

September 30, 2021

Ms. Anna M. Tuthill Virginia Department of Environmental Quality Northern Regional Office 13901 Crown Court Woodbridge, VA 22193

Re: NOVA's MS4 2020-2021 Annual Report General Permit No. VAR040095

Dear Ms. Tuthill:

Attached is NOVA's MS4 Annual Report for the period of July 1, 2020 through June 30, 2021.

If you have any questions or need any additional information, please contact me.

Sincerely,

IC. Fimble

David C. Trimble, P.G. Manager, Environmental Services Northern Virginia Community College

Facilities Planning and Support Services 8333 Little River Turnpike, CW Building, 3<sup>rd</sup> Floor Annandale, Virginia 22003-3796 703-764-5095 Direct 703-323-3121 Fax <u>dtrimble@nvcc.edu</u>

OFFICE OF FACILITIES PLANNING & SUPPORT SERVICES



Alexandria, Annandale, Loudoun & Woodbridge Campuses

# Municipal Separate Storm Sewer System Annual Report

For

General Permit No. VAR040095

Permit Year

July 1, 2020 through June 30, 2021

This annual report is submitted in accordance with 9VAC25-890-40 as part of the requirement for permit coverage to discharge stormwater to surface waters of the Commonwealth of Virginia consistent with the VAR04 General Permit effective per letter dated November 1, 2018.

Submitted: September 30, 2021



# TABLE OF CONTENTS

1.0 GENERAL ANNUAL REPORTING REQUIREMENTS 1	
1.1. General Information (Part I.D.2.a)	
1.2. Reporting Period (Part I.D.2.b)	
1.3. Signed Certification (Part I.D.2.c)	
1.4. Reporting for MCMs #1 - #6 (Part I.D.2.d) 1	
1.5. Evaluation of the MS4 Program Implementation (Part I.D.2.e)	
2.0 MINIMUM CONTROL MEASURES	
2.1. MCM #1: Public Education and Outreach	
2.1.1. High Priority Stormwater Issues (Part I.E.1.g(1))	
2.1.2. High Priority Stormwater Issue Communication Strategies (Part I.E. 1.g(2))	
2.1.3. MCM #1 Evaluation (Part I.D.2.e)	
2.2. MCM #2: Public Involvement and Participation 4	
2.2.1. Public Input Summary (Part I.E.2.f(1))	
2.2.2. MS4 Program Webpage (Part I.E.2.f(2))	
2.2.3. Public Involvement Activities Implemented (Part I.E.2.f(3))	
2.2.4. Public Involvement Activity Metric and Evaluation (Part I.E.2.f(4))	
2.2.5. MS4 Collaboration (Part I.E.2.f(5))5	
2.2.6. MS4 Program Plan BMP Measurable Goals5	
2.2.7. MCM #2 Evaluation (Part I.D.2.e)	
2.3. MCM #3: Illicit Discharge Detection and Elimination7	
2.3.1. MS4 Map and Information Table (Part I.E.3.e(1))7	
2.3.2. Dry Weather Screening (Part I.E.3.e(2))7	
2.3.3. Illicit Discharges (Part I.E.3.e(3))7	
2.3.4. MS4 Program Plan BMP Measurable Goals 8	
2.3.5. MCM #3 Evaluation (Part I.D.2.e)	
2.4. MCM #4: Construction Site Stormwater Runoff Control	
2.4.1. Implementation of Standards and Specifications (Part I.E.4.a(3))	
2.4.1.1. Conforming Land Disturbance Projects (Part I.E.4.d(1)(a))	
2.4.1.2. Non-Conforming Land Disturbance Projects (Part I.E.4.d(1)(b))	
2.4.2. Site Stormwater Runoff Inspections (Part I.E.4.d(2))	
2.4.3. Enforcement Actions (Part I.E.4.d(3))10	
2.4.4. MCM #4 Evaluation (Part I.D.2.e) 10	
2.5. MCM #5: Post-Construction Stormwater Management 11	
2.5.1. Implementation of Standards and Specifications (Part I.E.5.a(3)) 11	
2.5.2. Stormwater Management Facility Inspections (Part I.E.5.i(2)) 11	
2.5.3. Stormwater Management Facility Maintenance (Part I.E.5.i(3)) 11	
2.5.4. Virginia Construction Stormwater General Permit Database (Part I.E.5.i(4))	
2.5.5. DEQ BMP Warehouse (Part I.E.5.i(5))	

OVA Northern Virginia Community College

2.5.6. MS4 Program Plan BMP Measurable Goals	13
2.5.7. MCM #5 Evaluation (Part I.D.2.e)	13
2.6. MCM #6: Pollution Prevention and Good Housekeeping	14
2.6.1. Operational Procedures (Part I.E.6.q(1))	14
2.6.2. Newly Developed SWPPPs (Part I.E.6.q(2))	14
2.6.3. Modified or Delisted SWPPPs (Part I.E.6.q(3))	14
2.6.4. Newly Developed Nutrient Management Plans (Part I.E.6.q(4))	15
2.6.4.1. Nutrient Management Plan Acreage (Part I.E.6.q(4)(a))	15
2.6.4.2. Nutrient Management Plan Approval Date (Part I.E.6.q(4)(b))	15
2.6.5. Training Events (Part I.E.6.q(5))	16
2.6.5.1. Training Dates (Part I.E.6.q(5)(a))	16
2.6.5.2. Quantity Trained (Part I.E.6.q(5)(b))	16
2.6.5.3. Training Objective (Part I.E.6.q(5)(c))	16
2.6.6. MS4 Program Plan BMP Measurable Goals	17
2.6.7. MCM #6 Evaluation (Part I.D.2.e)	18
3.0 TMDL SPECIAL CONDITIONS	19
3.1. Chesapeake Bay TMDL Action Plan	19
3.1.1. BMPs Implemented and Estimated POC Reductions (Part II.A.13.a)	19
3.1.2. Nutrient Credits (Part II.A.13.b)	19
3.1.3. POC Cumulative Reduction Progress (Part II.A.13.c)	20
3.1.4. Next Reporting Period Planned BMPs (Part II.A.13.d)	21
3.1.5. Chesapeake Bay TMDL Action Plan Measurable Goals	21
3.1.6. Chesapeake Bay TMDL Action Plan Implementation Evaluation (Part I.D.2.e)	21
3.2. Local TMDL Action Plans	22
3.2.1. Neabsco Creek Watershed Bacteria TMDL Implementation (Part II.B.9)	22
3.2.2. Accotink Creek Watershed Sediment TMDL Implementation (Part II.B.9)	23
3.2.3. Accotink Creek Watershed Chloride TMDL Implementation (Part II.B.9)	25

## **APPENDICES**

Appendix A: Documentation of Public Education and Outreach Activities Appendix B: Documentation of Public Involvement Activities





# TABLES

Table 1:	Summary of MS4 Program Plan Changes
Table 2:	High Priority Stormwater Issues
Table 3:	Public Involvement Activities Implemented 5
Table 4:	MS4 Program Plan BMP Measurable Goals for MCM #2 5
Table 5:	Illicit Discharges
Table 6:	MS4 Program Plan BMP Measurable Goals for MCM #3 8
Table 7:	Project(s) Not in Conformance with Approved Standards and Specifications
Table 8:	Construction Project(s) 10
Table 9:	Maintenance Activities Performed on Stormwater Management Facilities 11
Table 10:	MS4 Program Plan BMP Measurable Goals for MCM #5 13
Table 11:	Good Housekeeping Operational Procedures Developed or Modified 14
Table 12:	New SWPPPs Developed14
Table 13:	SWPPPs Modified or Delisted
Table 14:	New Turf and Landscape Nutrient Management Plans 15
Table 15:	Training Events
Table 16:	MS4 Program Plan BMP Measurable Goals for MCM #6 17
Table 17:	Chesapeake Bay TMDL Action Plan POC Reductions 19
Table 18:	2019 - 2023 Chesapeake Bay TMDL Action Plan Implementation Schedule 20
Table 19:	Chesapeake Bay TMDL Action Plan BMPs Planned for next reporting year 21
Table 20:	Chesapeake Bay TMDL Action Plan Measurable Goals
Table 21:	Neabsco Creek Watershed Bacteria TMDL Action Plan Summary of Actions
Table 22:	Accotink Creek Watershed Sediment TMDL Action Plan Summary of Actions 23
Table 23:	Accotink Creek Watershed Chloride TMDL Action Plan Summary of Actions 25

# ACRONYMS

BMP	Best Management Practices
DEQ	Virginia Department of Environmental Quality
IDDE	Illicit Discharge Detection and Elimination
MCM	Minimum Control Measure
MS4	Municipal Separate Storm Sewer System
POC	Pollutants of Concern
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VPDES	Virginia Pollution Discharge Elimination System
WLA	Wasteload Allocation

W Wetland re-lutions, Inc. a DAVEY E company



## **1.0 GENERAL ANNUAL REPORTING REQUIREMENTS**

## 1.1. General Information (Part I.D.2.a)

Permitee Name: Northern Virginia Community College

System Name: Virginia Community College System

Permit Number: VAR040095

## **1.2. Reporting Period (Part I.D.2.b)**

The reporting period for which the annual report is being submitted:

July 1, 2020 through June 30, 2021

## **1.3. Signed Certification (Part I.D.2.c)**

A signed certification as per Part III K:

"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 ensure 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."

