



**Christopher Newport University
– Municipal Separate Storm
Sewer System (MS4) Annual
Report – Reporting Year July 1,
2018 – June 30, 2019**

Prepared for:

Christopher Newport University
1 Avenue of the Arts
Newport News, VA 23606

Prepared by:

Stantec Consulting Services Inc.
5209 Center Street
Williamsburg, VA 23188

Sign-off Sheet

This document entitled Christopher Newport University – Municipal Separate Storm Sewer System (MS4) Annual Report – Reporting Year July 1, 2018 – June 30, 2019 was prepared by Stantec Consulting Services Inc. (“Stantec”) for the account of Christopher Newport University (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not consider any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by _____



(signature)

Suzanne Dyba

Table of Contents

ABBREVIATIONS	II
1.0 BACKGROUND INFORMATION/ SIGNED CERTIFICATION.....	1
2.0 MINIMUM CONTROL MEASURE NO. 1 – PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS	3
3.0 MINIMUM CONTROL MEASURE NO. 2 – PUBLIC INVOLVEMENT/PARTICIPATION	8
4.0 MINIMUM CONTROL MEASURE NO. 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION	12
5.0 MINIMUM CONTROL MEASURE NO. 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL	16
6.0 MINIMUM CONTROL MEASURE NO. 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT.....	19
7.0 MINIMUM CONTROL MEASURE NO. 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING	22
8.0 TMDL ACTION PLAN IMPLEMENTATION	27

LIST OF TABLES

Table 1 MCM No. 1 – Public Education and Outreach on Stormwater Impacts	5
Table 2.1 MCM No. 2 – Public Involvement/Participation	9
Table 2.2 MCM No. 2 – Public Involvement/Participation	11
Table 3 MCM No. 3 – Illicit Discharge Detection and Elimination	13
Table 4 MCM No. 4 – Construction Site Stormwater Runoff Control	17
Table 5 MCM No. 5 – Post-Construction Stormwater Management	20
Table 6 MCM No. 6 – Pollution Prevention/Good Housekeeping	24

LIST OF APPENDICES

APPENDIX A	MINIMUM CONTROL MEASURE 1 SUPPLEMENTAL INFORMATION
APPENDIX B	MINIMUM CONTROL MEASURE 2 SUPPLEMENTAL INFORMATION
APPENDIX C	MINIMUM CONTROL MEASURE 3 SUPPLEMENTAL INFORMATION
APPENDIX D	MINIMUM CONTROL MEASURE 4 SUPPLEMENTAL INFORMATION
APPENDIX E	MINIMUM CONTROL MEASURE 5 SUPPLEMENTAL INFORMATION
APPENDIX F	MINIMUM CONTROL MEASURE 6 SUPPLEMENTAL INFORMATION



Abbreviations

AS&S	Annual Standards and Specifications
BMP	Best Management Practice
CFA	Certified Fertilizer Applicator
CGP	Construction General Permit
CNU	Christopher Newport University
DCR	Department of Conservation and Recreation
DEQ	Department of Environmental Quality
ESC	Erosion and Sediment Control
HUC	Hydrologic Unit Code
IDDE	Illicit Discharge Detection and Elimination
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NMP	Nutrient Management Plan
SOP	Standard Operating Procedure
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VDACS	Virginia Department of Agriculture and Consumer Services
VPDES	Virginia Pollution Discharge Elimination System
VSMP	Virginia Stormwater Management Program



Introduction

1.0 INTRODUCTION

1.1 BACKGROUND INFORMATION

The Virginia General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) requires Christopher Newport University (CNU) to develop and implement a comprehensive stormwater management (SWM) program consistent with the Virginia General Permit MS4 General Permit VAR040090. The general permit term is from November 1, 2018 to June 30, 2023. However, this annual report covers information for the reporting year of July 1, 2018 through June 30, 2019 which is the first year of the new permit cycle. The annual report for the 2018-2019 reporting year will cover information for Year 1 under the new MS4 permit which was effective on November 1, 2018, but may cover some of the interim period between the end of the last permit (July 1, 2018) and the start of the new permit requirements (October 31, 2018).

