosion.html</a></p> <p>UVA's MOU with the TJSWCD for plan review services is available upon request.</p>	<p>Existing, Ongoing</p>	<p>FM, UBO</p>
<p>4.a.(3) Annual Report Update: UVA conducted 454 E&amp;SC inspections during the reporting period. No enforcement actions were required. UVA hires the contractors and works with them directly to mitigate issues quickly so that they don't rise to the level of requiring enforcement. As part of UVA's AS&amp;S program, UVA submits semi-annual land disturbance reports to DEQ which document new plan approvals for regulated land disturbing activities.</p>					

**Minimum Control Measure No. 4: Construction Site Stormwater Runoff Control**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>4.b - The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections of the MS4. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.</p>					
<p>(there are no sub sections to this requirement)</p>	<p>Land disturbances over 1 acre must obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities, which requires preparation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP requires the site contractors to identify and implement appropriate controls to prevent nonstormwater discharges. For sites that do not have SWPPPs, UVA dual SWM and E&amp;SC inspectors inspect sites for compliance with SWPPP principles and include issues of non-compliance in routine E&amp;SC inspection reports of the site. UVA's SOPs will be shared with contractors during pre-construction meetings.</p>	<p>Number of inspections conducted annually.</p>	<p>The latest UVA Annual Standards and Specifications for SWM and E&amp;SC and associated approval letter from DEQ is available on the FM website at: <a href="https://www.fm.virginia.edu/depts/operations/environmental/erosion.html">https://www.fm.virginia.edu/depts/operations/environmental/erosion.html</a> The latest UVA SOPs are available on the FM website at: <a href="https://www.fm.virginia.edu/depts/operations/environmental/procedures.html">https://www.fm.virginia.edu/depts/operations/environmental/procedures.html</a></p>	<p>SOPs shared during pre-con meetings will begin January 2019, the remaining are existing, ongoing</p>	<p>FM</p>
<p>4.b. Annual Report Update: UVA conducted 24 SWPPP specific inspections during the reporting period. Several of the inspections were delayed and modified versions of the inspections were completed due to the COVID pandemic. UVA SOPs are discussed with contractors during pre-construction meetings.</p>					
<p><b>Additional Comments on Construction Site Stormwater Runoff Control</b></p>	<p>The MS4 Program Plan is a planning document to aid UVA staff in management of UVA's MS4 program. Revisions to the anticipated BMPs described in this 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. Each MCM will be reviewed and evaluated annually for effectiveness to determine whether or not changes to the MS4 Program Plan are necessary. Revisions required as a result of the iterative process or through evaluation of program effectiveness will be noted during the annual reporting process and appropriate updates will be made to the MS4 Program Plan. Internal documents, policies, and SOPs referenced in the Program Plan are intended to provide guidance and UVA reserves the right to change these documents at any time and in any manner. The MS4 General Permit requires these documents to be in place and the presence of the documents, not the details of their content, are the enforceable requirement of the permit. Revisions to the MS4 Program Plan or referenced documents will be made within 60 days upon discovery of the need for a change unless otherwise specified in the permit language. All BMPs and strategies are being implemented with consideration for the Chesapeake Bay and Local TMDLs and to support developing action plans to address such TMDLs in accordance with MS4 regulatory requirements. Unless otherwise stated, no monitoring data is collected for the MS4 program. Any documents noted as available upon request may be requested by emailing <a href="mailto:storm-water@virginia.edu">storm-water@virginia.edu</a>.</p>				

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**Minimum Control Measure No. 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>5.a. The permittee shall address post construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program.                      *only requirements pertaining to state agencies are listed below</p>					
<p>5.a.(3) If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and develop an inspection and maintenance program in accordance with Part I E 5 b;</p>	<p>As a state agency of higher education, UVA is legally required to follow the DEQ approved Annual Standards and Specifications (AS&amp;S) for Stormwater Management (SWM) and Erosion and Sediment Control (E&amp;SC) for all regulated land disturbing activities undertaken on UVA property. DEQ is the program authority for UVA AS&amp;S. The AS&amp;S include a description of the legal authorities utilized to ensure compliance with SWM and E&amp;SC regulations, personnel certification requirements, plan review and permitting requirements, inspection schedule, inspection and enforcement procedures (including all associated documents utilized during inspections), and reporting and recordkeeping requirements. The University Building Official will not issue a building permit for a project without documented approval of SWM Plans, if applicable. Currently, UVA has two staff members certified in plan review, but most plans are reviewed by a plan reviewer at the TJSWCD. UVA currently has four staff members with dual inspector certifications.</p>	<p>Number of projects reviewed annually to ensure stormwater runoff from UVA construction sites is managed appropriately for each site.</p>	<p>The latest UVA AS&amp;S for SWM and E&amp;SC and associated approval letter from DEQ is available on the FM website at: <a href="https://www.fm.virginia.edu/depts/operations/environmental/erosion.html">https://www.fm.virginia.edu/depts/operations/environmental/erosion.html</a>  UVA's MOU with the TJSWCD for plan review services is available upon request.</p>	<p>Existing, Ongoing</p>	<p>FM, UBO</p>
<p>5.a.(3) Annual Report Update: The TJSWCD reviewed 5 projects for UVA during the reporting period. One project was reviewed internally. UVA is involved in all steps of the approval process and sends the approval to the projects directly.</p>					
<p>5.b. The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee that discharges to the MS4 as follows:</p>					
<p>5.b(1) The permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities;</p>	<p>UVA owns and maintains all SWM facilities on its property within the MS4 with the exception of BMPs located on UVA property that is on a long-term lease to a local governmental agency. Each UVA facility has its own written inspection and maintenance procedures. Maintenance of the entire property on long term lease is the responsibility of the leasee.</p>	<p>BMPs are thoroughly inspected routinely to ensure proper function. New BMP inspection and maintenance procedures are created as new BMPs are added to UVA property.</p>	<p>UVA's SOP for BMP Inspection and maintenance can be found on FM's website: <a href="https://www.fm.virginia.edu/depts/operations/environmental/procedures.html">https://www.fm.virginia.edu/depts/operations/environmental/procedures.html</a>. Individual inspection checklists for each facility are maintained by FM and available upon request.</p>	<p>Existing, Ongoing</p>	<p>FM</p>



**Minimum Control Measure No. 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
5.b.(1) Annual Report Update: UVA has developed a BMP database to better document the timely completion of BMP inspections. This database is being utilized in addition to existing paper inspection records to ensure that each BMP is receiving appropriate attention.					
5.b.(2) - The permittee shall inspect stormwater management facilities owned or operated by the permittee no less than once per year.	All facilities are inspected at least annually, but some are visited more frequently for a quick inspection and routine maintenance, such as trash and debris removal.	Number of inspections completed. Routine maintenance, such as mowing or trash removal, is not tracked.	Inspection and maintenance procedures described in 5.b(1).	Existing, Ongoing	FM
5.b.(2) Annual Report Update: Approximately 125 BMP inspections were completed by UVA FM staff during the reporting period.					
5.b.(3) - If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).	FM staff receive and review all BMP inspection and maintenance written reports. FM staff make arrangements for BMP maintenance in the event maintenance is more extensive than the inspection staff were able to take care of on their own.	Number of maintenance items reported. Not all maintenance items require immediate attention, but are tracked to observe patterns.	Inspection and maintenance procedures described in 5.b(1).	Existing, Ongoing	FM
5.b.(3) Annual Report Update: UVA has a spreadsheet to track maintenance items noted during BMP inspections. Appropriate corrective action is taken when needed to ensure adequate BMP function.					
5.c. - This permit condition applies to Cities, Counties, or Towns. As a state agency, this condition does not apply to UVA and thus is not included.					
5.d. The permittee shall maintain an electronic database or spreadsheet of all known permittee owned or permittee-operated and privately owned stormwater management facilities that discharge into the MS4. The database shall also include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A. A database shall include the following information as applicable:					

**Minimum Control Measure No. 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p>5.d.(1)-(9) The stormwater management facility or BMP type; The stormwater management facility or BMPs location as latitude and longitude; The acres treated by the stormwater management facility or BMP, including total acres, pervious acres, and impervious acres; The date the facility was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use June 30, 2005; The 6th Order Hydrologic Unit Code in which the stormwater management facility is located; Whether the stormwater management facility or BMP is owned or operated by the permittee or privately owned; Whether or not the stormwater management facility or BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both; If the stormwater management facility or BMP is privately owned, whether a maintenance agreement exists; and The date of the permittee's most recent inspection of the stormwater management facility or BMP.</p>	<p>UVA maintains a stormwater BMP spreadsheet that contains all of the information required in 5.d.(1)-(9). The spreadsheet will be updated no later than 30 days after a new BMP is brought online, a BMP is implemented to meet TMDL requirements, or an existing BMP is discovered.</p>	<p>An accurate, up-to-date BMP spreadsheet.</p>	<p>FM maintains a BMP spreadsheet that can be reviewed upon request by emailing storm-water at virginia.edu.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>5.d.(1)-(9) Annual Report Update: 16 new BMPs meeting the conditions described in 5.d(1)-(9) were completed during the reporting period. One BMP was replaced, though no additional credit was achieved. UVA continues to maintain the stormwater BMP spreadsheet and includes BMPs that are in the planning and construction phase. Complete BMP information will be added to the spreadsheet with all required information within 30 days of the completion of construction.</p>					

**Minimum Control Measure No. 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
5.e. The electronic database or spreadsheet shall be updated no later than 30 days after a new stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction as required in Part II, or discovered if it is an existing stormwater management facility.					
(there are no sub sections to this requirement)	Maintain inventory of stormwater management facilities. Continue to update existing facility inventory database and GIS map as described in 3.a.(1) and include new requirement for this permit cycle to include whether the facility or BMP is part of a TMDL action plan. The spreadsheet is updated as soon as the appropriate FM staff learns about a project which will add a new BMP and will update the spreadsheet upon completion of the project.	An accurate, up-to-date BMP spreadsheet.	The spreadsheet is maintained as described in 5.d.(1)-(9).	Existing, Ongoing	FM
5.e. Annual Report Update: All new BMPs or modifications to existing BMPs are added to the spreadsheet within 30 days of being brought online.					
5.f. The permittee shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.					
(there are no sub sections to this requirement)	When the operator for a site with a construction general permit submits a notice of termination, they are required to submit a list of BMPs that were added to the site during construction. DEQ is the program authority for UVA's AS&S and as such, DEQ enters stormwater management facility information into the database as part of the construction general permit termination process.	Stormwater management facilities are reported to DEQ as required.	None.	Ongoing	FM
5.f. Annual Report Update: DEQ continues to serve as the Authority for UVA's AS&S and as such is responsible for updating the DEQ Construction Stormwater Database as described in 5.f.					
5.g. No later than October 1 of each year, the permittee shall electronically report the stormwater management facilities and BMPs implemented between July 1 and June 30 of each year using the DEQ BMP Warehouse and associated reporting template for any practices not reported in accordance with Part I E 5 f including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.					
(there are no sub sections to this requirement)	FM will report stormwater management facilities and BMP installations as specified by this requirement upon installation or in conjunction with submission of UVA's annual report.	Stormwater management facilities are reported to DEQ as required.	None.	Ongoing	FM
5.g. Annual Report Update: No stormwater management facilities or BMPs meeting the conditions described in 5.g. were installed during the reporting period.					