Printed Name: Steven M. Patterson

Title: Chief Facilities Officer

Signature:

Date: 9-30-2021

## 1.4. Reporting for MCMs #1 - #6 (Part I.D.2.d)

Include information for each annual reporting item specified in Part I.E:

Reporting information for each Minimum Control Measure is provided in Section 2.0.

Wetland



## 1.5. Evaluation of the MS4 Program Implementation (Part I.D.2.e)

An evaluation of the MS4 program implementation, including a review of each MCM to determine the MS4 program's effectiveness and whether changes to the MS4 Program Plan are necessary:

An evaluation for each Minimum Control Measure is provided in Section 2.0. Changes that are necessary to be made to the MS4 Program Plan are summarized in Table 1.

Table 1: Summary of MS4 Program Plan ChangesNo changes required.





## 2.0 MINIMUM CONTROL MEASURES

## 2.1. MCM #1: Public Education and Outreach

#### 2.1.1. High Priority Stormwater Issues (Part I.E.1.g(1))

<u>A list of high-priority stormwater issues addressed in the public education and outreach program:</u>

A list of high-priority stormwater issues addressed in public education and outreach program is provided in Table 2.

#### **2.1.2. High Priority Stormwater Issue Communication Strategies (Part I.E. 1.g(2))** A list of strategies used to communicate each high-priority stormwater issue:

A list of strategies used to communicate each high-priority stormwater issue is provided in Table 2. Appendix A includes documentation of the communication efforts described in Table 2.

Та	Table 2: High Priority Stormwater Issues						
#	Stormwater Issue	Strategy	Communication	Metric	Beneficial		
	Public education		Permanent signs installed at		Ves		
1	on stormwater	Signage	bioretention facilities on the	2 signs	$\square$ No		
	runoff		Loudoun campus				
2	TMDLs and Local	Speaking	Presentation to NOVA	12	🛛 Yes		
2	Impaired Waters	Engagement	Environmental Committee	Participants	🗆 No		
3	Pollution	Traditional	Parking Lot Pollutant Flyer		X Ves		
	Protection	Written	posted on bulletin boards on	50 flyers	$\square$ No		
	rievenuoli	Materials	the Alexandria campus				

#### 2.1.3. MCM #1 Evaluation (Part I.D.2.e)

Review the MCM to determine the MS4 Program's effectiveness and whether or not changes to the MS4 Program Plan are necessary:

Are the MS4 Program measurable goals effective?





## 2.2. MCM #2: Public Involvement and Participation

#### 2.2.1. Public Input Summary (Part I.E.2.f(1))

A summary of any public input on the MS4 program received (including stormwater complaints) and responses:

Were any MS4 Program inputs or stormwater complaints received from the public? □ Yes ⊠ No

If yes, were responses provided?  $\Box$  Yes  $\Box$  No

#### 2.2.2. MS4 Program Webpage (Part I.E.2.f(2))

A webpage address to the MS4 program and stormwater website:

The webpage address is https://www.nvcc.edu/stormwater/

#### 2.2.3. Public Involvement Activities Implemented (Part I.E.2.f(3))

A description of the public involvement activities implemented:

A description of the implemented public involvement activities is provided in Table 3.

#### 2.2.4. Public Involvement Activity Metric and Evaluation (Part I.E.2.f(4))

<u>A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality:</u>

A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality is provided in Table 3. Appendix B includes documentation of the public involvement activities.





Та	Table 3: Public Involvement Activities Implemented						
#	Activity Description/Date	Category	Metric	Collaboration	Beneficial		
1	Stormwater Certification Class for Students 4/20/21	Educational	1 participant	No	⊠ Yes □ No		
2	Fall Green Festival 10/8/20	Educational	Approx. 150 students, faculty & staff	No	⊠ Yes □ No		
3	Spring Green Festival 3/24/20	Educational	Approx. 120 students, faculty & staff	No	⊠ Yes □ No		
4	Storm Drain Marking 6/25/2021	Pollution Prevention	97 drain inlets, 6 participants	No	⊠ Yes □ No		

#### 2.2.5. MS4 Collaboration (Part I.E.2.f(5))

The name of other MS4 permittees collaborated with in the public involvement opportunities:

If applicable, the name of other MS4 permittees collaborated with for any of the public involvement opportunities are provided in Table 3.

#### 2.2.6. MS4 Program Plan BMP Measurable Goals

The MS4 Program Plan BMPs measurable goals are provided in Table 4.

Table 4: MS4 Program Plan BMP Measurable Goals for MCM #2					
BMP	Measurable Goal	Completeness Status			
2.1	Was documentation of the public input or complaints on the MS4 program and MS4 Program Plan maintained?	<ul><li>□ Yes</li><li>□ No</li><li>⊠ Not Applicable</li></ul>			
2.1	Is the effective MS4 permit and coverage letter on the webpage?	⊠ Yes □ No			
2.1	Is the most current MS4 Program Plan on the webpage?	⊠ Yes □ No			
2.1	Is the annual report for each year of the term covered by this permit no later than 30 days after submittal to the department on the webpage?	<ul> <li>Yes</li> <li>No</li> <li>Not Applicable</li> <li>(First permit year)</li> </ul>			





2.1	Is there a mechanism for the public to report potential illicit	
	discharges, improper disposal or spills to the MS4, complaints	$\boxtimes$ Yes
2.1	regarding land disturbing activities or other potential stormwater	□ No
	pollution concerns on the webpage?	
2.1	Is there a method for how the public can provide input of the MS4	🛛 Yes
2.1	Program Plan on the webpage?	□ No
2.1	Is the latest Virginia Community College System Annual	🛛 Yes
2.1	Standards and Specifications on the webpage?	□ No
2.1	Is there a method for responding to public input?	🛛 Yes
	is there a method for responding to public input?	□ No

#### 2.2.7. MCM #2 Evaluation (Part I.D.2.e)

<u>Review the MCM to determine the MS4 Program's effectiveness and whether or not changes to the MS4 Program Plan are necessary:</u>

Were all MCM #2 measurable goals completed in accordance with the MS4 Program Plan? Xes D No ( )

Are the MS4 Program measurable goals effective?





## 2.3. MCM #3: Illicit Discharge Detection and Elimination

#### 2.3.1. MS4 Map and Information Table (Part I.E.3.e(1))

A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year:

Were the MS4 storm sewer map and outfall information table updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year?  $\boxtimes$  Yes  $\square$  No ( )

#### 2.3.2. Dry Weather Screening (Part I.E.3.e(2))

The total number of outfalls screened during the reporting period as part of the dry weather screening program:

Were outfalls screened during the reporting period?  $\boxtimes$  Yes  $\square$  No ( )

The number of outfalls screened during the reporting year as part of the dry weather screening program is 59. This represents 100% of the total outfalls.

#### 2.3.3. Illicit Discharges (Part I.E.3.e(3))

A list of illicit discharges to the MS4 including spills reaching the MS4:

Were there any illicit discharges to the MS4 including spills reaching the MS4?  $\boxtimes$  Yes (Refer to Table 5)  $\square$  No

#### Table 5: Illicit Discharges

Illicit Discharge #1

Part I.E.3.e(3)(a) Source: A white liquid was observed in a storm drop inlet on the north side of the CW building on the Annandale Campus.

Part I.E.3.e(3)(b) Date Observed & Date Reported: 11/16/2020

Part I.E.3.e(3)(c) Detected during Screening, Reported by Public or Other (Describe): Reported by a subcontractor who was working in the area and observed another contractor's worker pouring the liquid into the riprap channel above the drop inlet.

Part I.E.3.e(3)(d) Investigation Resolution: Upon investigation, the white liquid was observed in the drop inlet. No white liquid was observed in the creek downstream of the outfall. The contractor was immediately contacted. It was immediately determined that the contractor's





employees were cleaning equipment laden with drywall joint compound and dumping the waste liquid into the inlet.

Part I.E.3.e(3)(e) Description of Follow-up Activities: The contractor removed the white liquid from the drop inlet and the contractor directed his employees to stop dumping any liquid outdoors.

Part I.E.3.e(3)(f) Date Investigation Closed: 11/17/2020

#### 2.3.4. MS4 Program Plan BMP Measurable Goals

The MS4 Program Plan BMPs measurable goals are provided in Table 6.

Table 6: MS4 Program Plan BMP Measurable Goals for MCM #3					
BMP	Measurable Goal	<b>Completeness Status</b>			
3.1	Was a GIS compatible shapefile submitted to DEQ?	Completed			
3.1	Was written notification provided to any downstream adjacent MS4 of any known interconnection established or discovered during the permit reporting year?	<ul> <li>□ Yes</li> <li>⊠ Not Applicable</li> <li>(No new or discovered)</li> <li>□ No</li> </ul>			
3.2	Did all students, faculty and staff have access to the Pollution Prevention Policy #303 and Stormwater Pollution Prevention Policy #308?	⊠ Yes □ No			
3.3	Were illicit discharge detection and elimination procedures implemented, enforced and documentation maintained?	⊠ Yes □ No			

#### 2.3.5. MCM #3 Evaluation (Part I.D.2.e)

<u>Review the MCM to determine the MS4 Program's effectiveness and whether or not</u> changes to the MS4 Program Plan are necessary:

Were all MCM #3 measurable goals completed in accordance with the MS4 Program Plan?

Are the MS4 Program measurable goals effective?