CNU's Stormwater Management Program is based on six minimum control measures (MCM) as required by the Virginia General Permit. These goals and objectives were developed to reduce the discharge of pollutants from the University's MS4 to the maximum extent practicable (MEP), protect water quality, ensure compliance with water quality standards, and to satisfy the appropriate water quality requirements of the Clean Water Act and its attendant regulations.

This MS4 Annual Report will serve to convey the required information and detail the status of compliance with all permit conditions as well as the appropriateness of best management practices (BMPs) identified in the MS4 Program Plan towards achieving measurable goals for each MCM.

1.2 SIGNED CERTIFICATION

As required by Christopher Newport University's MS4 Permit (VAR040090), the following certification is provided in accordance with Section 9VAC25-870-370 of the Virginia Stormwater Management Program (VSMP) Regulations, and as required as part of the submittal of University's MS4 Annual Report for 2018-2019.



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Introduction

Certification Statement and Requirements

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

- 1. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;*
- 2. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or*
- 3. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.*

Duly Authorized Representatives

A person is a duly authorized representative only if:

- 1. The authorization is made in writing by a person described above;*
- 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and*
- 3. The written authorization is submitted to the department.*

CERTIFICATION

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

M. Christy Seofal *September 30, 2019*
Responsible Official Signature Date

VAR040090 Christopher Newport University
Permit Number MS4 Name



Minimum Control Measure No. 1 – Public Education and Outreach on Stormwater Impacts

2.0 MINIMUM CONTROL MEASURE NO. 1 – PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

MCM1 provides for a public education and outreach program to develop and conduct outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. This measure includes the posting of educational materials around the campus, hosting informational workshops, and other activities.

The “public” in the case of CNU is defined as the faculty, students, employees, contractors, and visitors to the campus. Therefore, most of these outreach efforts are part of an on-campus effort to increase the CNU community’s knowledge about the steps that they can take to reduce stormwater pollution. These efforts can also be coordinated with MCM2 in order to increase individual and group involvement in local water quality improvement initiatives. CNU continues to explore opportunities to partner with the adjacent MS4s on education and outreach efforts to engage the broader community through an off-campus effort where possible.

CNU identified three high-priority water quality issues that contribute to the discharge of stormwater. These issues have remained as the high-priority water quality issues for the CNU stormwater program. The three issues are listed below along with associated public education and outreach information:

1) Litter & Street Debris – Faculty, Staff, Students, and Visitors

Litter and street debris is a water quality issue that is constantly observed and managed by the Grounds Department. Contributors towards this water quality issue include all the CNU public that work, attend, or visit the university. Therefore, the public or audience for this issue includes faculty, students, staff, and visitors.

In this permit year, Grounds Department staff hosted a table providing stormwater education materials, including those specific to litter and street debris, at the Garden Symposium, held at CNU on March 30, 2019.

CNU is continuing to look into alternative ways to distribute educational materials to the CNU MS4 public including use of social media. For the 2018-2019 reporting year, the CNU Sustainability (@sustainCNU) Facebook account posted information on stormwater issues under the hashtag #stormwaterMonday. Litter and street debris is one of the topics that was regularly included in the educational information posted on the CNU Sustainability Facebook page.

Additional ongoing programs to support this message include the installation/replacement of storm drain medallions on all campus storm drain inlets. Initial installation was completed in 2009-2010 and the program is still ongoing with missing or damaged medallions replaced annually. The storm drain medallions which read, “No dumping, Drains to Waterway”, are visible on nearly every storm drain inlet throughout the CNU campus and serve as a visual reminder to not pollute.



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Minimum Control Measure No. 1 – Public Education and Outreach on Stormwater Impacts

2) Construction Site Runoff – Contractors

At times, the university has several construction projects ongoing at any one time. Therefore, construction site runoff is a high-priority water quality issue. The public or audience for this issue is the contractors, subcontractors and VSMP inspectors who are working on campus at the construction sites. Educational signs are installed at all active on-campus construction projects. The signs are visible on campus to all persons who walk next to the construction fencing adjacent to the project location.