**Minimum Control Measure No. 5: Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
<p><b>Additional Comments on Post-Construction Stormwater Management</b></p>	<p>The MS4 Program Plan is a planning document to aid UVA staff in management of UVA's MS4 program. Revisions to the anticipated BMPs described in this 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. Each MCM will be reviewed and evaluated annually for effectiveness to determine whether or not changes to the MS4 Program Plan are necessary. Revisions required as a result of the iterative process or through evaluation of program effectiveness will be noted during the annual reporting process and appropriate updates will be made to the MS4 Program Plan. Internal documents, policies, and SOPs referenced in the Program Plan are intended to provide guidance and UVA reserves the right to change these documents at any time and in any manner. The MS4 General Permit requires these documents to be in place and the presence of the documents, not the details of their content, are the enforceable requirement of the permit. Revisions to the MS4 Program Plan or referenced documents will be made within 60 days upon discovery of the need for a change unless otherwise specified in the permit language. All BMPs and strategies are being implemented with consideration for the Chesapeake Bay and Local TMDLs and to support developing action plans to address such TMDLs in accordance with MS4 regulatory requirements. Unless otherwise stated, no monitoring data is collected for the MS4 program. Any documents noted as available upon request may be requested by emailing storm-water@virginia.edu.</p>				

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**Minimum Control Measure No. 6: Pollution Prevention and Good Housekeeping for UVA Facility Operations**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
6.a. - The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:					
6.a.(1) - Prevent illicit discharges;	UVA has developed several SOPs to minimize the potential for or prevent pollutant discharges from activities of concern. These include, but are not limited to, SOPs on Waste Management, Vehicle and Equipment Washing, and Building Fire Sprinkler System Flushing.	Number of illicit discharges caused by UVA operations.	All SOPs are saved on the FM website and are reviewed at least annually or whenever an operations or equipment change warrants such review. <a href="https://www.fm.virginia.edu/depts/operations/environmental/procedures.html">https://www.fm.virginia.edu/depts/operations/environmental/procedures.html</a> In addition, UVA tracks all reported and discovered illicit discharges or spills in a spreadsheet and follows up as needed to determine if activity patterns might warrant the need for a new or updated SOP.	Existing, Ongoing	FM
6.a.(1) Annual Report Update: As described in 3.b and 3.c. (1) UVA had 6 illicit discharge during the reporting period. Several SOPs are being developed or revised as a result of these illicit discharges.					
6.a.(2) - Ensure the proper disposal of waste materials, including landscape wastes;	UVA has developed SOPs on Waste Management, Used Oil Disposal, Used Cooking Oil Disposal, UVA Recycling Sorting Facility, and Disposal of Landscape Organic Wastes.	Same goal as stated in 6.a.(1)	Same SOP process as described in 6.a.(1)	Existing, Ongoing	FM
6.a.(2) Annual Report Update: Several illicit discharges resulted from the improper handling of waste by contractors on UVA construction sites. Contract language has been modified and several SOPs are being drafted to address the proper handling of waste on construction sites. Per an Executive Compliance Agreement with DEQ, the new SOPs will be completed by September 30, 2020.					
6.a.(3) - Prevent the discharge of wastewater or permittee vehicle wash water or both into the MS4 without authorization under a separate VPDES permit;	UVA has developed an SOP on Vehicle and Equipment Washing as well as one on Exterior Surfaces and Building Washing.	Same goal as stated in 6.a.(1)	Same SOP process as described in 6.a.(1)	Existing, Ongoing	FM
6.a.(3) Annual Report Update: Several of the illicit discharges described in 3.b resulted from improper handling of wastewater generated on construction sites. As mentioned in 6.a.(1) and (2), several new SOPs are being drafted to describe proper handling of wastes, including liquid wastes, on construction sites in the future.					
6.a.(4) - Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities;	UVA has developed an SOP on Water Disposal from Dewatering Activities.	Same goal as stated in 6.a.(1)	Same SOP process as described in 6.a.(1)	Existing, Ongoing	FM
6.a.(4) Annual Report Update: Two illicit discharges on construction sites resulting from non-traditional dewatering activities during the reporting period. As mentioned in 6.a.(1) and (2), several new SOPs are being drafted to describe proper handling of wastes, including liquid wastes, on construction sites in the future.					

**Minimum Control Measure No. 6: Pollution Prevention and Good Housekeeping for UVA Facility Operations**

Applicable Regulatory Text	BMPs or Strategies Anticipated to be Implemented	Measurable Goal	Standard Operating Procedures, Policies, or Documents Incorporated by reference to support this BMP or Strategy	Implementation Schedule	RESPONSIBLE DEPARTMENTS
6.a.(5) - Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices;	UVA has developed an SOP on Salt/Sand and Spreader Shed Maintenance and developed a SWPPP for the FM Yard.	Same goal as stated in 6.a.(1)	Same SOP process as described in 6.a.(1)	Existing, Ongoing	FM
<b>6.a.(5) Annual Report Update: There were no illicit discharges resulting from bulk storage areas during the reporting period.</b>					
6.a.(6) - Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and	UVA has developed an SOP on Vehicle and Equipment Maintenance.	Same goal as stated in 6.a.(1)	Same SOP process as described in 6.a.(1)	Existing, Ongoing	FM
<b>6.a.(6) Annual Report Update: There were no illicit discharges resulting from vehicle and equipment maintenance activities during the reporting period.</b>					
6.a.(7) - Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.	Only licensed applicators are allowed to use pesticides, herbicides, and fertilizers on UVA property covered by the MS4 permit. All such chemicals are required to be stored and transported underneath a cover where it cannot be exposed to stormwater. All fertilizer and pesticide applicators are certified and their certifications are reviewed annually by UVA's certified Nutrient Management Planner.	Ensure applicators have required licenses. Number of certified pesticide, herbicide, and fertilizer users at UVA.	Nutrient management plans are updated and maintained by UVA's certified Nutrient Management Planner and are available upon request.	Existing, Ongoing	A, EHS, FM
<b>6.a.(7) Annual Report Update: UVA's certified Nutrient Management Planner checked that licenses of applicators were up to date during the reporting cycle.</b>					
<b>6.b. The written procedures established in accordance with Part I E 6 a shall be utilized as part of the employee training program at Part I E 6 m.</b>					
(there are no sub sections to this requirement)	SWPPPs, SOPs, and any other written procedures shall be covered in the employee training program that is included in Appendix D.	Track staff training provided in compliance with this requirement.	Written training materials and staff training sign in sheets. SOPs described in 6.a(1) are part of the training process.	Existing, Ongoing	A, FM
<b>6.b. Annual Report Update: The SOPs were included in the employee training program and training completed, which is included in Appendix D.</b>					
6.c.- Within 12 months of state permit coverage, the permittee shall identify which of the high priority facilities have a high potential of discharging pollutants. The permittee shall maintain and implement a site specific stormwater pollution prevention plan (SWPPP) for each facility identified. High priority facilities that have a high potential for discharging pollutants are those facilities that are not covered under a separate VPDES permit and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff:					

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<p>6.c.(1)-(9) - Areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater; Materials or residuals on the ground or in stormwater inlets from spills or leaks; Material handling equipment; Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt); Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants); Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers; Waste material except waste in covered, nonleaking containers (e.g., dumpsters); Application or disposal of process wastewater (unless otherwise permitted); or Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.</p>	<p>UVA has completed an evaluation of high priority facilities with a high potential of discharging pollutants, which is included in Appendix C. For all identified high priority facilities with a high potential to discharge, UVA has already prepared a SWPPP which is maintained internally. In addition, UVA will annually inspect facilities that have been identified as high priority, but do not have a high potential to discharge in order to determine if a SWPPP is needed. Facilities with SWPPPs are also inspected annually. Facilities will be added or removed from the list of high priority facility with a high potential to discharge during the permit cycle as conditions warrant.</p>	<p>Up-to-date list of high priority facilities with a high potential of discharging pollutants, which require SWPPPs.</p>	<p>The list of high priority facilities with a high potential to discharge pollutants along with any SWPPPs developed is maintained as an appendix to the MS4 Program Plan.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>6.c.(1)-(9) Annual Report Update: UVA maintains a list of high priority facilities with a high potential to discharge pollutants along with facilities with SWPPPs in Appendix E. Inspections are conducted annually at SWPPP facilities. Items identified as needing attention during the SWPPP inspection are brought to the attention of management for that facility. During this reporting year, items identified were minor and did not require updates to the SWPPPs.</p>					
<p>6.d - Each SWPPP as required in Part I E 6 c shall include the following:</p>					

**Minimum Control Measure No. 6: Pollution Prevention and Good Housekeeping for UVA Facility Operations**

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<p>6.d.(1)-(8) - A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies; A description and checklist of the potential pollutants and pollutant sources; A description of all potential nonstormwater discharges; Written procedures designed to reduce and prevent pollutant discharge; A description of the applicable training as required in Part I E 6 m; Procedures to conduct an annual comprehensive site compliance evaluation; An inspection frequency of no less than once per year and maintenance requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP; and A log of each unauthorized discharge, release, or spill incident reported in accordance with Part III G including the following information: (a) Date of incident; (b) Material discharged, released, or spilled; and (c) Estimated quantity discharged, released or spilled.</p>	<p>UVA has developed a SWPPP template which contains the information required in 6.d.(1)-(8). Any subsequent SWPPPs which need to be developed will be developed using this template.</p>	<p>SWPPP template and SWPPPs contain all permit-required information.</p>	<p>The SWPPP template and SWPPPs are available upon request.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>6.d.(1)-(8) Annual Report Update: No new SWPPPs were developed during the reporting period. UVA continues to maintain a SWPPP template and the template will be used to develop any future, required SWPPPs.</p>					
<p>6.e. - No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which a SWPPP has not been developed to determine if the facility has a high potential to discharge pollutants as described in Part I E 6 c. If the facility is determined to be a high-priority facility with a high potential to discharge pollutants, the permittee shall develop a SWPPP meeting the requirements of Part I E 6 d no later than December 31 of that same year.</p>					
<p>(there are no sub sections to this requirement)</p>	<p>UVA will annually review high priority facilities owned by UVA for which a SWPPP has not been developed to determine if the facility has a high potential to discharge pollutants. A SWPPP will be developed by December 31 of that same year for any such facility if the need for a SWPPP is determined.</p>	<p>Facilities requiring SWPPPs are identified in a timely manner.</p>	<p>The list of high priority facilities with a high potential to discharge pollutants, including whether or not a SWPPP has been developed, is maintained as an appendix to the MS4 Program Plan.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>6.e. Annual Report Update: High-priority facilities with a high potential to discharge pollutants are reviewed annually to determine if a SWPPP is needed. No new SWPPPs were added during the reporting cycle. The list of high priority facilities and SWPPPs is available in Appendix E.</p>					
<p>6.f. - The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part III G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.</p>					