Wetland DAVEY A company



## 2.4. MCM #4: Construction Site Stormwater Runoff Control

#### 2.4.1. Implementation of Standards and Specifications (Part I.E.4.a(3))

The MS4 implements a construction site stormwater runoff program in accordance with the most recent DEQ approved Standards and Specifications in compliance with the Virginia Erosion and Sediment Control Law and Virginia Erosion and Sediment Control Regulations.

#### 2.4.1.1. Conforming Land Disturbance Projects (Part I.E.4.d(1)(a))

A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control:

Were all land disturbing projects that occurred during the reporting period conducted in accordance with the current department approved standards and specifications for erosion and sediment control?

 $\boxtimes$  Yes  $\square$  No (Refer to Table 7)  $\square$  Not Applicable (No land disturbing projects)

#### 2.4.1.2. Non-Conforming Land Disturbance Projects (Part I.E.4.d(1)(b))

If one or more of the land disturbing projects were not conducted with the department standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications:

If no is checked above, an explanation as to why a project did not conform to the approved standards and specifications are provided in Table 7.

Table 7: Project(s) Not in Conformance with Approved Standards and Specifications

Project Name: Not Applicable

Explanation:

**2.4.2. Site Stormwater Runoff Inspections (Part I.E.4.d(2))** Total number of inspections conducted:

The total number of site stormwater runoff inspections conducted for regulated land disturbance activities in accordance with the most recent DEQ approved Standards and Specifications are provided in Table 8.

Wetland DAVEY A company



#### 2.4.3. Enforcement Actions (Part I.E.4.d(3))

The total number and type of enforcement actions implemented:

The total number enforcement actions implemented which include Notices of Violations (Red Flags) and Stop Work Orders (Black Flags) are 3.

The total number of Notices of Violations (Red Flags) and Stop Work Orders (Black Flags) are provided in Table 8.

Table 8: Construction Project(s)						
Project(s)	Total Number of Inspections	Total Number of Notices of Violation Issued (Red Flags)	Total Number of Stop Work Orders Issued (Black Flags)	Total Number of Enforcement Actions Per Project		
Reynolds Building Renovation - Loudoun Campus	40	3	0	3		
Dawes Avenue Parking Garage Ramp - Alexandria Campus	10	0	0	0		

#### 2.4.4. MCM #4 Evaluation (Part I.D.2.e)

<u>Review the MCM to determine the MS4 Program's effectiveness and whether or not changes to the MS4 Program Plan are necessary:</u>

Were all MCM #4 measurable goals completed in accordance with the MS4 Program Plan? Xes D No ( )

Are the MS4 Program measurable goals effective?

Wetland DAVEY A company



## 2.5. MCM #5: Post-Construction Stormwater Management

#### 2.5.1. Implementation of Standards and Specifications (Part I.E.5.a(3))

The MS4 implements the most recent DEQ approved standards and specifications in compliance with the Virginia Erosion and Sediment Control Law and Virginia Erosion and Sediment Control Regulations and a stormwater management facility inspection and maintenance program in accordance with Part I.E.5.b.

#### 2.5.2. Stormwater Management Facility Inspections (Part I.E.5.i(2))

Total number of inspections conducted on stormwater management facilities owned or operated by the permittee:

Were inspections conducted on stormwater management facilities during the reporting year?  $\boxtimes$  Yes  $\square$  No

The total number of inspections conducted on stormwater management facilities are 48.

#### 2.5.3. Stormwater Management Facility Maintenance (Part I.E.5.i(3))

A description of significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection:

Were significant maintenance, repair, or retrofit activities performed on any stormwater management (SWM) facilities during the reporting year?

 $\Box$  Yes  $\Box$  No ( )  $\boxtimes$  Not Applicable (No significant maintenance required)

If yes, a description of significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the MS4 to ensure it continues to perform as designed is provided in Table 9.

Table 9: Maintenance Activities Performed on Stormwater Management Facilities					
Stormwater Significant Mainton and Activity					
<b>Management Facility</b>	Significant Maintenance Activity				
Not Applicable					

Wetland DAVEY A company



**2.5.4. Virginia Construction Stormwater General Permit Database (Part I.E.5.i(4))** <u>A confirmation statement that the permittee submitted stormwater management facility</u> <u>information through the Virginia Construction Stormwater General Permit database for</u> <u>those land disturbing activities for which the permittee was required to obtain coverage</u> <u>under the General VPDES Permit for Discharges of Stormwater from Construction</u> <u>Activities in accordance with Part I E 5 f or a statement that the Permittee did not complete</u> <u>any projects requiring coverage under the General VPDES Permit for Discharges of</u> <u>Stormwater form Construction Activities:</u>

Stormwater management facility information for stormwater facilities installed after July 1, 2014 was submitted through the Virginia Construction Stormwater General Permit database for land disturbing activities requiring a General VPDES Permit for Discharges of Stormwater from Construction Activities?

⊠ Not Applicable (Not a VMSP Authority)

#### 2.5.5. DEQ BMP Warehouse (Part I.E.5.i(5))

A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted:

No later than October 1 of each year, stormwater management facilities and BMPs implemented to meet a TMDL load reduction between July 1 and June 30 of each year were electronically reported using the DEQ BMP Warehouse for any practices not reported in accordance with Part I.E.5.f (requirement 2.5.4) including stormwater management facilities from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required?

 $\boxtimes$  Yes Inspection dates updated on 9/24/2021  $\square$  No  $\square$  Not Applicable (No qualifying structural SWM facilities constructed.)





#### 2.5.6. MS4 Program Plan BMP Measurable Goals

The MS4 Program Plan BMPs measurable goals are provided in Table 10.

Table 10: MS4 Program Plan BMP Measurable Goals for MCM #5					
BMP	Measurable Goal	<b>Completeness Status</b>			
5.1	Was the post-construction stormwater management inspection and maintenance program implemented in accordance with approved standards and specifications?	⊠ Yes □ No			
5.2	Was the stormwater management facility tracking database updated?	<ul> <li>Yes</li> <li>Not Applicable (No new or discovered)</li> <li>No</li> </ul>			

#### 2.5.7. MCM #5 Evaluation (Part I.D.2.e)

Review the MCM to determine the MS4 program's effectiveness and whether or not changes to the MS4 Program Plan are necessary:

Were all MCM #5 measurable goals completed in accordance with the MS4 Program Plan? Xes Ves No ( )

Are the MS4 Program measurable goals effective?





## 2.6. MCM #6: Pollution Prevention and Good Housekeeping

#### 2.6.1. Operational Procedures (Part I.E.6.q(1))

<u>A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period:</u>

Were any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period?

 $\Box$  Yes (Refer to Table 11)  $\boxtimes$  No (No modifications required.)

Table 11: Good Housekeeping Operational Procedures Developed or ModifiedNot Applicable

#### 2.6.2. Newly Developed SWPPPs (Part I.E.6.q(2))

<u>A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period:</u>

Were any new SWPPPs developed in accordance Part I E 6 c during the reporting period?  $\Box$  Yes (Refer to Table 12)  $\Box$  No ( )  $\boxtimes$  Not Applicable (No new high priority facilities)

Table 12: New SWPPPs Developed	
SWPPP Name	SWPPP Address
Not Applicable	

#### 2.6.3. Modified or Delisted SWPPPs (Part I.E.6.q(3))

A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in accordance with Part I E 6 h during the reporting period:

Were any SWPPPs modified after an unauthorized discharge, release or spill reported?

Were any high priority facilities delisted in accordance with Part I.E.6.h during the reporting period?

 $\Box$  Yes (Refer to Table 12)  $\boxtimes$  No

Wetland DAVEY A company



If yes, rationale is provided for any high priority facilities delisted in accordance with Part I.E.6.h during the reporting period in Table 13.

Table 13: SWPPPs Modified or Delisted	1
SWPPPs Modified/Delisted	<b>Rationale for Delisting</b>
Not Applicable	Not Applicable

#### 2.6.4. Newly Developed Nutrient Management Plans (Part I.E.6.q(4))

A summary of new turf and landscape nutrient management plans developed:

Were any new turf and landscape nutrient management plans developed? ⊠ Yes (Refer to Table 14) □ No ( ) □ Not Applicable ( )

#### 2.6.4.1. Nutrient Management Plan Acreage (Part I.E.6.q(4)(a))

The location and the total acreage of each land area:

If yes is checked above, the location and total acreage of the land area for any newly developed nutrient management plan is provided in Table 14.

#### **2.6.4.2.** Nutrient Management Plan Approval Date (Part I.E.6.q(4)(b)) The date of the approved nutrient management plan:

If yes is checked above, the approval date of any newly developed nutrient management plan is provided in Table 14.

Table 14: New Turf and Landscape Nutrient Management Plans				
Location	<b>Total Acreages</b>	Date Approved		
5000 Dawes Avenue Alexandria, VA 22311	9.27	7/29/2021		
8333 Little River Turnpike Annandale, VA 22003	13.74	7/29/2021		
21200 Campus Drive Sterling, VA 20164	50.81	7/29/2021		
6901 Sudley Road Manassas, VA 20109	16.34	7/29/2021		
6699 Springfield Center Drive Springfield, VA 22150	1.50	7/29/2021		
15200 Neabsco Mills Road Woodbridge, VA 22191	11.57	7/29/2021		

Wetland DAVEY . company



#### 2.6.5. Training Events (Part I.E.6.q(5))

<u>A list of the training events conducted in accordance with Part I.E.6.m, including the following information:</u>

Was training conducted?