In addition, contractors at CNU were trained in construction site Pollution Prevention and Good Housekeeping practices by a DEQ - certified combined administrator in this permit year. The training logs show that five (6) people or over 80% of the target audience (site contractors, CNU representatives, and general contractors' project managers) were trained with these educational video modules.

3) Nutrient Management – Grounds staff

The CNU Grounds Department identified nutrient management as a third high-priority water quality issue. The university takes pride in a clean and green campus but also works to not over-apply nutrients and diligently follows the approved Nutrient Management Plans (NMPs) for the campus. The public or audience for this water quality issue is the Grounds Department staff as they are the only ones involved in nutrient application and management to campus and athletic grounds. The CNU Grounds Department currently has two (2) Certified Fertilizer Applicators, and two (2) Certified Nutrient Management Planners through the Virginia Department of Agriculture and Consumer Services (VDACS). In this permit year, the University's turfgrass technician attended the 3-day training course (Virginia Turfgrass Short Course) sponsored by the Virginia Turfgrass Council.

In addition to the high-priority issues listed above, the CNU Stormwater website (<http://cnu.edu/public/stormwater/>) is an important part of the public education and outreach program at CNU. The website contains MS4 information including the annual report and program plan and has been updated each year to include additional information related to stormwater and pollution prevention including copies of the permit, IDDE information, annual reports, the program plan, educational information about stormwater, links to other stormwater-related websites and stormwater incident reporting information.

CNU implements this MCM through the BMPs provided below. Information concerning each BMP is provided in Table 1. Additional public education and outreach information is provided in Appendix A.

- MS4 Program Update
- CNU MS4 Website
- Campus Public Involvement
- Storm Drain Medallions
- Construction Signage
- Construction Site Runoff
- Litter and Street Debris Education
- Nutrient Management Training



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 1 – Public Education and Outreach on Stormwater Impacts

Table 1 MCM No. 1 – Public Education and Outreach on Stormwater Impacts

BMP	Description	Measurable Goal	BMP Status	Future Activities
1.1 – MS4 Program Update	Conduct a self-assessment and update of the MS4 Program to identify and proactively address issues and deficiencies, as well as identify opportunities to improve program effectiveness.	Complete self-assessment and update.	Completed 2008-2009; MS4 Program Plan Update in 2018-2019. Annual reviews and updates as needed.	The MS4 Program was revised during the 2018-2019 reporting year to reflect MS4 Program Plan updates required in the general permit. The plan will continue to be updated annually as needed to reflect requirements outlined in the permit.
1.2 – CNU MS4 Website	Update the CNU website to include information on the MS4 Program, MS4 general permit, MS4 Program Plan and annual reports, educational information about stormwater, links to other stormwater-related websites and stormwater incident reporting information.	Update CNU website to include information on the MS4 Program. Review website annually and update any necessary information based on changes to CNU policies and/or staffing.	Website initially updated to include MS4 information in 2009-2010; Additional information was added to the website in subsequent years. Annual reviews and updates as needed.	Additional stormwater information will continue to be added to the website in Permit Year 2 as the website is updated.
1.3 – Campus Public Involvement	CNU Grounds Department staff hosted a table providing stormwater education materials at the Garden Symposium held at CNU on 3/30/19.	Participate through promotion, sponsorship, or other involvement, in a minimum of four local activities annually aimed at increasing public participation to reduce stormwater pollutant loads, improve water quality, and support local restoration and clean-up projects.	An annual Garden Symposium event was held at CNU on 3/30/19. 150 people were in attendance. CNU Grounds Department staff hosted a table providing stormwater education materials at the event.	CNU will look to provide stormwater educational materials at future Garden Symposiums at CNU and other similar events.