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(there are no sub sections to this requirement)	UVA will review site specific SWPPPs within 30 days of any spills, releases, or major changes to site operations.	Updated SWPPPs.	SWPPPs are stored on FM's internal server and are available upon request.	Existing, Ongoing	FM
6.f. Annual Report Update: No unauthorized discharge, releases, or spills occurred at any facilities with SWPPPs during the reporting cycle.					
6.g. - The SWPPP shall be kept at the high-priority facility with a high potential to discharge and utilized as part of staff training required in Part I E 6 m. The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.					
(there are no sub sections to this requirement)	All UVA SWPPPs are stored electronically are available to employees on site. SWPPPs are used as part of staff training.	Electronically available SWPPPs. Training materials containing SWPPP related information.	SWPPPs and training materials are stored on FM's internal server and are available upon request.	Existing, Ongoing	FM
6.g. Annual Report Update: Currently all facilities with SWPPPs are operated by FM. All SWPPPs are available on the FM internal server and the Environmental Resources website: <a href="https://www.fm.virginia.edu/depts/operations/environmental/procedures.html">https://www.fm.virginia.edu/depts/operations/environmental/procedures.html</a>					
6.h. If activities change at a facility such that the facility no longer meets the criteria of a high-priority facility with a high potential to discharge pollutants as described in Part I E 6 c, the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.					
(there are no sub sections to this requirement)	The list of high priority facilities with a high potential to discharge pollutants is available in Appendix C. Any facilities evaluated for or removed from the list are documented with the rationale for their removal. Facilities are evaluated at least annually and may be added back to the list if site conditions warrant.	Up-to-date list of high priority facilities with a high potential to discharge pollutants.	The list of high priority facilities with a high potential to discharge pollutants is maintained as an appendix to the MS4 Program Plan.	Existing, Ongoing	FM
6.h. Annual Report Update: No facilities were removed from the high-priority facilities with a high potential to discharge pollutants list during the reporting period.					
6.i. The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.					
(there are no sub sections to this requirement)	UVA is a state agency and follows the requirements for turf and landscape nutrient management plans specified in 6.j, which regulate nitrogen application rates on lands owned by UVA.	Track acres of UVA lands upon which Nutrient Management Plans have been implemented.	Nutrient management plans are updated and maintained by UVA's certified Nutrient Management Planner and are available upon request.	Existing, Ongoing	A, EHS, FM
6.i. Annual Report Update: Currently 209.6 acres are covered under Nutrient Management Plans at UVA.					
6.j. Permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement.					

**Minimum Control Measure No. 6: Pollution Prevention and Good Housekeeping for UVA Facility Operations**

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(there are no sub sections to this requirement)	UVA has implemented the Nutrient Management Plans to moderate the use of fertilizer on all lawn and landscaped areas on state-owned lands. A staff member at UVA's Office of Environmental Health and Safety is a certified Nutrient Management Planner and ensures the Nutrient Management Plans are accurate and up-to-date. UVA currently has the following Nutrient Management Plans: John Paul Jones Arena -updated 6/1/18, Athletics - updated 4/5/18, UVA Grounds - submitted 4/1/19, and Intramural-Recreational Sports - updated 8/15/2018. A total of 209.4 acres are covered by these plans, which are stored electronically on UVA servers.	Same goal as stated in 6.i	Same documents as referenced in 6.i	Existing, Ongoing	A, EHS, FM
<b>6.j. Annual Report Update: UVA continues to follow its Nutrient Management Plans to moderate fertilizer usage.</b>					
<b>6.k. The permittee shall not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.</b>					
(there are no sub sections to this requirement)	UVA's Nutrient Management Plans prohibit the usage of deicing agents containing urea or other forms of N or P.	No deicers containing N or P are used at UVA.	Nutrient management plans are updated and maintained by UVA's certified Nutrient Management Planner and are available upon request.	Existing, Ongoing	A, EHS, FM
<b>6.k. Annual Report Update: UVA Nutrient Management Plans continue to prohibit the usage of deicing agents containing urea or other forms of nitrogen and phosphorus.</b>					
<b>6.l. The permittee shall require through the use of contract language, training, standard operating procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities with the potential to discharge pollutants use appropriate control measures to minimize the discharge of pollutants to the MS4.</b>					
(there are no sub sections to this requirement)	For construction sites over one acre, contractors must adhere to their SWPPP, which is reviewed regularly by UVA inspectors. Contractors are expected to adhere to UVA's SOPs while doing work on UVA property and contracts can be terminated for failure to comply. References to SOPs are also included in Division 1 Guidelines, which includes language about governing authority. UVA is also working to add specific language into contract vendor requirements to emphasize this requirement. In addition, FM staff aims to talk to contractor representatives at least once annually at the Safety Summit organized by UVA Occupational Health and Safety staff.	Contractors follow best management practices established by and followed by UVA staff. Document ways contractors are engaged in annual report.	Construction site SWPPPs are maintained on each construction site. SOPs are maintained on the FM website. UVA Division 1 Guidelines are available on the FM website.	By winter 2019 for Safety Summit, remaining are existing, ongoing	FM

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<p>6.l. Annual Report Update: During the reporting period, UVA modified both procurement guidelines to include more specific expectations regarding contractor compliance with regulations. Where previous language indicated the contractors were expected to follow state guidelines, the new language includes specific expectations related to waste management in order to prevent illicit discharges. The Division 1 Guidelines were also updated with more specific language and expectations. UVA is developing SOPs as mentioned in 6.a.(1) and a Waste Management Plan template to clarify expectations for proper waste management from contractors working on construction sites. Waste Management Plans will be required for future large construction sites and those that generate significant amount of waste. UVA provided in person training for project management staff on the expectation for management of contractors and their associated wastes. UVA plans to provide training and tools for contractors in the future. The Safety Summit was not held during this reporting period due to COVID-19.</p>					
<p>6.m. The permittee shall develop a training plan in writing for applicable staff that ensures the following:</p>					
<p>6.m.(1) - Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months;</p>	<p>UVA updates and maintains a training plan as needed to provide applicable staff with necessary training on IDDE, good housekeeping, pollution prevention, spill prevention, environmental awareness, SOPs and other required training. Training is provided to appropriate staff at least once every 24 months and is reviewed for appropriateness.</p>	<p>Track training program, dates, and individuals trained. Update training plan as needed to ensure appropriate employees are adequately trained.</p>	<p>The training program is maintained as an appendix to the MS4 Program Plan. Training records are saved on the FM secure server and are available on request.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>6.m.(1) Annual Report Update: The training plan and list of training completed during the reporting cycle is available in Appendix D.</p>					
<p>6.m.(2) - Employees performing road, street, and parking lot maintenance receive training in pollution prevention and good housekeeping associated with those activities no less than once per 24 months;</p>	<p>Same strategy as described in 6.m.(1).</p>	<p>Same goal as stated in 6.m.(1)</p>	<p>Same documentation as described in 6.m.(1)</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>6.m.(2) Annual Report Update: The training plan and list of training completed during the reporting cycle is available in Appendix D.</p>					
<p>6.m.(3) - Employees working in and around maintenance, public works, or recreational facilities receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months;</p>	<p>Professional and administrative staff working in and around such facilities that do not receive training under 6.m.(1)-(2) will receive training on who to contact when concerns about good housekeeping or pollution prevention are observed.</p>	<p>Same goal as stated in 6.m.(1)</p>	<p>Same documentation as described in 6.m.(1)</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p>6.m.(3) Annual Report Update: The training plan and list of training completed during the reporting cycle is available in Appendix D.</p>					
<p>6.m.(4) - Employees and contractors hired by the permittee who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VCACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement;</p>	<p>Since UVA is a state agency, all applicators are required to be certified through VDACS and turn in their application records to them. Applicators are required to keep certification records and receive continuing education credit as needed.</p>	<p>Only certified pesticide and herbicide applicators are used on UVA property.</p>	<p>UVA's Certified Nutrient Management planner verifies applicator licenses and that applicators are maintaining required records.</p>	<p>Existing, Ongoing</p>	<p>FM</p>

**Minimum Control Measure No. 6: Pollution Prevention and Good Housekeeping for UVA Facility Operations**

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<p><b>6.m.(4) Annual Report Update: UVA currently employs 27 applicators certified through the VDACS certification program.</b></p>					
<p>6.m.(5) - Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;</p>	<p>UVA has two employees certified as dual inspectors and two employees certified as dual combined administrators through DEQ's program. UVA uses Thomas Jefferson Soil and Water Conservation District (TJSWCD) staff for some plan review, and these staff are also certified in plan review. UVA requires a copy of the Responsible Land Disturber certification from at least one responsible individual from each regulated land disturbing project before the site breaks ground.</p>	<p>Up-to-date staff working on E&amp;SC and SWM projects. Certification renewals are maintained at the required intervals.</p>	<p>Copies of certification records are maintained on the FM secure server and are available upon request.</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>6.m.(5) Annual Report Update: All plan reviews and inspections were completed using TJSWCD or UVA staff with appropriate certifications.</b></p>					
<p>6.m.(6) - Employees and contractors implementing the stormwater program obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations; and</p>	<p>Same strategy as described in 6.m.(5)</p>	<p>Same goal as stated in 6.m.(5)</p>	<p>Same documentation as described in 6.m.(5)</p>	<p>Existing, Ongoing</p>	<p>FM</p>
<p><b>6.m.(6) Annual Report Update: All plan reviews and inspections were completed using TJSWCD or UVA staff with appropriate certifications.</b></p>					
<p>6.m.(7) - Employees whose duties include emergency response have been trained in spill response. Training of emergency responders such as firefighters and law-enforcement officers on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.</p>	<p>UVA maintains an in-house police force who are trained in emergency response. The police will biannually review and sign UVA's Hazardous Material Response policy, which describes how they are expected to handle spills. In addition, EHS maintains staff who are 40-hour HAZWOPER trained in spill response. HAZWOPER training requires annual certification.</p>	<p>Track individuals trained.</p>	<p>Training records are maintained by the PD and EHS. FM will check in with each annually for training progress and to ensure records are available upon request.</p>	<p>Winter 2020 for new requirements for police record-keeping</p>	<p>EHS, FM, PD</p>
<p><b>6.m.(7) Annual Report Update: The training plan and list of training completed during the reporting cycle is available in Appendix D. UVA has developed an online training for all FM staff who work in and around the FM Yard. However, due to COVID-19, implementation of this training was unable to be completed prior to the end of this reporting cycle as originally planned. UVA intends to complete this training during the next permit cycle.</b></p>					
<p><b>6.n. - The permittee shall maintain documentation of each training event conducted by the permittee to fulfill the requirements of Part I E 6 m for a minimum of three years after the training event. The documentation shall include the following information:</b></p>					