 $\boxtimes$  Yes  $\square$  No ( )  $\square$  Not Applicable (Not required this reporting year.)

A list of training events conducted in accordance with Part I.E.6.m is provided in Table 15.

## 2.6.5.1. Training Dates (Part I.E.6.q(5)(a))

The date of the training event:

If yes is checked above, the date of the training event is provided in Table 15.

#### 2.6.5.2. Quantity Trained (Part I.E.6.q(5)(b))

The number of employees who attended the training event:

If yes is checked above, the number of employees who attended the training event is provided in Table 15.

#### **2.6.5.3. Training Objective (Part I.E.6.q(5)(c))** The objective of the training event:

If yes is checked above, the objective of the training event is provided in Table 15.

Table 15: Training Events			
Date	# of Attendees	Training Objective	
6/21/2021	67	Good Housekeeping Pollution Prevention, IDDE & TMDLs	





## 2.6.6. MS4 Program Plan BMP Measurable Goals

The MS4 Program Plan BMPs measurable goals are provided in Table 16.

Table	ble 16: MS4 Program Plan BMP Measurable Goals for MCM #6			
BMP	Measurable Goal	Completeness Status		
6.1	Was good housekeeping and pollution prevention biennial training conducted this reporting year?	<ul> <li>Yes</li> <li>Not Applicable</li> <li>(Not required this reporting year)</li> <li>No</li> </ul>		
6.2	Was the annual comprehensive compliance evaluation conducted?	⊠ Yes □ No		
6.2	Was the SWPPP reviewed within 30 days after an unauthorized discharge, release or spill reported?	<ul><li>☑ Yes</li><li>□ Not Applicable</li><li>(Not required)</li><li>□ No</li></ul>		
6.2	Was the SWPPP updated within 90 days after an unauthorized discharge?	<ul> <li>□ Yes</li> <li>⊠ Not Applicable</li> <li>(Not required)</li> <li>□ No</li> </ul>		
6.2	Were the MS4's properties reviewed this reporting year to determine if the properties meet the criteria of a high priority facility?	<ul> <li>□ Yes</li> <li>☑ Not Applicable</li> <li>(MS4 campuses are high priority facilities.)</li> <li>□ No</li> </ul>		
6.3	Was the nutrient management plan implemented through completion of application records?	<ul> <li>☑ Yes</li> <li>□ Not Applicable</li> <li>(No nutrients applied)</li> <li>□ No</li> </ul>		
6.4	Were all signed contracts executed with contract good housekeeping and pollution prevention language?	<ul><li>☑ Yes</li><li>□ No</li></ul>		
6.5	Did all signed contracts executed for pesticide and herbicide application maintain proof of certifications on file?	🛛 Yes		

Wetland and Solution a DAVEY 🟝 company



		□ Not Applicable
		(No contracts executed)
		□ No
		🛛 Yes
	Did training occur and were proof of certifications maintained	□ Not Applicable
6.6	on file for employees performing pesticide and herbicide	(No employees
	applications?	applied nutrients.)
		□ No

#### 2.6.7. MCM #6 Evaluation (Part I.D.2.e)

<u>Review the MCM to determine the MS4 Program's effectiveness and whether or not</u> changes to the MS4 Program Plan are necessary:

Were all MCM #6 measurable goals completed in accordance with the MS4 Program Plan?

 $\boxtimes$  Yes  $\Box$  No ( )

Are the MS4 Program measurable goals effective?

Wetland a DAVEY 🟝 company



## 3.0 TMDL SPECIAL CONDITIONS

## 3.1. Chesapeake Bay TMDL Action Plan

#### 3.1.1. BMPs Implemented and Estimated POC Reductions (Part II.A.13.a)

A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year:

Were any BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I.E.5.g? □ Yes (Refer to Table 17) □ No
( ) ☑ Not Applicable (Existing BMPs meet required 5% reductions. Refer to Table 17.)

The estimated reduction of pollutants of concern achieved by each BMP reported in pounds per year is provided in Table 17.

Table 17: Chesapeake Bay TMDL Action Plan POC Reductions					
BMP #1: Existing BMPs					
TN (lbs./yr.) TP (lbs./yr.) TSS (lbs./yr.)					
Required 5% Reduction (lbs.) = 11.13 1.50 1,290.12					
Provided Reduction (lbs.) = 11.89 2.62 1,363.12					
BMP #2: Street Sweeping Using the Mass Loading Approach					
Provided lbs. of material swept (lbs.) =		28,445			
TN (lbs./yr.) TP (lbs./yr.) TSS (lbs./yr.)					
Provided Reduction (lbs.) = 49.78 19.91 5,973.45					
Future 40% Reduction (lbs.) =89.3311.9910,326.52					
% Achieved towards $40\%$ (%) =         56         166         58					

#### 3.1.2. Nutrient Credits (Part II.A.13.b)

If the permitee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired:

Were credits acquired during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5?  $\Box$  Yes  $\boxtimes$  No

Wetland DAVEY . company



#### 3.1.3. POC Cumulative Reduction Progress (Part II.A.13.c)

The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids:

The progress, using the final design efficiency of the BMPs, toward meeting the required 40% reductions for total nitrogen, total phosphorus, and total suspended solids is provided in Table 18.

Table	ble 18: 2019 – 2023 Chesapeake Bay TMDL Action Plan Implementation Schedule			
Step	General Description	Measurable Goal	Completion Date	
1	5% reduction requirement complete. Evaluate lbs. swept.	Completed tracking documentation?	<ul><li>☑ Yes (July 2019)</li><li>□ No</li></ul>	
2	5% reduction requirement complete. Make adjustments to frequency based on 2019 information obtained.	Completed tracking documentation with increase sweeping frequency?	<ul><li>☑ Yes (July 2020)</li><li>□ No</li></ul>	
3	5% reduction requirement complete. Determine if 40% can be achieved w/ street sweeping alone. If not, evaluate alternate means to achieve 40% reduction. Secure funding for future implementation of new BMPs. Revise Action Plan accordingly.	Completed tracking documentation. If required, revise Action Plan?	⊠ Yes (July 2021) □ No	
4	Revise Action Plan based on the newly issued DEQ Guidance Memo No. GM-20-2003 (Appendix V.G).	Completed tracking documentation and support documentation from any new BMPs employed to meet 40% reduction?	July 2022	
5	Complete 40% reduction requirement with selected means and methods.	Completed tracking documentation and support documentation from any new BMPs employed to meet 40% reduction?	July 2023	
6	Report on Chesapeake Bay TMDL 40% reduction achievement.	Recorded results in Annual Report?	October 2023	

Wetland a DAVEY L company



#### 3.1.4. Next Reporting Period Planned BMPs (Part II.A.13.d)

A list of BMPs that are planned to be implemented during the next reporting period:

BMPs that are planned to be implemented during the next reporting period is provided in Table 19.

Table 19: Chesapeake Bay TMDL Action Plan BMPs Planned for next reporting year

Reductions satisfied by existing BMPs. Street sweeping planned for achieving 40% reduction.

#### **3.1.5.** Chesapeake Bay TMDL Action Plan Measurable Goals

The Chesapeake Bay TMDL Action Plan measurable goals are provided in Table 20.

Table 20:         Chesapeake Bay TMDL Action Plan         Measurable Goals			
#	Measurable Goal	Completeness Status	
1	Were public comments considered during the required 15-day comment period?	<ul> <li>□ Yes</li> <li>⊠ Not Applicable (Not required this reporting year)</li> <li>□ No</li> </ul>	
2	Were cost effective BMPs selected to support model quantification to achieve the required pollutant reductions?	<ul> <li>Yes</li> <li>Not Applicable (Not required this reporting year)</li> <li>No</li> </ul>	
3	Was the required pollutant reduction reached for this reporting year?	⊠ Yes □ No	

**3.1.6.** Chesapeake Bay TMDL Action Plan Implementation Evaluation (Part I.D.2.e) Review the TMDL Special Condition to determine the Chesapeake Bay TMDL Action Plan's effectiveness and whether or not changes to the Chesapeake Bay TMDL Action Plan are necessary:

Were all measurable goals completed in accordance with the Chesapeake Bay TMDL Action Plan?

 $\boxtimes$  Yes  $\square$  No ( )

Are the MS4 Program measurable goals effective?

Wetland a DAVEY 😤 company



## **3.2. Local TMDL Action Plans**

#### 3.2.1. Neabsco Creek Watershed Bacteria TMDL Implementation (Part II.B.9)

A summary of actions conducted to implement each local TMDL action plan:

A summary of actions conducted to implement the Neabsco Creek Watershed Bacteria TMDL is provided in Table 21.

Table 21: Neabsco Creek Watershed Bacteria TMDL Action Plan Summary of Actions			
BMP	Summary of Actions	Completion	
1	Identify areas with high bird populations and evaluate deterrents, population controls, habitat modifications and other measures that may reduce bird-associated bacteria loading. Use Geese Management via trained dog harassment on campus $2 - 3$ times daily, 7 days a week.	<ul><li>☑ Yes (July 2021)</li><li>□ No</li></ul>	

Were all measurable goals completed in accordance with the Neabsco Creek Bacteria TMDL Action Plan?

 $\boxtimes$  Yes  $\square$  No ( )

Are the MS4 Program measurable goals effective?





## 3.2.2. Accotink Creek Watershed Sediment TMDL Implementation (Part II.B.9)

A summary of actions conducted to implement each local TMDL action plan:

A summary of actions conducted to implement the Accotink Creek Watershed Sediment TMDL is provided in Table 22.