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 1 – Public Education and Outreach on Stormwater Impacts

1.5 – Storm Drain Medallions	Install storm drain medallions on all campus storm drain inlets to help remind the CNU community about stormwater pollution. The medallions read, “No dumping, Drains to Waterway	Install storm drain medallions on all campus storm drain inlets. Evaluate storm drain medallions annually. Replace any missing or damaged medallions annually.	During this permit year, no new medallions were necessary, and no medallions needed replacement.	Monitoring of the storm drain medallions is an ongoing activity. Any missing or damaged medallions will be replaced. New medallions will be installed on newly constructed campus storm drains.
1.6 – Construction Signage	Have a sign to be placed on construction site fencing at all on-campus construction projects explaining the importance of proper erosion and sediment control practices and its connection to stormwater quality.	Install educational sign on fencing at all on-campus construction projects. Inspect and replace any missing or damaged signs as needed.	Signs were installed on 3/08/2019 on the fencing surrounding the Fine Arts Center construction site.	Installation of educational signage at new on-campus construction projects will be an ongoing activity. Any missing or damaged signs observed will be replaced.
1.7 – Construction Site Runoff	Construction site runoff was identified as one of the three high-priority water quality issues at CNU. CNU conducts biennial training for contractors on construction site runoff pollution prevention.	Conduct biennial training to contractors on construction site runoff pollution prevention. Document each training event including the training date, number of people attending the training, and the objective of each training event.	For 2018-2019, the training logs show that six (6) people or over 80% of the target audience (site contractors, CNU representatives, and general contractors’ project managers) were trained with these educational video modules.	Construction site runoff pollution prevention training will be a biennial and ongoing activity, as needed based on active construction projects, for contractors associated with all new regulated land disturbing activities on campus. CNU is looking at rotating biennial presentations/training materials to present similar but varying content.
1.8 – Litter and Street Debris Education	Litter and street debris was identified as one of the three high-priority water quality issues at CNU. CNU conducts public education/outreach regarding the impacts of litter and street debris on stormwater discharges.	Conduct public education/outreach to increase the CNU community’s knowledge about the steps that they can take to reduce stormwater pollution associated with litter and street debris.	The CNU Sustainability (@sustainCNU) Facebook account posted monthly information on stormwater issues under the hashtag #stormwaterMonday. Litter and street debris is one of the topics that was regularly included in the educational information posted on the CNU Sustainability Facebook page.	Distribution of educational materials to the CNU public related to litter and street debris is an ongoing activity. CNU will continue to conduct public education/outreach regarding this issue and continue to look into alternative ways to distribute educational materials to the CNU MS4 public.



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 1 – Public Education and Outreach on Stormwater Impacts

<p>1.9 – Nutrient Management Training</p>	<p>Nutrient management was identified as one of the three high-priority water quality issues at CNU.</p>	<p>Train CNU Grounds Department staff as certified fertilizer applicators and/or Nutrient management Planners to ensure that nutrients are only applied in accordance with CNU's approved Nutrient Management Plans.</p>	<p>Continue to train Grounds Department staff and document training (names, date, etc.) regarding nutrient management. This year, the University's turfgrass technician attended the 3-day training course (Virginia Turfgrass Short Course) sponsored by the Virginia Turfgrass Council.</p>	<p>This is an ongoing program with biennial training. In addition to any in-house training, staff are sent to training courses.</p>
---	--	--	---	---



Minimum Control Measure No. 2 – Public Involvement/Participation

3.0 MINIMUM CONTROL MEASURE NO. 2 – PUBLIC INVOLVEMENT/PARTICIPATION

MCM No. 2 provides for public involvement and participation by making the MS4 Program Plan available for public review and input. The Program Plan can be found on the CNU website at the link provided below. More importantly, MCM No. 2 provides for public participation in watershed activities that further the education and awareness of stormwater impacts to receiving water quality.

<http://cnu.edu/public/stormwater/>

In this permit year, the University did not receive any public input concerning stormwater or erosion and sediment control issues, practices, or programs.