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6.n.(1)-(3) - The date of the training event; The number of employees attending the training event; and The objective of the training event.	UVA FM retains scanned copies of all training records, including the number of employees, the date, and the type of training for three years except for training provided to the PD and EHS. The PD and EHS maintain their own training records. UVA's training plan can be found in Appendix D.	Adequately and appropriately trained staff.	Most training records are stored on FM's secure network. EHS and Police training records are maintained by those departments and FM will coordinate with them to receive the training records at the scheduled intervals. Records are available upon request.	Existing, Ongoing	FM
6.n.(1)-(3) Annual Report Update: The training plan and training completed during the reporting cycle is available in Appendix D. Specific training records for individual training sessions are available upon request.					
6.o. - The permittee may fulfill the training requirements in Part I E 6 m, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.					
(there are no sub sections to this requirement)	UVA is not currently planning to fulfill training requirements through regional training programs, but will update the MS4 Program Plan accordingly if the training plans change.	Not applicable	Not applicable	NA	FM
6.o. Annual Report Update: This section was not applicable during the reporting cycle.					
<b>Additional Comments on Pollution Prevention and Good Housekeeping</b>	The MS4 Program Plan is a planning document to aid UVA staff in management of UVA's MS4 program. Revisions to the anticipated BMPs described in this 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. Each MCM will be reviewed and evaluated annually for effectiveness to determine whether or not changes to the MS4 Program Plan are necessary. Revisions required as a result of the iterative process or through evaluation of program effectiveness will be noted during the annual reporting process and appropriate updates will be made to the MS4 Program Plan. Internal documents, policies, and SOPs referenced in the Program Plan are intended to provide guidance and UVA reserves the right to change these documents at any time and in any manner. The MS4 General Permit requires these documents to be in place and the presence of the documents, not the details of their content, are the enforceable requirement of the permit. Revisions to the MS4 Program Plan or referenced documents will be made within 60 days upon discovery of the need for a change unless otherwise specified in the permit language. All BMPs and strategies are being implemented with consideration for the Chesapeake Bay and Local TMDLs and to support developing action plans to address such TMDLs in accordance with MS4 regulatory requirements. Unless otherwise stated, no monitoring data is collected for the MS4 program. Any documents noted as available upon request may be requested by emailing storm-water@virginia.edu.				

A - University Athletics Department  
 EHS - UVA Office of Environmental Health and Safety  
 FM - UVA Facilities Management  
 PD - UVA Police Department  
 UBO - University Building Official  
 RSEP - Rivanna Stormwater Education Partnership

Appendix A  
Stormwater Public Education, Outreach, Involvement and Participation Plan

# Public Education and Outreach and Public Involvement and Participation Program

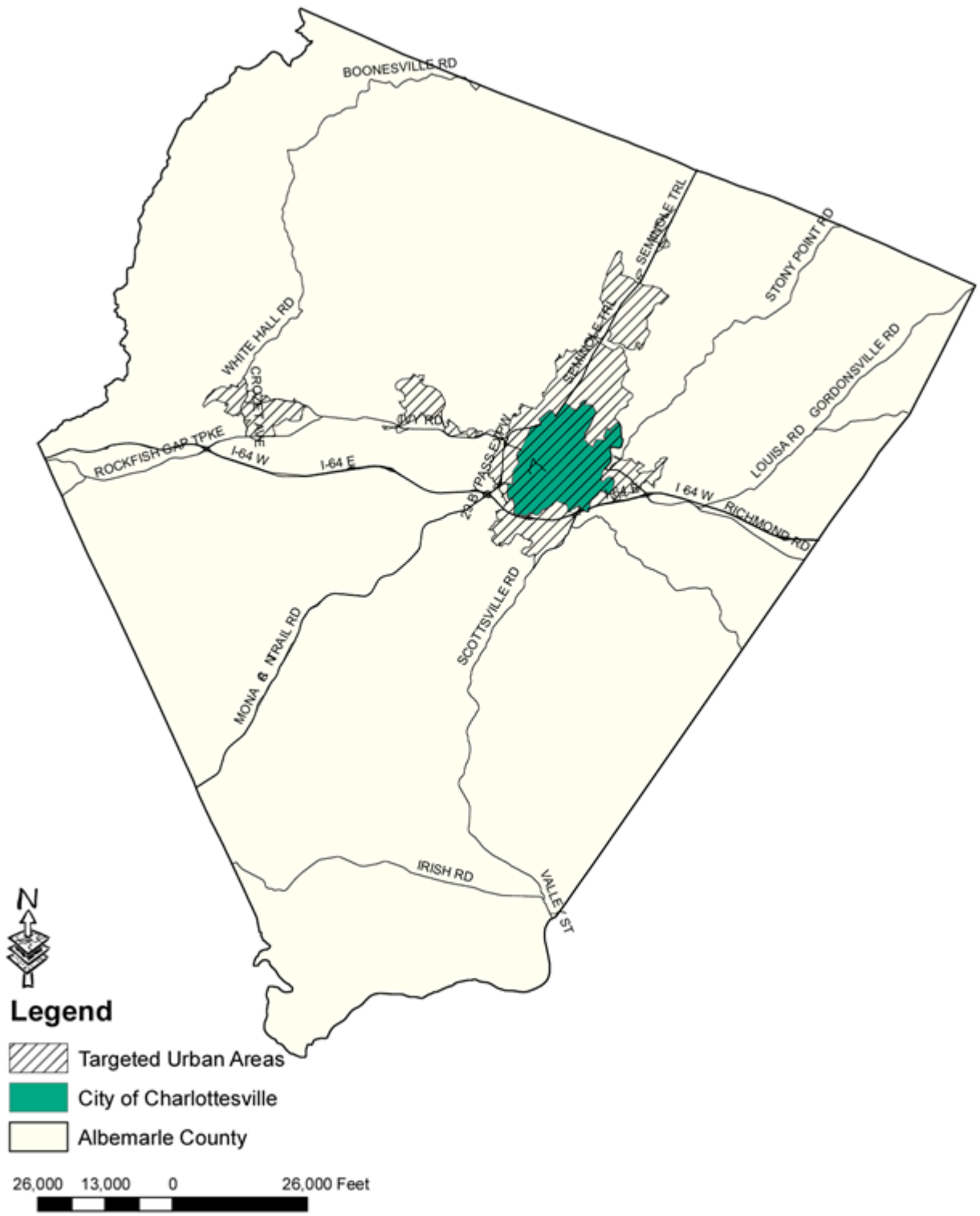
## 1. Background - Coordinating efforts amongst local MS4 operators

Educating, reaching out to, and involving the public in stormwater issues is accomplished primarily through participation in the Rivanna Stormwater Education Partnership (RSEP). The RSEP is a collaborative effort among local public entities in the City of Charlottesville and the surrounding County of Albemarle that hold small MS4 permits under the National Pollutant Discharge Elimination System program. The RSEP is dedicated to helping its members achieve the MS4 permit requirements related to education, outreach, and public participation in stormwater management.

The MS4 permit holders that comprise RSEP are Albemarle County, the City of Charlottesville, and the University of Virginia. Other members of RSEP are Albemarle County Public Schools, the Albemarle County Service Authority, and the Rivanna Water and Sewer Authority. The Thomas Jefferson Soil and Water Conservation District (TJSWCD) provides support to RSEP and serves as its coordinating body.

Founded in March 2003, the RSEP meets a minimum of six times a year to plan and implement stormwater education initiatives and share information about each partner's stormwater programs. Education initiatives are undertaken by the RSEP to help make citizens aware of stormwater issues, while also equipping them with practical knowledge and actions to help improve local water quality. RSEP utilizes a multi-faceted approach to educate and provide outreach across targeted urban areas (Figure 1). Past campaign materials, including print ads, movie theatre ads, posters on public transit buses, magnets, radio spots, and utility bill inserts are written in simple, easy to understand language and often utilize simple pictures or drawings to help the message come across to all generations and all education levels. RSEP also provides some campaigns in Spanish. Education and outreach materials are available at [www.rivanna-stormwater.org](http://www.rivanna-stormwater.org). Each partner pays an annual membership fee to help fund RSEP projects. In addition, the RSEP has successfully applied for and partnered on grants to supplement education efforts.

The RSEP has produced effective and far-reaching education programs that have benefited from the variety of expertise and resources each partner offers. Planning and implementing education initiatives through the RSEP has resulted in Rivanna River watershed-focused projects and has avoided the over-exposure and redundancy that might result if each partner were carrying out projects on their own.



Targeted Urban Areas: U.S. Census Urban Area and Urban Cluster (2010) available at <https://www.census.gov/geo/maps-data/>

Figure 1. Urban Areas Targeted by RSEP Education and Outreach

MCM#1 – Public Education and Outreach  
 MCM#2 – Public Involvement and Participation  
 MS4 Program Plan (2018 – 2023)



## 2. Identification of high-priority water quality issues and their importance

RSEP held several meetings to discuss and determine the high priority water quality issues for the region, which will be the focus of their education and outreach campaigns for the current MS4 permit cycle. During the 2013-2018 permit cycle, RSEP chose local and regional water quality impairments, bacteria, sediment, and nutrients (nitrogen and phosphorus), as their high priority issues. Campaigns conducted during this time frame were considered successful. However, RSEP found the chosen issues limited in some ways the extent of outreach efforts that the group could undertake. For the 2018-2023 permit cycle, RSEP members have chosen to address broader categories of water quality issues, namely runoff volume reduction, potential runoff pollutants, and TMDL pollutants as the high priority issues. By grouping regional water quality impairments as one high priority issue, RSEP can still address this highly important topic, while allowing the group to also address other issues that also have the potential to impact water quality in the region.

The reasoning behind choosing each of these high-priority issues is further described in the following sections. Examples of planned education and outreach campaigns and general content ideas are provided in Table 1. Using the iterative adaptive approach, the plan may be modified at any time during the permit cycle to address changes in local stormwater issues or concerns.