Table 22: Accotink Creek Watershed Sediment TMDL Action Plan Summary of Actions			
Step	General Description	Measurable Goal	Completion Date
1	Develop Action Plan	Action Plan submitted to DEQ with public comment period.	⊠ Yes (5/1/2021) □ No
2	Evaluate the potential for addressing the WLA by modifying the current Street Sweeping Program	<ul> <li>Determine the potential number of lane miles that can be swept.</li> <li>Incorporate guidance from DEQ GM20-2003 &amp; develop tracking document.</li> <li>Consider Chesapeake Bay TMDL Action Plan WLA in conjunction with this Action Plan.</li> </ul>	June 30, 2022
3	Evaluate the potential for addressing the WLA by modifying the current Street Sweeping Program	<ul> <li>Evaluate current equipment &amp; staff availability.</li> <li>Evaluate budget to determine how much street sweeping can be accomplished.</li> </ul>	June 30, 2023
4	Evaluate the potential for addressing the WLA by modifying the current Street Sweeping Program	<ul> <li>If required, plan to purchase dedicated sweeper.</li> <li>If required, hire additional staff to adequately address staffing needs to address the WLA.</li> </ul>	June 30, 2024
5	Implement modified Street Sweeping Program and evaluate progress in meeting WLA.	<ul> <li>Begin staff training &amp; modified street sweeping program.</li> <li>Explore options for additional BMPs as necessary.</li> </ul>	June 30,2025
6	Implement modified Street Sweeping Program and evaluate	• Continued staff training & modify street sweeping program as necessary.	June 30, 2026

Wetland 8 and Solution a DAVEY 🟝 company



	progress in meeting	• If required, evaluate options for	
	WLA.	additional BMPs as necessary.	
	Implement modified	• Continued staff training & modify	
	Street Sweeping	street sweeping program as necessary.	
7	Program and evaluate	• If required, implement options for	June 30, 2027
	progress in meeting	additional BMPs as necessary and	
	WLA.	feasible.	
8	TMDL End date	WLA met	June 30,2028
		Re-evaluate BMPs used to achieve	
	Ongoing avaluation of	sediment reductions and explore any	
9	sediment reductions	necessary modifications to the program	Ongoing
		(new BMPs, modifying existing BMPs,	
		etc.)	

Were all measurable goals completed in accordance with the Accotink Creek Sediment TMDL Action Plan?

 $\boxtimes$  Yes  $\Box$  No ( )

Are the MS4 Program measurable goals effective?





#### 3.2.3. Accotink Creek Watershed Chloride TMDL Implementation (Part II.B.9)

#### A summary of actions conducted to implement each local TMDL action plan:

A summary of actions conducted to implement the Accotink Creek Watershed Chloride TMDL is provided in Table 23.

Table 23: Accotink Creek Watershed Chloride TMDL Action Plan Summary of Actions		
#	Action Item	Completion Date
1	Complete TMDL Action Plan	⊠ Yes (5/1/2021)
		🗆 No
2	Establish Salt Management Working Group and Schedule of	⊠ Yes (10/1/2021)
	Meetings	🗆 No
3	Salt Management Working Group Reviews of SaMS and	June 30, 2022
	Development Salt Management Program (SMP)	June 30, 2022
4	Salt Management Program Progress provided on the MS4	
	Annual Report (See 5.1.3)	October 1, 2022
	<ul> <li>Action Plan Updated as Necessary</li> </ul>	
	Snow Operations Staff Training	
5	<ul> <li>Salt Management Program Progress provided on the MS4</li> </ul>	
	Annual Report (See 5.1.3)	October 1, 2023
	<ul> <li>Action Plan Updated as Necessary</li> </ul>	,
	Snow Operations Staff Training	
6	<ul> <li>Salt Management Program Progress provided on the MS4</li> </ul>	
	Annual Report (See 5.1.3)	October 1, 2024
	<ul> <li>Action Plan Updated as Necessary</li> </ul>	
	Snow Operations Staff Training	
7	Develop Snow Operations Standard Operating Procedure Manual	June 30, 2025
8	<ul> <li>Salt Management Program Progress provided on the MS4</li> </ul>	
	Annual Report (See 5.1.3)	October 1, 2025
	<ul> <li>Action Plan Updated as Necessary</li> </ul>	
	Snow Operations Staff Training	
9	Implement SOPs	Winter 2025

Were all measurable goals completed in accordance with the Accotink Creek Chloride TMDL Action Plan?

 $\boxtimes$  Yes  $\square$  No ( )

Are the MS4 Program measurable goals effective?

Wetland a DAVEY 🟝 company



Appendix A: Documentation of Public Education and Outreach Activities





High Priority Stormwater Issue #1





BIORETENTION BASIN STORMWATER MANAGEMENT AREA WATER MAY POND AFTER STORM THIS AREA IS NOT TO BE DISTURBED PLEASE KEEP. OUT





BIORETENTION BASIN STORMWATER MANAGEMENT AREA WATER MAY POND AFTER STORM THIS AREA IS NOT TO BE DISTURBED PLEASE KEEP OUT





High Priority Stormwater Issue #2





Presented by:

# **David Trimble**

NOVA Environmental Compliance Officer

# **NOVA MS4 Stormwater Program**

October 2020
Stormwater runoff is rainfall that flows over the ground surface. It is created when rain falls on impervious surfaces such as roads, parking lots, rooftops, and other paved surfaces. The impervious surfaces prevent the water to soak into the ground. Runoff picks up fertilizers, pesticides, oil, dirt, bacteria, and other pollutants as it makes its way through storm drains and ditches – untreated – into our streams, rivers, lakes, and the ocean. Stormwater runoff is the number one cause of steam impairment in urban areas.

## **EFFECTS OF STORMWATER RUNOFF**



Improperly disposed of **animal waste and human waste** from sanitary overflows cause high levels of bacteria (E.coli) in water bodies. Excessive E.coli makes water bodies unsafe for swimming and can sicken or kill people and wildlife.



Nitrogen and Phosphorous in **fertilizers** cause algae blooms in water bodies. Excessive algae produce toxins that sicken or kill people and wildlife.



## **EFFECTS OF STORMWATER RUNOFF**

**Sediment** from construction sites, bare and denuded areas without vegetative cover, and streambank erosion due to high volumes of rainwater runoff caused by urbanization.



- **Carries other pollutants** to water bodies which adversely affects wildlife.
- **Clogs fish gills** which interferes with breathing and kills fish.
- Creates a muddy bottom which adversely affects spawning beds.
- **Reduces visibility** due to suspended particles affecting the ability of fish to locate prey.
- Decreases the depth of the water which increases water temperatures which forces fish and animals to find a more suitable environment to live.
- **Reduces light penetration** which adversely affects plant growth.
- Interferes with navigation, flood control, recreation and fishing industries.

## **APPLICABLE STORMWATER REGULATIONS**

### WHY WE HAVE TO?

Clean Water Act (CWA) protects Virginia's waters





### WHERE APPLICABLE?

### MS4 General Permit Entity

- Localities & State Entities within urbanized areas
  - Special Conditions for TMDLs

- Chesapeake Bay
   Preservation Act
- Virginia Stormwater Management Act
- Virginia Stormwater Management Program
  - Virginia VSMP Regulations

## **MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)**

➢Collects & conveys stormwater

- Potential to convey pollutants downstream
- Ultimately leads to a point discharge at a natural drainage way (outfall)

Activities/operations draining to outfalls are regulated if within a Census Urbanized Area (MS-4 Area)







## Requires the operator to:

"... develop, implement, and enforce a MS4 Program designed to reduce the discharge of pollutants from the regulated small MS4 to the maximum extent practicable ..."

## Maximum Extent Practicable (MEP)

- Ensures compliance to water quality standards if
- the MS4 Program:
  - Addresses Minimum Control Measures with Best Management Practices (BMP) implementation
    - Structural and nonstructural BMPs
  - Addresses Special Conditions for TMDLs



General Permit No.: VAR040095

Effective Date: November 1, 2018 Expiration Date: October 31, 2023

GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA STORMWATER MANAGEMENT PROGRAM REGULATIONS, VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS, AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, permittees of small municipal separate storm sewer systems are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those waters specifically named in State Water Control Board regulations which prohibit such discharges.

The authorized discharge shall be in accordance with the registration statement filed with the department, this cover page, Part I - Discharge Authorization and Special Conditions, Part II - TMDL Special Conditions, and Part III - Conditions Applicable to All State and VPDES Permits, as set forth in this general permit.

## **Special Conditions**

- 1. Chesapeake Bay TMDL
- → 2. Local Waterbody TMDLs

## Minimum Control Measures

- → 1. Public Education & Outreach
- → 2. Public Involvement/Participation
- → 3. Illicit Discharge Detection & Elimination
- → 4. Construction Site Runoff Controls
- $\Rightarrow$  5. Post-construction Runoff Controls
- → 6. Pollution Prevention/Good Housekeeping

## TOTAL MAXIMUM DAILY LOAD (TMDL)





Waterbody not meeting water quality standards

- **TMDL** is a plan (pollution diet) that establishes the maximum amount of a pollutant the waterbody can hold and meet water quality standards.
- WLA is the quantity of the pollutant (sediment, nitrogen, bacteria, etc.) that may be discharged.