### a. Runoff Volume Reductions

One of the biggest challenges facing urban waterways is the sheer volume of runoff being transported from impervious surfaces to the streams. In developed areas, rainwater falls on impervious surfaces, such as buildings, parking lots, and driveways which prevent water from infiltrating into the ground and recharging local aquifers. This rainwater flows rapidly across impervious surfaces and into storm sewers, which direct the water to local streams. As a result of this rapid transport to local streams, stream flow volumes and velocities are significantly higher than would be observed under natural conditions. These high, rapid flows can cause stream bank erosion and changes in stream ecosystem habitats. Best management practices (BMPs) can be installed to mitigate the impacts of development by slowing down the transport of water from impervious surfaces to local streams.

While localities and developers are required to install BMPs for certain construction projects, maintenance of these BMPs is not always taken into account during their installation. In addition, there are many BMPs homeowners can implement or install to reduce the runoff volume and velocity from their properties and contribute to healthier streams. RSEP intends to provide education and outreach to both homeowners as well as new and existing BMP owners during the permit period. The goal of this education program will be to educate recipients on the negative impacts of increased stormwater volume and velocity and also provide ideas for ways they can reduce, mitigate, or treat runoff from their property.

### b. Potential Runoff Pollutants

As stormwater flows across roadways, parking lots, and driveways, it picks up pollutants such as sediment, oil, nutrients, bacteria, and trash that are lying on the surface. Sources of these pollutants can be as varied as the pollutants themselves, ranging from pet waste left by a local resident to a diesel fuel spill on a local industrial site to cigarette butts tossed on the ground by passing smokers.

MCM#1 – Public Education and Outreach

MCM#2 – Public Involvement and Participation

MS4 Program Plan (2018 – 2023)

There are two primary ways to handle potential runoff pollutants. The first is to prevent the potential pollutant from becoming a water quality issue. Educational messaging for this approach will range from reminding restaurants how to properly handle their used cooking oil to reminding residents to obtain a soil test before applying fertilizer on their lawns. The second way to handle potential runoff pollutants is to try to capture them after they are out in the environment. While this approach is not ideal, it is a necessary component of a comprehensive outreach program. In addition to reducing runoff as previously discussed, certain BMPs can also help trap or absorb these pollutants in the environment and prevent them from reaching local waterways. In addition, the illicit discharge and elimination (IDDE) programs run by the various MS4 permit holders will help to identify and eliminate possible illicit discharges resulting from human activity in the watershed. IDDE outreach and education efforts provided by RSEP have warned against storm drain dumping and encouraged use of the RSEP Water Pollution Hot Line to report suspected illegal discharges.

c. TMDL Impairments – Bacteria, Sediment, Nitrogen, Phosphorus

The Chesapeake Bay TMDL requires pollution reductions in sources of phosphorus, nitrogen, and sediment loads across the Bay watershed and sets pollution limits need to achieve desired water quality standards. These TMDL impairments have significant impacts in the local area. In addition to sediment reductions required in the Chesapeake Bay TMDL, sediment source reductions are also required by the Rivanna River Benthic TMDL. Local TMDLs for streams such as Meadow and Lodge Creek also touch on sediment as a pollutant source, with bacteria as an added pollutant of concern in many local streams.

TMDL impairments are logical topics for MS4 outreach and education programs, as most of the streams with TMDLs in the local areas are urban streams and MS4s are concentrated in the urban areas. Of the stream miles assessed within the targeted urban areas, almost 30% have an impaired benthic macro-invertebrate community, as a result of too much sediment in our waterways<sup>1</sup>. The *Final Report of the Benthic TMDL Development for the Rivanna River Watershed* submitted to VA DEQ (2008) identifies an existing sediment load from land-based and in-stream erosion from the MS4 point source. Over a quarter (26%) of streams assessed within the targeted urban areas are considered impaired by excessive amounts of bacteria<sup>2</sup>. Bacteria impairments in these streams can be caused by a variety of sources urban stormwater, pet waste, leaking sewer pipes, wildlife excrement, and agricultural uses. In addition, the MS4 general permit requires permittees to utilize turf and landscape management plans to minimize nutrient usages, while also prohibiting the usage of deicers containing urea, nitrogen, or phosphorus. Similar messaging is also relevant to home and business owners.

The goal of outreach and education campaigns focusing on TMDL impairments will include a variety of approaches, strategies, and target audiences. Licensed dog owners in the City and County can be targeted to pick up pet waste to reduce bacteria. Strategies utilized to address reductions in runoff volume can be used to target sediment. While homeowners, gardeners, and landscape maintenance professionals can be targeted to address fertilizer usage.

### 3. Providing public involvement opportunities during the reporting cycle

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<sup>1</sup> *Final 2012 305(b)/303(d) Water Quality Assessment Integrated Report*, VA DEQ, 2014

<sup>2</sup> *Final 2012 305(b)/303(d) Water Quality Assessment Integrated Report*, VA DEQ, 2014

MCM#1 – Public Education and Outreach

MCM#2 – Public Involvement and Participation

MS4 Program Plan (2018 – 2023)

This Outreach and Education Plan will be posted on the [RSEP website](#), [the City of Charlottesville's website](#), [Albemarle County's website](#), and [UVA's website](#) and will remain available for the duration of the 2018-2023 MS4 Permit Cycle. At any time during the permit cycle, the public can visit any of these websites to report potential illicit discharges, improper disposal or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns. In addition, the public can also utilize these websites to provide input on any of the RSEP partners MS4 programs, including the Outreach and Education Plan.

#### **4. Adjusting target audience and messages to address any observed weaknesses or shortcomings**

As necessary, RSEP will adjust target audiences and messages to address any observed weaknesses or shortcomings in the public education and outreach program. Additional educational materials have already been developed and may be modified or improved to address changing needs. In addition, the messaging described in Table 1 or activities described in Table 2 may be altered to appeal to different target audiences or to address a different high priority issue than the one listed. Other methods beyond those currently described in Tables 1 and 2 are likely to be employed as well. For example, RSEP members are currently discussing the possibility of creating a humorous stormwater education video to appeal to residents, brainstorming ways to partner with local arts on an educational display, considering starting a "love your watershed" initiative, as well as brainstorming additional "new" strategies to engage audiences in different ways. Some of these "new" ideas will require support and resources beyond what RSEP alone can provide and thus are not listed as planned education strategies or public involvement opportunities. However, RSEP will continue to pursue these ideas where feasible to find innovative ways to reach new audiences.

#### **5. COVID-19 Pandemic Adjustments**

The COVID-19 pandemic that began in March 2020 created unprecedented changes in daily life and business functions. The Governor of Virginia enacted executive orders which required people to stay at home, forced businesses to adjust or cease operations, and limited gatherings to no more than ten people. As such, many traditional public involvement opportunities, such as fairs, stream cleanups, and other springtime gatherings were prohibited. In addition, the changes in daily and business life have resulted in changes in other areas such as a dramatic decline in usage of public transportation. Ridership on Charlottesville Area Transit declined more than 50% in March 2020 as compared to March 2019. In light of these shifts in behavior, Tables 1 and 2 have been adjusted to address the fact that some previously planned efforts or initiatives may need to be adapted or replaced to adjust to changing public health concerns and public behavior.

**Table 1. Outreach and Education Strategies**

Strategy Examples	Public Audience	Time Frame Anticipated Frequency	Anticipated Relevant Message (s)	High Priority Issues Addressed		
				Runoff Volume Reductions	Potential Runoff Pollutants	TMDL Pollutants
Written Materials <i>Utility Bill Inserts</i>	Homeowners and residents	Spring <i>Two or Three times during permit cycle</i>	Pick up After Your Pets: Animal waste that is washed off of lawns and sidewalks sends harmful bacteria into the storm drain system and into streams and rivers, creating problems for swimmers and fish.		✓	✓
			Use moderation when applying lawn products such as fertilizers, pesticides or herbicides. Better yet, get your soil tested, fertilize only in the fall, and look into non-chemical products to protect your lawn. Call the Cooperative Extension Service in Albemarle County at 872-4580 to find out how to get your soil tested.		✓	✓
Media Materials <i>Charlottesville Public Access Station PSAs</i>	Homeowners and residents	Winter <i>Once during permit cycle</i>	We all prefer healthy streams and lakes...but most of our local waters are somewhat polluted. When it rains, pollution is carried directly into streams by runoff from parking lots, streets, and lawns. Here's what YOU can do to reduce pollution: (one) pick up after your pet, (two) don't over-fertilize your lawn, and (three) capture the water from your rooftop in a rain barrel...or in a rain garden. Do your part to keep our streams clean and healthy. Visit <a href="http://Rivanna-stormwater.org">Rivanna-stormwater.org</a> .	✓	✓	✓
Media Materials <i>Charlottesville Weekly Ads</i>	Homeowners and residents	Fall or Spring <i>Annually</i>	While being good to your pet, don't be bad to the river. Every time it rains, runoff from your lawn carries bacteria and other organisms from your pet's waste into local streams. Dispose of your pet's waste properly by bagging it and throwing it away.		✓	✓
			Don't over-fertilize your lawn. Excess nutrients from fertilizer are a major source of water pollution when they are carried by rain runoff into stormdrains and local waterways. Apply fertilizer based on a soil test. Don't rake leaves down storm drains or into streams.		✓	✓

MCM#1 – Public Education and Outreach

MCM#2 – Public Involvement and Participation

MS4 Program Plan (2018 – 2023)