UNSAFE FOR BATHING

WARNING

Assign WLA for pollutant(s) of concern (POC) to point sources

## **CHESAPEAKE BAY PRESERVATION ACT**

- Under the Chesapeake Bay Preservation Act and NOVA's MS4 General Permit, the college is subject to the Special Conditions for the Chesapeake Bay Total Maximum Daily Load (TMDL) for nitrogen, phosphorus, and sediment.
- ➢ Virginia committed to a phased approach for MS4s to comply with the required pollutant reductions, consisting of three five-year permit cycles to achieve necessary pollutant reductions. These reductions are to achieve 5% reduction of pollutant loadings in the first permit cycle, 40% at the end of the second permit cycle, and 100% reduction at the end of the third permit cycle.
- NOVA developed and implemented its Chesapeake Bay TMDL Action Plan for the first permit cycle (2013-2018) which achieved the required 5% reductions. NOVA developed its second phase Action Plan to achieve the additional 35% reductions required this permit cycle (2018-2023).

### **CHESAPEAKE BAY TMDL**

- NVCC implements a Chesapeake Bay TMDL Action Plan to reduce the Pollutants of Concern (POCs) based on the amount of impervious area (hard surfaces like roads, sidewalks and building footprints) on campus.
- Currently, NVCC uses street sweeping as a Best Management Practice to achieve the required reductions.
- NVCC also abides by the construction laws and regulations that reduces the amount of sediment from construction activities.
- NVCC also implements a Nutrient Management Plan to reduce the amount of Nitrogen and Phosphorous applied in the form of fertilizer on the campus.

**Woodbridge Campus** drains to the **Neabsco Creek** which is impaired for **E.coli** (**bacteria**). TMDL Action Plan to minimize the discharge of bacteria that will be updated in accordance with the 2019

– 2023 MS4 General Permit.

Steps taken to reduce pollution of impaired waterways:

Implemented a goose management program

Pick-up pet waste

Inspect sanitary sewer system for signs of overflows

Annandale Campus drains to Accotink Creek which was recently approved for Sediment and Chloride TMDLs. NVCC will develop TMDL Action Plans for these pollutants of concern that will be implemented in 2021.

 Steps taken to reduce pollution of impaired waterways: Increased construction controls of stormwater runoff; Increased onsite storage of stormwater runoff and/or streambank restoration; Development of snow operations SOPs (i.e., increased control and tracking of salt, use of brine operations)

## **MS4 PROGRAM COMPONENTS**



## **PUBLIC EDUCATION AND OUTREACH**

NOVA shall implement a public education and outreach program designed to:

- 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.
- Three water quality issues:
  - 1. Public education on stormwater runoff
  - 2. TMDLs and Local Impaired Waters
  - 3. Education on Good Housekeeping and Pollution Prevention

## **PUBLIC INVOLVEMENT AND PARTICIPATION**

- NOVA must implement no less than four activities per year for two or more of the categories "Monitoring," "Restoration," Educational Events," Disposal or Collection Events," or "Pollution Prevention" to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.
- Examples of Educational events include booths at college events like the Green Festival, Restoration events includes stream clean ups, and Pollution Prevention events include storm drain marking be students.

## **GUIDANCE DOCUMENTS**



#### **Good Housekeeping & Pollution Prevention Manual**

A Programmatic Overview of NOVA's **Good Housekeeping and Pollution Prevention** Practices



#### June 2019

NOVA - Annandale Campus

8333 Little River Turnpike

Annandale, VA 22003

NOVA – Woodbridge Campus

2645 College Drive

Woodbridge, VA 22191

NOVA - Alexandria Campus
5000 Dawes Avenue
Alexandria, VA 22311

NOVA - Loudoun Campus 21200 Campus Drive

Sterling, VA 20164

For concerns related to Good Housekeeping & Pollution Prevention or for reporting pollution into stormwater runoff contact David Trimble (Environmental Compliance Officer) at (703) 764-5095.



**Post-Construction Stormwater** Management Inspection & **Maintenance Manual** 



#### June 2019

NOVA - Alexandria Campus 5000 Dawes Avenue Alexandria, VA 22311

NOVA - Loudoun Campus 21200 Campus Drive Sterling, VA 20164

Annandale, VA 22003 NOVA – Woodbridge Campus 2645 College Drive

NOVA - Annandale Campus

8333 Little River Turnpike

Woodbridge, VA 22191

For reporting pollution into stormwater runoff contact David Trimble (Environmental Compliance Officer) at (703) 764-5095.



**Illicit Discharge Detection and Elimination Manual** 



June 2019

OVA - Alexandria Campus	NOV
5000 Dawes Avenue	8333
Alexandria, VA 22311	Ar

NOVA – Woodbridge Campus 2645 College Drive

/A - Annandale Campus 33 Little River Turnpike nnandale, VA 22003

NOVA – Loudoun Campus 21200 Campus Drive Sterling, VA 20164

Woodbridge, VA 22191

For concerns related to Illicit Discharge Detection and Elimination or for reporting pollution into stormwater runoff contact David Trimble, Environmental Compliance Officer at (703) 764-5095.

Northern Virginia Community College

## **IDDE PROGRAM MANUAL**

> Written IDDE procedures to detect, identify, and address non-stormwater discharges

- Methods for field observations/screening
  - Schedule (outfalls screened annually)
  - Data collection (field screening form)
- Methods for investigation of source

   Specific timeframe prioritization
- Mechanisms for eliminations of source
  - Policies
  - $_{\circ}~$  Follow-up & documentation

➤Training Plan

➢ Reporting/Documentation

➢Inspection Guidance

> Maintenance & operations procedures as non-structural BMP

- Manage vehicle washing and maintenance, dumpster operations/locations, power washing, fueling, chemical storage, and other applicable practices
- ➤Waste Management
  - Oil, gas, and diesel
  - Absorbents
  - Other applicable wastes

## POST-CONSTRUCTION STORMWATER MANAGEMENT INSPECTION AND MAINTENANCE MANUAL

### ➢ Reporting/Documentation

- Forms
- Documentation

### ➢Inspection Guidance

Frequency

➢ Information on Facilities @ NOVA

➢Inspection Forms

➤ Facility Maintenance

## **IMPLEMENTATION TOOLS: SWPPP MAPS**

#### Site Evaluation Overview Northern Virgini

Community Co

ANORE AVENI

SWPPP Inspect

In addition to

on the map, th

1. Areas of e

2. Locations

3.

4.

5

Oil, hydrau

Open (unci

precipitatic

Any other

- SWPPP Inspec

Inspect potenti

Reference the

concerns at ea

exposure to stc

during inspecti-

Complete the

Submit comple

Conduct follo

Compliance Off

Document on

the map.

#### Purpose

The intent of this reference guide is to provide guick access to descriptions of common pollutant sources and common controls and practices to address the pollutants for each location identified on the Stormwater Pollution Prevention Plan (SWPPP) map. If needed, additional information for each potential pollutant source or activity, including source controls, standard operating procedures, and removal/disposal of pollutants is provided in the College's Good Housekeeping and Pollution Prevention Manual (GHPP), latest edition

#### **Qualification for Performing Site Evaluation**

The individual completing the Site Compliance Evaluation Form shall have participated in the College's Municipal Separate Storm Sewer System (MS4) Good Housekeeping/Pollution Prevention training that includes introduction to the GHPP College Specific Operation & Maintenance (O&M) Procedures Section included with this SWPPP, by reference.

#### **Frequency and Protocol**

The Site Compliance Evaluation Form shall be completed monthly. The completed form shall be provided to the Environmental Compliance Officer (ECO) immediately after the evaluation is completed. The ECO will provide follow-up for findings. Once follow-up is completed, it shall be indicated or noted on the Site Compliance Evaluation Form, as appropriate. The Site Compliance Evaluation is not complete until appropriate follow-up to findings has been documented on the Evaluation Form.

#### Reportable Spills & Discharges

If an onsite spill or occurring discharge to surface waters of any pollutant is observed, immediately contain the pollutant to prevent potential or further discharge. The ECO shall be notified immediately to:

- 1. Determine the further actions necessary to eliminate the potential or occurring discharge and 2. Determine if the discharge was equal to or in
- excess of a reportable quantity per Section III G of the MS4 General Permit. • If the discharge is reportable, the ECO will
- notify the DEQ within 24 hours and prepare the necessary report per Section III G of the MS4 General Permit for submission to DEQ. A copy of the report shall be maintained in a file with the SWPPP materials on site. For emergencies, call 9-1-1.

#### SWPPP Map Quick Reference Guide

#### Salt Storage/Operations

Potential Pollutant and Sources: Salt.

Source Controls: C-container acts as the primary source control. Perimeter controls prevent transport of salt.

Best Management Practice(s): Regularly inspect to ensure proper maintenance of perimeter controls. Remove and dispose of materials that have migrated outside of perimeter controls daily. Place salt storage away from drain inlets and surface waters.

O&M Procedure Reference: Section 5.10

#### Outdoor Material Storage

Potential Pollutant and Sources: Petroleum products, solvents, corrosive material, grease or sediment from materials stored outdoors

Source Controls: Perimeter controls or cover.

Best Management Practice(s): Store materials that could introduce pollutants to runoff indoors. Remove and properly dispose of pollutants on ground surface.

O&M Procedure Reference: Section 5.8

#### Outdoor Material Stockpiling (1)

Potential Pollutant and Sources: Sand, grit, sediment or any other erodible material stored outdoors.

Source Controls: Perimeter controls to prevent transport of stockpiled materials. Cover to prevent exposure to precipitation.

Best Management Practice(s): Regularly inspect stockpile areas and ensure proper maintenance of perimeter controls. Remove and dispose of materials that have migrated outside of perimeter controls daily. Place stockpiles away from outfalls and surface waters.

**O&M Procedure Reference:** Section 5.9

#### Vehicle Washing

Potential Pollutant and Sources: Solvents, grease, sediment, petroleum product and cleaning agents.

Source Controls: Wash only in designated areas that drain to sanitary sewer or in lawn areas with water only.

Best Management Practice(s): Take state vehicles and equipment to the Annandale campus and wash in designated wash pad. Use a commercial washing facility. Wash vehicles/equipment on pervious surfaces, such as grass or gravel only with water (no soap, chemicals, etc.) O&M Procedure Reference: Section 5.1

#### Dumpsters (123578)

Potential Pollutant and Sources: Various liquids, solids and rust can leach onto the ground.

Source Controls: If leaking, use absorbent, scrub with a broom to remove as much of the contaminate as possible, and promptly recover all material. For recurring issues, provide drip pan or absorbent pad.

Best Management Practice(s): Keep dumpsters and trash cans covered and replace damaged containers. O&M Procedure Reference: Section 5.5

#### Fueling (1)(3)

Potential Pollutant and Sources: Fuel spills.

Source Controls: Maintain a spill kit in the immediate vicinity with posted instruction for use of the kit. Perform timely maintenance repairs to address leaks. Use secondary containment and/or cover with a tarp.

Best Management Practice(s): Cover spills completely with absorbent and subsequently scrub with a broom. Promptly remove and dispose of material in a waste receptacle for waste oil. For leaks, provide a drip pad or absorbent pad until repairs can be made. Dispose of collected fuel in a waste receptacle for waste oil.

**O&M Procedure Reference:** Section 5.4

#### Vehicle/Equipment Storage (1)(3)(4)

Potential Pollutant and Sources: Petroleum product leaks from hydraulic hoses or vechicles/equipment in disrepair. Grease, sediment, rust and other pollutants on equipment.

Source Controls: Drip pans or absorbent pads placed under leaks and containment bags wrapped around leaking components if potential for intermingling with stormwater. Best Management Practice(s): Repair equipment leaking fuel or oil. Utilize source controls while leaks occur and inspect regularly to ensure pollutants are not exposed to precipitation. Remove and properly dispose of pollutants on ground surface.

O&M Procedure Reference: Section 5.3



Potential Pollutant and Sources: Packaging material from loading, petroleum products from equipment/vehicles. Source Controls: Drip pans, absorbent pads, and sweeping. Best Management Practice(s): Load material in dry weather, sweep up trash and erodibles. Clean up vehicle or equipment leaks. Remove and properly dispose of pollutants on ground surface.

O&M Procedure Reference: Section 5.7

#### Silt Fence (6)

Potential Pollutant and Sources: Sediment and other pollutants carried by sediment across parking lot.

Best Management Practice(s): Inspect after each rainfall event to ensure properly functioning. Repair damaged areas as necessary. Promptly replace any decomposed or ineffective fabric. Remove sediment deposits after each storm event. Do not let deposits reach half the height of the barrier.

VA Erosion & Sediment Control Handbook: Chapter 3.05

#### Outdoor Waste Grease Storage (2)

Potential Pollutant and Sources: Grease containers stored outdoors.

Source Controls: Cover, secondary containment and spill kit in the immediate vicinity.

Best Management Practice(s): Remove and properly dispose of pollutants on ground surface.

O&M Procedure Reference: Section 6.13



City of Alexandria Fire Department (Non-Emergency): (703) 746-4444

NOVA Emergency Management & Safety: (703) 764-5043 Director of Facilities (Steve Patterson): (703) 323-3554 Environmental Compliance Officer (David Trimble): (703) 764-5095 DEQ (NOVA Regional Office): (703) 583-3800 (Mon. - Fri. 8:15 - 4:30)

VA Dept. Emergency Management: (800) 468-8892 (24 hrs./7wk.) Interconnected MS4 Localities City of Alexandria (IDDE Reporting): (703) 748-4200 VDOT (NOVA District): (800) 367-7632



## POST-CONSTRUCTION STORMWATER MANAGEMENT FACILITY (BMP) COMPLIANCE MAPS



## **STRUCTURAL BMPS**



### **NUTRIENT MANAGEMENT PLAN**

- Virginia regulations (Code of Virginia 10.1.104.4) require all state colleges to develop and implement a Nutrient Management Plan (NMP) for the application of fertilizers, herbicides, pesticides, and lime.
- > NOVA's NMPs address only the nutrient management of **turf grass**, including athletic fields.
- NMPs are used as a resource for planning the quantity and timing of turfgrass nutrient application based on sound agronomic practices to reduce the amount of nutrients that ultimately negatively affect waterbodies.
- NMPs must be revised following major renovation or other changes to maintenance practices as they occur or every three years.

➤ Latest NMP covers the time period of July 2018 – July 2021.

## **COMPLIANCE INSPECTIONS AND DOCUMENTATION**

- SWPPP INSPECTIONS ANNUALLY/MONTHLY
- BMP INSPECTIONS ANNUALLY/MONTHLY
- OUTFALL INSPECTIONS ANNUALLY/MONTHLY
- ILLICIT DISCHARGE INVESTIGATIONS AS NEEDED
- CONSTRUCTION SITE COMPLIANCE EVERY TWO WEEKS OR AFTER A RUNOFF PRODUCING RAINFALL FOR EROSION AND SEDIMENT CONTROL AND FOR STORMWATER POLLUTION PREVENTION
- DOCUMENTATION INSPECTION FORMS, REPORTING FORMS, MAINTENANCE TRACKING, NMP REPORTING FORMS,
- MS4 ANNUAL REPORT



# David Trimble (Environmental Compliance Officer) 703-764-5095 <u>dtrimble@nvcc.edu</u>

Steven Patterson (Chief Facilities Officer, Facilities Planning & Support Services) 703-323-3554 <u>spatterson@nvcc.edu</u>

• Stormwater webpage: <a href="https://www.nvcc.edu/stormwater/">https://www.nvcc.edu/stormwater/</a>



High Priority Stormwater Issue #3







576C			
2225		000000000	********
			2000
			_ 0000
			C 2333
			CODE
	UPPO UPI DO		8888
	NEED HELPT		00000
			2000
LISE R	EMOTE SERV	ICES	00000
OSL M	LINGILOLIN		2000
r so to the	e websites listed belo	w for help.	00000
	and a subscription of		8000
ing Transfer In	state in some success little and the	and Appendix and the second	00000
Community of the same			85068
W ADDRESS ADDR	the second second second second		50005
Contraction in which the	an second provide second provide a		2000
	a constant to the second se		5000
			2000
			2000
ineres, linerenes, line	real Reportation, Press Int College In-	And	50000
	And the second second second		6666
management share proved	and Provide state		55555
of the second second	Contraction in the local data		2000
		a contract of the second	2000
			2000
			36666
	The local division of	and researching little	22255
and Summery, Topy and	a closed and second assessed		2000
	CARL DOCTOR COMP. The second after the	accounty francis, parameters and	0000
	and a second sec		2000
	and the second s	and the second second	88888
	the second second second second second		20000
	a top and assume to \$250, reasons to		8888
	a loss and againing to \$250, resume to		

PREVENIE AND ADDRESS	Research Services Colo Manuel Manager (1993) // Transmission, grav. Francescond Colors, editor 24/7 Filmmannak Act Transmissi Convenier (1993)-2223-22398
NUMBER OFFICE	Product and Research Section Product AA 3.07 Creation and and the converte associating frames. SA/7 Minameri Account Kanner's Commer ( 1955-325-3190)
PARKING & HOVACARD SERVICES RAINANG PERMIT STUDENT ID CARD	Der Campon und Remets karonen Reserri AA (187) Diese wennen für einer einer einer sonnen im gesennt wennen stellt mit der personeng persongeförsent einer Provider 2014 (127)
BOOKETONES BUTY COLUMNE MATTERIALS OF SLIPPLIES	On Common and Remain Investment Alth First Finner Dimits assessments for conventing beauty, mean front, and / heating./ 7023-073-0014.)
LIBRARY SERVICES INTERNET ACCESS: ECONTON: A LIBRARY RESO.	De-Company and Remarks Services Remark AA 2022 Direct extension for convert converting frames. Here forms a literature 23/7 (that) were reached through the service of the form of To any service converting literary resources and a remark of frames, service of the firmery
TUTORING RESULTICES	Remain Services Only mean many adds/fathering/ Settering/Mean_adds/
DELABILITY SUPPORT SERVICES	Ramata Lervines Dety
VETERAN & MILITARY SUPPORT SERVICES VETERANS HIELMANY UN TURING ACCESSIONCE EDUCATIONAL MENETITS	Remain Berning Chip
MOTA MOREFUNCE ADDRENES, (INICA) DIG DI A MORMITCHICA, DOMENNICA DELICATION, ACLI CLASS	Nova North

ENNERLING IN A CLASS AND AFAT STITES arrestationseptimes; and







Appendix B: Documentation of Public Involvement Activities





Public Involvement Activity #1



### INTERESTED IN ENV CLASSES OR STORMWATER MANAGEMENT? APRIL 20

April 14, 2021 / Events

Do you know of a student interested in a career in environmental consulting, environmental engineering, land development, property management or who are just interested in those fields? One of the major components of those programs is stormwater management and preventing pollution from entering our water bodies, i.e., "Only Rain down the Drain."