			When leaves are washed into streams they decompose there and degrade water quality. Compost them or bag for proper disposal. When you mow your lawn, don't dispose of grass clippings down a storm drain. Like decomposing leaves, grass clippings degrade water quality. Leave them on your lawn.			
Written Materials <i>Charlottesville Area Transit Bus Ad</i>	Homeowners and residents	Fall <i>Once during permit cycle – may not be utilized if ridership numbers do not warrant the effort</i>	While being good to your pet, don't be bad to the river. Every time it rains, runoff from your lawn carries bacteria and other organisms from your pet's waste into local streams. Dispose of your pet's waste properly by bagging it and throwing it away.		✓	✓
Media Materials <i>Radio Ads</i>	Homeowners and residents	Summer <i>Once during permit cycle</i>	Did you know 1 quart of motor oil can contaminate 250,000 gallons of water? Every year in the U.S., millions of gallons of used motor oil, chemicals, and other wastes are disposed of illegally – down a storm drain or in the trash. Unlike sewage, stormwater is not treated. Storm drains empty directly into local streams and eventually reach the Chesapeake Bay. Please do your part to keep our waterways healthy. Recycle used motor oil at the Rivanna Solid Waste Authority's Ivy location or return it to where you bought it.		✓	
			Planning to wash your car this weekend? Ever wonder where all that water goes after it runs off your driveway? This water does not get treated and carries oil, soaps, and cleaners into storm drains; it flows directly into local streams and eventually reaches the Chesapeake Bay. To help prevent this, consider using biodegradable cleaning products, and wash your car on the lawn, instead of the driveway. Even better, take your car to a carwash facility that recycles its wash water.		✓	✓
			Pet waste commonly contains bacteria and parasites harmful to humans and other pets. Waste left on		✓	✓

			trails, sidewalks and grassy areas can wash into creeks and lakes, harming aquatic life and making the water unsafe for swimming and wading. Our own Moores Creek has been found to contain harmful levels of E. coli. By picking up after dogs and cats, you can improve local water quality and keep your community safer! Remember: Always scoop pet waste and dispose of it properly by throwing it in the trash or flushing it down the toilet.			
Alternative Materials Magnets	Homeowners and residents	Spring <i>Once during permit cycle</i>	Hand out magnets regarding cigarette butt litter, picking up pet waste, and proper car washing at Earth Week or other tabling events. May be distributed in other ways should tabling events remain unfeasible or poorly attended.		✓	✓
Alternative Materials Stickers	Homeowners and residents	Spring <i>Once during permit cycle</i>	Hand out stickers with stormwater focused messaging at Earth Week or other tabling events. May be distributed in other ways should tabling events remain unfeasible or poorly attended.		✓	✓
Media Materials Social Media Promotion	Homeowners and residents	Twice Yearly <i>Annually</i>	Provide stormwater focused social media content to existing local Facebook pages or other social media outlets. Share stormwater video online.	✓	✓	✓

**Table 2. Public Involvement Opportunities**

Description of public involvement activity	Anticipated time period and frequency	Metric to determine if the activity is beneficial to water quality
Tabling at Earth Day Eco Fair and other Events	2-3 Events <i>Annually</i> May be adapted to virtual or other engagement events if public events remain unfeasible or poorly attended	Number of individuals spoken with
Participant Workshop	Once per permit cycle	Number of workshop attendees

# UVA Addendum to 5-yr MS4 Education and Outreach Plan

## University of Virginia Initiatives:

### 1. Background

The purpose of this addendum is to address education and outreach programs specifically targeted the University of Virginia (UVA) community. Educational programs and outreach events are primarily conducted by the University's Environmental Resources as well as the Clean Water Working Group.

Environmental Resources (ER) within the UVA Facilities Management provides a number of university-wide services including pollution prevention, erosion and sediment control, greenhouse gas monitoring, and stormwater management. ER is responsible for coordination and oversight of all environmental regulatory requirements at UVA. The Clean Water Working Group (CWWG) is a student-led task force that collaborates with ER. The students are given the opportunity and resources to investigate and recommend stormwater practices to reduce UVA's impacts on local streams and ultimately the Chesapeake Bay. To encourage and promote community involvement, both ER and CWWG engaged in outreach and education directed toward UVA students, staff, faculty, and visitors.

### 2. High Priority Water Quality Issues

Similar the RSEP's campaign, UVA's education and outreach campaigns are designed to help improve local and regional water quality. UVA will focus on the same high-priority water quality issues using the same rationale as those described in the RSEP Outreach and Education Plan.

#### a. Runoff Volume Reductions

Education on the concepts of stormwater runoff, ways UVA is working to reduce stormwater runoff help students, faculty, staff, and visitors understand the importance of stormwater management.

#### b. Potential Runoff Pollutants

Potential pollutants at UVA range from cigarette butts and litter at Beta Bridge to runoff from car washing or pet waste. Education around these topics allow members of the UVA community as well visitors to understand how their every-day actions can help or harm their local waterways.

#### c. TMDL Impairments – Bacteria, Sediment, Nitrogen, Phosphorus



Most sources of TMDL Impairments on UVA property are managed under existing programs, SOPs, or UVA BMP installation. For example, all fertilizer and de-icing material is purchased and applied by UVA staff. Pets are not allowed in most UVA residences. However, visitors to UVA often walk their dogs on or through grounds. Efforts to educate members of the UVA Community and visitors on their impacts on these activities can help produce positive outcomes after they have left UVA.

### **3. Student to Student Outreach**

To promote stormwater related events, the CWWG document their projects to update the student body and those that are not in the taskforce but are interested in stormwater issues.

- Facebook page <https://www.facebook.com/UVACleanWater/>
- UVA mailing lists including the UVA Sustainability email list and Facebook Page, the Engage@UVA email list, and other email lists targeted toward potential interested student groups such as the Environmental Sciences Organization.

### **4. Adjusting target audience and messages to address any observed weaknesses or shortcomings**

The CWWG will review previous campaigns at the start of each semester and new ideas for campaigns will be considered for implementation. Campaigns created by CWWG are anticipated to change from year to year depending on student interest and participation levels. ER will remain involved to provide oversight and work with other UVA departments as needed. Educational efforts and engagement activities described in the tables below will be altered as needed to address different audiences, issues, or may be held at different times than those stated.

### **5. Nature of this Addendum**

This plan is intended to be a supplement to the RSEP Public Education and Outreach and Public Involvement and Participation Program Plan. This plan is not intended as a stand-alone document and therefore may not cover all program requirements which have previously been covered in the RSEP Plan. Tables 1 and 2 are intended to serve as guides for potential activities that may occur based on previous student interest levels. Planned activities may be adjusted at any time to reflect student interest and availability.

### **6. COVID-19 Pandemic Adjustments**

The COVID-19 pandemic that began in March 2020 created unprecedented changes in daily life and business functions. The Governor of Virginia enacted executive orders which required people to stay at home, forced businesses to adjust or cease operations, and limited gatherings to no more than ten people. UVA students left for spring break in early March and were not allowed to return to UVA, as the remainder of the semester was completed virtually. As such, many traditional public involvement opportunities, such as tabling events for World Water Day, numerous Earth Week events, stream cleanups, Dell tours and other springtime gatherings were prohibited. In addition, other educational material such as signage, storm drain marking, and flyers are ineffective as there are few people to view them.

UVA had already completed enough Table 1 and 2 activities during the fall and spring semester to meet the intention of this Outreach and Education Plan addendum before the COVID-19 pandemic began. However, the long term impacts and changes in behavior are unknown. Tables 1 and 2 will be updated, as needed, to address the fact that some previously planned efforts or initiatives may need to be adapted or replaced to adjust to changing public health concerns and public behavior.

**Table 1. Outreach and Education Strategies**

Strategy Examples	Public Audience	Time Frame Anticipated Frequency	Anticipated Relevant Message (s)	High Priority Issues Addressed		
				Runoff Volume Reductions	Potential Runoff Pollutants	TMDL Pollutants
Written Materials <i>Storm Drain Markers</i>	Students, Faculty, Staff and Visitors	Spring <i>Once during permit cycle</i>	Student created message resulting from design competition reminding those walking by not to pollute runoff going down the storm drain.		✓	
Written Materials Flyers	Students, Faculty, Staff and Visitors	Spring Semester <i>Annually</i>	Design a flyer to promote involvement in CWWG efforts and promote using email, bus posters, or posting of flyers in strategic locations.	✓	✓	✓
UVA Stormwater Tours <i>Dell Tours</i>	Students, Faculty, Staff and Visitors	Fall and Spring Semesters <i>Annually</i>	Provide tours of UVA stormwater best management practices to interested community groups, student groups, and classes. Topics covered include runoff volume reductions, runoff pollutants, and how the BMPs treat TMDL pollutants.	✓	✓	✓

**Table 2. Public Involvement Opportunities**

Description of public involvement activity	Anticipated time period and frequency	Metric to determine if the activity is beneficial to water quality
Stream Clean Up Events	1 Event <i>Annually</i>	Number of individual participants
Stormwater Related Design Competition	Once per permit cycle	Estimated number of students viewing the flyer
Tabling at public fairs or other events	1 Event <i>Annually</i>	Estimated number of visitors

Appendix B  
Stormwater Public Education, Outreach, Involvement and Participation Events

Date	Activity or Event Title	UVA or RSEP	Audience	Event Description	Education and Outreach?	Involvement and Participation?
7/2/2019	Student Shadow	UVA	Melissa Throckmorton	Student joined Dawson Garrod on several BMP construction and maintenance inspections including the FM lot pervious concrete test pad, Rotunda Paver investigation and the MEL ADS system install. Student assisted with CCTV inspections at the Rotunda. Student joined Brittany Olenlager on several stormwater outfall inspections.	✓	✓
8/21/2019	UVA Sustainability Annual Report	UVA	UVA and Local Community	Widely shared through UVA Office for Sustainability mailing lists and social media campaigns, the UVA Sustainability Annual Report included a write up on stormwater pollution prevention and highlighted the Clean Water Working Group's Rainworks stencil contest and winning designs.	✓	
9/3/2019	CE 4210 Stormwater Management	UVA	13 UVA Students and 1 Professor	Dawson Garrod led a class lecture and tour concerning stormwater management at UVA and the associated regulations and challenges. The class lecture was followed by a tour of nearby BMPs and the Dell.	✓	
9/3/2019	VIRGINIA Magazine Dell Article	UVA	UVA alumni	VIRGINIA Magazine article discussing how the Dell was designed to manage stormwater runoff at UVA. Print magazine distribution. <a href="https://uvamagazine.org/articles/the_dell_its_beautiful_its_serene_and_it_makes_uva_basketball_possible">https://uvamagazine.org/articles/the_dell_its_beautiful_its_serene_and_it_makes_uva_basketball_possible</a>	✓	
9/12/2019	CE 3500 Land Development Class	UVA	19 UVA Students	Dawson Garrod served as a critic for presentations that were pitched in a class that related to current UVA projects. This was the first step in working toward a SWM plan.	✓	
9/17/2019	UVA Sustainability Email	UVA	UVA Students, Faculty, and Staff	Distributed the VIRGINIA Magazine article on the Dell to active students, faculty, and staff	✓	
9/20/2019	Global Sustainability Dell Tour	UVA	18 UVA Students	Dawson Garrod led a tour of the Dell, describing the project itself and how it correlates to stormwater management goals, and improves the ecosystem and watershed	✓	
9/26/2019	UVA Class COLA 1500 - Water: How We Use It and Abuse It	UVA	18 UVA Students	Jeff Sittler provided tour of New Cabell Hall rain garden, the Rouss-Robertson green roof, the amphitheater cistern, the Garrett Hall green roof, and permeable pavers on the north side of the Rotunda. Students also watched "The Story of Water at UVA" video prior to the tour. ( <a href="https://youtu.be/9-FtTFgQZUs">https://youtu.be/9-FtTFgQZUs</a> )	✓	
9/28/2019	Corner Clean Up	UVA	35 UVA Students	The Office for Sustainability and Green Grounds sponsored the second Corner Clean-up which picked up litter around the UVA Corner.		✓
9/28/2019	Storm Drain Labeling	UVA	6 UVA Students	UVA students applied water quality protection related stencils at two locations around grounds. Storm drain markers with 'do not dump, drains to waterways' were also applied along sidewalks and loading docks by the students.	✓	✓
9/28/2019	FLOW: Rivanna River Arts Festival	RSEP	Charlottesville Community	FLOW is a celebration of art, music, song and dance inspired by the Rivanna River. <a href="https://flowfestival.weebly.com/">https://flowfestival.weebly.com/</a> Approximately 400 participants attended.		✓
10/1/2019	VIRGINIA Magazine Dell Article Email	UVA	UVA alumni	VIRGINIA Magazine article discussing how the Dell was designed to manage stormwater runoff at UVA. Email distribution. <a href="https://uvamagazine.org/articles/the_dell_its_beautiful_its_serene_and_it_makes_uva_basketball_possible">https://uvamagazine.org/articles/the_dell_its_beautiful_its_serene_and_it_makes_uva_basketball_possible</a>	✓	
10/4/2019	Global Sustainability Dell Tour	UVA	24 UVA Students	Dawson Garrod led a tour of the Dell, describing the project itself and how it correlates to stormwater management goals and improves the ecosystem and watershed.	✓	
10/11/2019	Global Sustainability Dell Tour	UVA	25 UVA Students	Dawson Garrod led a tour of the Dell, describing the project itself and how it correlates to stormwater management goals and improves the ecosystem and watershed.	✓	