Click here for more information about NOVA's Stormwater Program.

This year, **Radford University's Sustainability Office** is collaborating with the **National Stormwater Center** to bring the "**Certified Stormwater Student**" program to Virginia college students.

On Tuesday, April 20 from 6 p.m. until 7:30 p.m., the National Stormwater Center will host a virtual course for Virginia students to learn about stormwater runoff, the Clean Water Act and the Municipal Separate Storm Sewer System (MS4). Participants will earn a student stormwater certification from the National Stormwater Center.

The course is free to all students.

#### Register Here.

Submitted by: Robert Johnson, Auxiliary Services, **ROJohnson@nvcc.edu** 

NATIONAL STORMWATER CENTER **PRESENTS:** Certified Stormwater **Student Class** 

### **Course Overview**

- Examine the Clean Water Act & NPDES
   Action 1998
   Action 1998
- Learn what stormwater is & its impacts
- Learn what illicit discharges are & understand where to look for
   discharges and how to report illicit discharges
- Discover ways to participate in your community



**National Stormwater Center** 105 East Broadway, Bel Air, Maryland 21014 1-888-397-9414, info@npdes.com, www.NPDES.com

# Tuesday, April 20 Online

https://attendee.gotowebinar.com/ register/4785333403052375564

## 6:00-7:30 PM



Public Involvement Activity #2



From:	Johnson, Robert
То:	Johnson, Robert
Cc:	Robinette, Cheryl A.
Subject:	RE: NOVA Green Festival 2020 take 2!
Date:	Thursday, October 8, 2020 9:27:49 AM
Attachments:	GreenFestival-Flyer-2020 102820.jpg
	GreenFestival-Flver-2020 .pdf

Greetings again!

As we are adjusting to the current environment, the College's Green Festival has taken on a new format!

We will hold the event via Zoom on October 28<sup>th</sup>.

More information and the registration links are available here - <u>https://www.nvcc.edu/green-festival/</u> - and a distributable flyer is attached.

Thank you!

-----

Rob Johnson Director of Sustainability & Auxiliary Services Northern Virginia Community College 703-425-5753 Office rojohnson@nvcc.edu

From: Johnson, Robert
Sent: Wednesday, March 4, 2020 12:53 PM
To: Johnson, Robert <rojohnson@nvcc.edu>
Cc: Robinette, Cheryl A. <crobinette@nvcc.edu>
Subject: NOVA Green Festival 2020

#### Greetings!

With Spring nearly upon us, please mark your calendar and plan to join us for Northern Virginia Community College's **2020 Green Festival**, scheduled for **9 a.m. – 4 p.m., Wednesday, April 15, 2020, at NOVA's Annandale Campus**. The theme for this year's event is *"Waste and its impact on habitats."*.

As many of you are aware, the purpose of NOVA's Annual Green Festival is to increase both the college and local community awareness of regional, national, and global environmental issues and provide information regarding ways that individuals can help preserve the environment. Participants at this community event will include faculty, staff, students and local community members. While our target audience is high school and college students, the event is free and open to the public.

The festival will be a combination of presentations, panel discussions, interactive

demonstrations, and informational displays. Ideally, it will help the audience to recognize ways they can conserve resources, promote change, and make a difference as individuals. More information is here – <u>www.nvcc.edu/green-festival/2020</u> (and a printable/distributable flyer is attached).

As in the past, we invite you to join us for this topical and educational festival. If you have questions or would like to participate as an exhibitor in the information fair or on one of the panels, please contact me or <u>crobinette@nvcc.edu</u>.

And please forward as this event is open to the public!

Thank you!

-----

Rob Johnson Director of Sustainability & Auxiliary Services Northern Virginia Community College 703-425-5753 Office rojohnson@nvcc.edu



# **NOVA's Annual GREEN FESTIVAL 2020**

### WASTE AND ITS IMPACT ON HABITATS

Wednesday, October 28, 2020 10:15 a.m. – 3:00 p.m. Online – Via Zoom

Keynote Speaker: Chad Pregracke – 10:15 a.m. Cleaning America's Rivers

Everything Counts / Waste Prevention / Habitat Loss – 11:30 a.m.

Richard Reynolds, Wildlife Biologist, VDGIF – 1:00 p.m. Bats and Wind Energy Development

> Raptor Lecture / Live Birds – 2:00 p.m. Secret Garden Birds and Bees

### **Your Keynote Speaker: Chad Pregracke**

Chad Pregracke, the 2013 CNN Hero of the Year, is proof that one person can make a difference. At the age of 17, Chad started on a crusade to clean up the Mississippi river. Since then Chad's hard work, vision, humor, and leadership has evolved into a cultural movement that had resulted in 11 million pounds of garbage being cleaned out of America's rivers with over 100,000 volunteers and dozens of global corporations coming aboard to lend a hand.

Chad's not-for-profit organization, **Living Lands & Waters**, was started in 1998 and has evolved to be the only "industrial strength" river organization like it in the world with a multi-million-dollar operation. Chad remains the driving force behind the organization and divides his time between living on a house-barge with his crew and living with his wife Tammy at their river home on the Mississippi.





Northern Virginia Community College

Free and open to the public.

For additional information and to register, visit www.nvcc.edu/green-festival/



Public Involvement Activity #3



From:	Johnson, Robert	
То:	<u>Johnson, Robert</u>	
Cc:	Robinette, Cheryl A.	
Subject:	NVCC Green Festival 2021!	
Date:	Monday, March 8, 2021 9:12:44 AM	
Attachments:	image005.png	
	image006.png	
	GreenFestival2021-Flyer .pdf	

#### Greetings!

You are receiving this email either because you previously attended one of the Green Festival events or because I thought you might be interested in this year's event.

If you are no longer interested in receiving emails like this, please let me know and I will remove you from my distribution list.

With Spring nearly upon us, please mark your calendar and plan to join us for Northern Virginia Community College's **2021 Green Festival**, scheduled for **10 a.m. – 3 p.m.**, **Wednesday, March 24, 2021, via Zoom**. The theme for this year's event is *"RESTORE THE EARTH: A Discussion of the Interconnections and Relationships Between Humans and Natural Processes."* 

As many of you are aware, the purpose of NOVA's Annual Green Festival is to increase both the college and local community awareness of regional, national, and global environmental issues and provide information regarding ways that individuals can help preserve the environment. While our target audience is high school and college students, the event is free and open to the public.

The festival will be a combination of presentations and panel discussions. Ideally, it will help the audience recognize ways they can conserve resources, promote change, and make a difference as individuals. More information and Zoom registration links are here – <u>www.nvcc.edu/green-festival/2021</u> (and a printable/distributable flyer is attached).

As in the past, we invite you to join us for this topical and educational festival.

And please forward this announcement or share the Facebook event link!

Thank you!

**Robert Johnson** Director of Sustainability & Auxiliary Services

Northern Virginia Community College 4001 Wakefield Chapel Rd Annandale, Virginia 22003-3796




# **NOVA's Annual GREEN FESTIVAL 2021**

**RESTORE THE EARTH:** A Discussion of the Interconnections and Relationships Between Humans and Natural Processes.

## Schedule

Wednesday, March 24, 2021 10:15 a.m. - 3:00 p.m. Online - Via Zoom

## **Keynote and Q&A**

#### 10:15 a.m. - 11:15 a.m.

Keynote Speaker - **Dr. Wallace Nichols** How Being Near, In, On, or Underwater Can Make you Happier, Healthier, More Connected, and Better at What You Do

## 11:15 a.m. - 12:00 p.m.

Q&A Group Session with Attendees and Students

## **Afternoon Sessions**

## 12:30 p.m. - 1:00 p.m.

Beekeeping In Virginia - Martha Kiene EAS Master Beekeeper, President - Virginia State Beekeeping Association

## 1:00 p.m. - 2:00 p.m.

Sustainable Food, Farming & Forests - Hala Elbarmil Greenhouse and Gardens Coordinator, GMU Examples of Restoration and Natural Connection in an Urban Setting

## 2:00 p.m. - 3:00 p.m.

Leave No Trace - **Nancy Chamberlain** Former NOVA Professor, Current GMU Professor Leave No Trace Principles and How Individuals Interact with Nature and the Environment

This event is free and open to the public. For additional information and to register, visit www.nvcc.edu/green-festival/

# Your Keynote Speaker: Dr. Wallace Nichols

Dr. Wallace "J" Nichols is an innovative, silobusting, entrepreneurial scientist, movement maker, renown marine biologist, voracious Earth and idea explorer, wild water advocate, bestselling author, sought after lecturer, and funloving Dad. He also likes turtles (a lot).



Dr. Nichols collaborates tirelessly to create the new story of water and share it with the world. This story includes the vast cognitive, emotional, psychological, social, physical, and spiritual benefits that we can all derive from healthy waters and oceans throughout our lives.

In 2017 Fijian Prime Minister Voreqe Bainimarama presented the Champion of Change Award at the World Oceans Festival on Governor's Island, New York to Dr. Nichols.

Nichols' experiences and creativity as a field research scientist, government consultant, founder and director of numerous businesses and nonprofit organizations, teacher, mentor, parent, and advisor all support his quest to build a stronger, more inclusive and diverse blue movement.





Public Involvement Activity #4



06/25/2021 09:37

Contractions

BULAROUS

06/25/2021 09:37