Date	Activity or Event Title	UVA or RSEP	Audience	Event Description	Education and Outreach?	Involvement and Participation?
Fall 2019	Clean-up at Scheier Natural Area	UVA	18 UVA APO Volunteers	APO, a service organization, volunteers cleaned up the Rivanna Conservation Alliance's Scheier Natural Area		✓
Fall 2019	Storm Drain Labeling	UVA	UVA Students, Faculty, Staff, and Visitors	Labeling of storm drains by an intern along approximately 5 miles worth of roadways and sidewalks throughout UVA.	✓	
11/16/2019	Corner Clean-Up	UVA	30 UVA Students	In honor of America Recycles Day, the Office for Sustainability and Green Grounds hosted a Corner Clean-up, where volunteers pick up litter around the UVA Corner.		✓
11/16/2019	Stream Clean-Up	UVA	5 UVA Students, 2 UVA staff	Student members of the Clean Water Working Group volunteered for a Fall semester clean-up. Volunteers cleaned along a northern tributary of Meadow Creek off-grounds, at the Brookmill Condos complex off of Route 29.		✓
12/5/2019	CE 3500 Land Development Class	UVA	19 UVA Students	Dawson Garrod and other UVA faculty and staff served as critics for student final class presentations about a large redevelopment project that included their stormwater management approach.	✓	
1/10/2020	Dell Tour - J-Term STS Class	UVA	22 UVA Students + 1 Professor	Dawson Garrod led a tour of the Dell, describing the project itself and how it correlates to stormwater management goals and improves the ecosystem and watershed.	✓	
3/4/2020	CHS Dell Tour	UVA	80 Students + 5 chaperones (CHS)	Dawson Garrod led a tour of the Dell, describing the project itself and how it correlates to stormwater management goals and improves the ecosystem and watershed.	✓	
2/3/20-3/6/20	Storm Drain Mural Contest	UVA	UVA Students, Faculty, Staff, and Charlottesville Community	The Clean Water Working Group hosted an art contest which called for artists to create and submit mural designs for two storm drains on Grounds, with the purpose of highlight the importance of stormwater pollution prevention. Two winning designs were chosen out of 15 submissions.	✓	✓
9/19-3/20	Clean Water Working Group Meetings	UVA	15 UVA Students, 5 UVA Staff	Student and Staff members met regularly during the Fall '19 and Spring '20 semesters to plan and facilitate stormwater projects.		✓
4/1/20-5/30/20	RSEP Web Launches	RSEP	Charlottesville Community	RSEP website redesign launch ( <a href="https://rivanna-stormwater.org/">https://rivanna-stormwater.org/</a> ), in addition to the interactive 'The Rivanna River River' Story Map ( <a href="https://tinyurl.com/RivannaRiverWatershed">https://tinyurl.com/RivannaRiverWatershed</a> ).	✓	
4/21-4/28	Sustainable Art Competition	UVA	UVA Students, Faculty, and Staff	Competition to see trash as treasure and turn recyclables into art. Litter prevention.	✓	✓
4/30/2020	Charlottesville Inside Out	UVA	Charlottesville Community	Feature story about UVA Stormwater Management on local PBS Show, Charlottesville Inside Out: <a href="https://www.pbs.org/video/the-garage-uva-stormwater-management-p2ulrv/">https://www.pbs.org/video/the-garage-uva-stormwater-management-p2ulrv/</a>	✓	
4/30/2020	UVA Sustainability Newsletter Article	UVA	UVA Students, Faculty, Staff, and Alumni	Love Your Watershed campaign kickoff story in UVA Sustainability Newsletter	✓	
5/1/20-Ongoing	Love Your Watershed Campaign	RSEP	Charlottesville Community	Launch of "Love Your Watershed" webpage and virtual education activities. Website hits and unique visitors to the website more than tripled during May compared to previous months. <a href="https://rivanna-stormwater.org/additional-resources/love-your-watershed/">https://rivanna-stormwater.org/additional-resources/love-your-watershed/</a>	✓	
5/18/20-5/29/20	Love Your Watershed Social Media Blitz	RSEP	Charlottesville Community	Love Your Watershed Postings regarding bacteria, nutrients, sediment, local plants, etc. were pushed out via UVA, Charlottesville, and Albemarle social media accounts (Facebook, Twitter) and mailing lists. "Love Your Watershed" social media/online campaign. Designed to motivate residents of the greater Charlottesville area to reduce their impact on waterways and ultimately improve local water quality.	✓	
6/1/2020	Rivanna Conservation Alliance Newsletter	RSEP	Charlottesville Community	Love Your Watershed campaign mentioned in Rivanna Conservation Alliance monthly newsletter.	✓	

Date	Activity or Event Title	UVA or RSEP	Audience	Event Description	Education and Outreach?	Involvement and Participation?
June 17-24th	Cville Weekly Ad	RSEP	Charlottesville Community	Love Your Watershed campaign advertisement in C'ville Weekly featuring top stormwater pollutants - bacteria, nutrients, and sediment.	✓	
9/19-5/20	CAPSTONE Advisor for CE4991	UVA	4 UVA Students, 1 Faculty, 2 Advisors	Dawson Garrod served as an advisor for a CAPSTONE project for a group of students that discussed stormwater principles and management. The project required the students to design and plan construction of the Ivy Corridor Master Plan.	✓	
July 2019-June 2020	Conservation Site Visits	RSEP	Charlottesville Community	Distribution of Virginia Conservation Assistance Program Brochures during site visits. 106 site visits completed during the reporting year. <a href="https://vaswcd.org/wp-content/uploads/2020/07/VCAP-Brochure-Updated.pdf">https://vaswcd.org/wp-content/uploads/2020/07/VCAP-Brochure-Updated.pdf</a>	✓	

**Planned Events Cancelled due to COVID-19 and prohibitions on gatherings**

Spring 2020	World Water Day Tap Water Challenge	UVA				✓
	UVA Earth Week Events	UVA			✓	✓
	Beta Bridge Stream Cleanup	UVA				✓
	Rivanna Riverfest	RSEP			✓	✓
	FM Girls Day	UVA			✓	✓

Appendix C  
Reportable Spills



Date IDDE Observed	Results of Investigation (conditions, nature of IDDE, situation when arrive on site)	Follow Up Efforts and Resolution (efforts to find IDDE source, how source was eliminated)	Describe any follow up to prevent reoccurrence or revisitation of site to ensure IDDE eliminated	Date investigation closed (education may be ongoing)	Written Report - yes/no and location	Reported to DEQ, City, County, EPA	Who Reported Incident to ER	Resulted in Release to MS4	If resulted in release to MS4, reportable quantity?
7/10/2019	Lee Bryant reported to Josh Berthod. Josh Berthod reported to Kristin Carter that a contractor on the chemistry construction site was improperly pumping decanted concrete slurry water down the storm drain in front of the construction site. Josh stopped the activity and reported to the site team and Kristin. Kristin arrived on site with members of Whiting Turner and investigated the storm sewers downstream and confirmed the extent of the release.	The FM Vac truck was called in and cleaned the sewer underneath McCormick road and collected the generated wash water. The next inlet downstream was not accessible by the truck so clean up activity was suspended until the next morning. Cleanup continued the next morning by sandbagging the outlet from a downstream manhole, using a trashcan to collect inflow, and jetting the sewerline upstream using the vac truck. Generated water was pumped to a nearby sanitary sewer for disposal.	Construction site contractors were educated on illicit discharges and this activity was halted until a proper means to dispose of the decant water was identified.	7/11/2019	Yes, report to DEQ in illicit discharge folder	Yes (DEQ, City)	Josh Berthod, FM	Yes	Yes
8/23/2019	Pumping of water mixed with concrete dust from former U-Hall Mechanical Space. 50-60,000 gallons of high pH water resulted in fish kill downstream.	Multiple report sent to DEQ regarding follow up and resolution efforts, which included DEQ visits to the site. Contractor was prohibited from further discharge upon discovery. All impacted storm pipes were cleaned.	Remaining water on site was hauled away using vacuum trucks or was pumped to sanitary, with DEQ permission, after being treated with CO2 to bring the pH to an acceptable sanitary discharge range.	8/24/2019	Yes, report to DEQ in illicit discharge folder	Yes (DEQ, City)	Dan Frisbee, City of Charlottesville	Yes	Yes
10/4/2019	JR Richardson was working at Lambeth Field and reported that Meadow Creek was green. ER staff arrived along with Outside Utilities and the source was traced to an IM-Rec contractor painting the tennis courts and washing their empty paint barrel into the storm drain.	Stream flow in Meadow Creek was reduced by pumping the main flow to sanitary sewer. Pools on the Lambeth side which had collected green water were pumped using the vacuum truck.	Follow up with IM-Rec regarding the contractor and training of IM-Rec staff on their management of contractors	10/7/2019	Yes, report to DEQ in illicit discharge folder	Yes (DEQ, City)	JR Richardson, FM	Yes	Yes
1/10/2020	Citizen sent email to Charlottesville City staff regarding purple fluid draining out of the main outfall into the South Pond. UVA ER, Utilities, and Zone Maintenance Staff responded to investigate. Discharge was no longer happening when arrived on site, but bubbles were evident in the rocks at the outfall. Bubbles smelled like cleaning fluid.	Several manholes were pulled and ER checked drop inlets, but snowmelt entering the drop inlets made tracing the discharge back to the source impossible.	Emails were sent to area maintenance managers and project managers to ask them to remind staff and contractors about proper disposal of cleaning waste. No leads were found as to the source of the discharge via these efforts. Jess Wenger returned to the site on 1/11, 1/12, 1/13, and 1/14 and did not observe either a repeat occurrence or adverse aquatic life impacts.	1/10/2020	Yes, report to DEQ in illicit discharge folder	Yes (DEQ, City)	City of Charlottesville via private citizen report	Yes	Yes

3/9/2020	While conducting annual outfall inspections, Brittany Olenlager of ER observed white cloudy water coming from an outfall that receives drainage from the Ivy MSKC construction site. John Marshall of UVA and Bennett Atwill of Whiting-Turner were notified of the discharge and began measures to block the outfall which was receiving a trickle of flow due to groundwater upslope of the storm drain. Steve Woodward of W-T verified with subcontractor Capital Interiors that the material was residual washout (2-8 ounces) of smoke and acoustical sealant and provided an SDS for the product.	Bennett Atwill, Steve Woodward, and John Sullivan of Whiting-Turner contained the residual sealant within the stormwater pipe overnight by using a gutter buddy and booms in the stormwater outfall and installing a straw bale and silt fence in the creek by the outfall. Bill Simmons of UVA E&U called RooterMan who arrived on site with a vac truck the following morning 3/10 to flush out the affected storm drain, pipe, and outfall structure, and to capture remnants of the contaminated washout in two stagnant areas downstream from the outfall.	Whiting-Turner held a "stand down" meeting with all project members of Capital Interiors on Tuesday morning. Whiting-Turner posted laminated signs stating "NO DUMPING. DO NOT WASHOUT IN STORM DRAIN" at two storm drains near washout stations on site. One at Gate 3 and one at Gate 2. ER revisited the site after cleanup Tuesday afternoon and again on Wednesday morning to confirm no adverse impacts to aquatic life occurred and that stream flow was clear.	3/10/2020	Yes, report to DEQ in illicit discharge folder	Yes (DEQ)	self-reported, Brittany Olenlager, FM	Yes	Yes
6/30/2020	Keith Payne informed ER that an irrigation line being installed on the APR site had broken overnight at a joint. It was discovered the next morning and stopped. Workers left for the evening by 6pm on June 29th and arrived on site by 7am on June 30th. Nearby drop inlets were protected but the water was able to escape the site via a storm pipe that was being installed.	The leak was stopped, the storm pipe was protected, and Rooterman has been contacted to flush the impacted storm lines.	None	6/30/2020	Yes, report to DEQ in illicit discharge folder	Yes (DEQ)	Keith Payne, FM	Yes	Yes

Appendix D  
Training Plan and Training Completed

Department	Reason Required	Training Type/ Objective	Frequency	Means to Achieve Training Requirement	Date Completed (2018-2019)	# of Staff Trained	Date Completed (2020-2021)	# of Staff Trained	Date Completed (2022-2023)	# of Staff Trained
Athletics	6.1.(1) - Field Personnel	SPCC Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/16-17/2019	22				
John Paul Jones Arena	6.1.(1) - Field Personnel	Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	12/12/2018	14				
IM-Rec Sports	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/16/2019	24				
Heat Plant	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	11/7/2018	24				
Recycling	6.1.(1) - Field Personnel	Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	10/26/2018	20				
Utilities	6.1.(1) - Field Personnel	SPCC Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	12/4/2018	16				
Power and Light	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/9/2019	13				
North Grounds Zone Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/11/2019	14				
Newcomb Zone Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/22/2019	14				
West Grounds Zone Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	2/8/2019	19				
McCormick Zone Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/30/2019	22				
Central Grounds Zone Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	2/28/2019	32				
FM HSPP Zone 1 Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/15/2019	24				
FM HSPP Zone 2 Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	2/21/2019	36				
FM HSPP Zone 3 Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	2/4/2019	19				
FM HSPP Zone 4 Maintenance	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	1/23 and 1/28 2019	26				
Landscaping	6.1.(1)-(2) - Field Personnel, Street and Parking Lot Maintenance	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	11/29/2018	67				
Renovations	6.1.(1) - Field Personnel	Class C UST Operator, Spill Response, IDDE, SOPs	Once every 24 months	Training provided by ER or appropriate designated staff	4/25/2019	26				
Facilities Management Administrative Staff	6.m.(3) - Work around maintenance facility	IDDE	Once every 24 months	Training provided by ER or appropriate designated staff	Planned for next reporting cycle. Training to be pushed out as required training to all FM staff via new HR system. This training will serve as refresher training for other FM staff who also receive job-specific in person training.					
FM Pesticide and Herbicide Applicators	6.m.(4) - Pesticide and herbicide applicators	VCACS Certification	As required for certification	VCACS Program Certification Requirements	Certificates maintained per VCACS requirements					
Environmental Resources	6.m.(5)-(6) - E&SC and VSMP inspectors	E&SC and SWM Combined Inspector or Administrator	As required for certification	DEQ E&SC and SWM	Certificates maintained per DEQ requirements					
UVA Police	6.m.(7) - Emergency response	IDDE	Once every 24 months	Officers provide training in-house on UVA emergency response procedures.	Various dates	88	November 19- May 2020	99		
EHS	6.m.(7) - Emergency response	HAZWOPER	As required for certification	EHS to receive training by a certified trainer as appropriate. Online training in 2020 due to COVID.	3/26/2019	13	Spring 2020	15		

**Additional Targeted Training Provided in Response to Contractor Management Issues\***

<b>Department</b>	<b>Reason</b>	<b>Training Type/ Objective</b>	<b>Date Completed</b>	<b># of Staff Trained</b>
IM Rec Sports	Training provided to address contractor management related issues. Training focused on preventing illicit discharges, proper waste handling and management, and managing contractor actions while on UVA property.	Training delivered in person by ER	10/25/2019	14
FM Project Services			10/19/2019	4
FM Project Services			10/14/2019	19
UVA Health - Project Services			10/16/2019	5
UVA Health - Facilities Planning and Construction			12/16/2019	16
UVA Foundation			1/13/2020	10
UVA FM - Facilities Planning and Construction			10/21/2019	23

\*this training was not completed to meet MS4 permit requirements but is included because some of the topics included are relevant to MS4 permit requirements

Appendix E  
High Priority Facility Evaluation

Location	Residuals from using, storing, or cleaning machinery or equipment	Materials or residuals from spills or leaks	Material Handling equipment	Materials could be mobilized in stormwater during loading or unloading	Materials stored outdoors	Materials contained in open or leaking drums, barrels, tanks, and similar containers	Water material except in covered, nonleaking containers	Application or disposal of process wastewater	Particulate matter from roof stacks or vents not otherwise regulated	Discharge to MS4	SWPPP required	Rationale
FM Yard	✓	✓	✓	✓	✓		✓			✓	✓	Salt storage shed, landscape storage area under the T-shed, and number of vehicles stored on site warrant SWPPP
FM Forestry Yard	✓		✓		✓							Does not discharge to MS4. Will inspect and evaluate annually.
FM Fontaine Yard	✓		✓		✓							Does not discharge to MS4, not in census urbanized area. Will inspect and evaluate annually.
Recycle Sort Facility			✓		✓		✓			✓	✓	Recyclable materials are waste and stored in large quantities, even if under cover.
Main Heat Plant	✓	✓							✓	✓	✓	Historic number of large spills and potential for releases to air.
Athletics Precinct	✓		✓	✓	✓					✓		Materials now largely stored under cover due to new facilities. Will inspect and evaluate annually.
Scott Stadium			✓	✓						✓		Not a high priority facility. Only issues come from power washing and an SOP has been developed.
Cambell Hall					✓					✓		Not a high priority facility. New equipment and SOP developed for concrete work outside has reduced potential for discharge.

Location	Residuals from using, storing, or cleaning machinery or equipment	Materials or residuals from spills or leaks	Material Handling equipment	Materials could be mobilized in stormwater during loading or unloading	Materials stored outdoors	Materials contained in open or leaking drums, barrels, tanks, and similar containers	Water material except in covered, nonleaking containers	Application or disposal of process wastewater	Particulate matter from roof stacks or vents not otherwise regulated	Discharge to MS4	SWPPP required	Rationale
Ruffin Hall					✓					✓		Not a high priority facility. Work outside has little potential for discharge.
Fontaine Composting Site												Not a high priority facility. No potential to discharge observed.
North Grounds Mechanical Plant										✓		Not a high priority facility. No potential to discharge observed.
Hospital Loading Dock and West Complex										✓		Not a high priority facility. No potential to discharge observed.
Copeley Substation					✓					✓		Not a high priority facility. No potential to discharge observed.



Appendix F  
Chesapeake Bay TMDL and Rivanna TMDL Annual Updates

## **Chesapeake Bay TMDL**

Seven new BMPs were completed within the regulated MS4 boundary during the reporting period that contributed reductions for the Chesapeake Bay TMDL. Currently there are three BMPs under construction that will also contribute reductions for all three pollutants of concern.

Reduction totals for Total Suspended Solids have exceeded the requirements. Current reductions for the Total Phosphorous goal are calculated at 97% of the required expectations and reductions for Total Nitrogen are calculated at 62% of the goal.

BMPs that contributed reductions:

1. BAGS A Bioretention
2. BAGS B Bioretention
3. BAGS C Bioretention
4. BAGS D Bioretention
5. FM Porous Concrete
6. FM Porous Asphalt
7. Bond House Bioretention

## **Rivanna TMDL – Sediment**

Seven new BMPs were completed within the regulated MS4 boundary during the reporting period that contributed reductions for the benthic TMDL. Three are currently under construction that will benefit sediment reductions as well. Funding sources are now in question due to COVID-19 considerations and the MOU discussions with the City of Charlottesville and Albemarle County to partner on projects to reach TMDL goals have been temporarily put on hold.

## **Rivanna TMDL – Bacteria**

UVA continued to partner with the Rivanna Conservation Alliance to facilitate the stormwater quality monitoring program which includes *E. coli* sampling from February to November and testing using the Colilert® Method from 5 locations draining the UVA Grounds. If a sample indicates significant *E. coli* levels, a field investigation is conducted and resampling performed, often yielding a lower concentration. When analyzing the weather surrounding the date of samples with elevated levels, it was noted that spikes were seen when samples were taken immediately following a large storm event which had been preceded by prolonged periods of non-runoff producing events or dry weather. ER staff observed an increased number of dog walkers around Grounds during the reporting period which could have contributed to elevated bacteria levels.