Through this MCM, CNU developed a series of activities that actively involves the students, faculty, and staff and, to the maximum extent practicable (MEP), the community at large. During the reporting year, CNU participated in a variety of events/activities aimed at increasing public participation to reduce stormwater pollutant loads, improve water quality, and support local restoration and clean-up projects, programs, groups, meetings, and other opportunities for public involvement. See Table 2.1 for a summary of participation events for Permit Year 1.

CNU Grounds Department staff hosted a table providing stormwater education materials at the Garden Symposium held at CNU on March 30, 2019. <http://cnu.edu/gardening/>

During the 2018-2019 reporting year, CNU did not install any new pet waste stations on campus, but all currently installed pet waste stations were maintained and refilled with bags as necessary to encourage faculty, staff, students, and visitors to collect and properly dispose of pet waste. The pet waste stations will continue to remain on campus to educate faculty, staff, students, and visitors on the importance of water quality.

CNU implements this MCM through the BMPs provided below. Information concerning each BMP including a detailed description, measurable goals, and implementation dates is provided in Table 2.2. Additional public involvement/participation information is provided in Appendix D.

- MS4 Program Update
- CNU MS4 Website
- Campus Public Involvement
- Pet Waste Stations
- Outreach/Participation Events



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Minimum Control Measure No. 2 – Public Involvement/Participation

Table 2.1 MCM No. 2 – Public Involvement/Participation

BMP	Description	Measurable Goal	BMP Status	Future Activities
2.1 – MS4 Program Update	Conduct a self-assessment and update of the MS4 Program to identify and proactively address issues and deficiencies, as well as identify opportunities to improve program effectiveness.	Complete self-assessment and update.	Completed 2008-2009; MS4 Program Plan Update in 2018-2019. Annual reviews and updates as needed.	The MS4 Program was revised during the 2018-2019 reporting year to reflect MS4 Program Plan updates required in the general permit. The plan will continue to be updated annually as needed to reflect requirements outlined in the permit.
2.2 – CNU MS4 Website	Update the CNU website to include information on the MS4 Program, MS4 general permit, MS4 Program Plan and annual reports, educational information about stormwater, links to other stormwater-related websites and stormwater incident reporting information.	Update CNU website to include information on the MS4 Program. Review website annually and update any necessary information based on changes to CNU policies and/or staffing.	Website initially updated to include MS4 information in 2009-2010; Additional information was added to the website in subsequent years. Annual reviews and updates as needed.	Additional stormwater information will continue to be added to the website in Permit Year 2 as the website is updated.
2.3 – Campus Public Involvement	CNU Grounds Department staff hosted a table providing stormwater education materials at the Garden Symposium held at CNU on 3/30/19.	Participate through promotion, sponsorship, or other involvement, in a minimum of four local activities annually aimed at increasing public participation to reduce stormwater pollutant loads, improve water quality, and support local restoration and clean-up projects.	An annual Garden Symposium event was held at CNU on 3/30/19. 150 people were in attendance. CNU Grounds Department staff hosted a table providing stormwater education materials at the event.	CNU will look to provide stormwater educational materials at future Garden Symposium events at CNU and other similar events.



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Minimum Control Measure No. 2 – Public Involvement/Participation

2.4 – Pet Waste Stations	CNU did not install any new pet waste stations but refilled and maintained the ones already on campus to encourage faculty, staff, students, and visitors to collect and properly dispose of pet waste.	Use of pet waste stations and increasing public participation to reduce stormwater bacteria loads. Staff replaces bags on a regular basis.	CNU installed pet waste stations on campus in previous reporting years to encourage faculty, staff, students, and visitors to collect and properly dispose of pet waste. These were refilled and maintained this permit year.	The Pet Waste Stations will continue to remain on campus to educate faculty, staff, students, and visitors on the importance of water quality.
2.5 – Outreach/Participation Events	CNU students, faculty and staff participate in service events throughout the permit year.	Participate through promotion, sponsorship, or other involvement, in a minimum of four local activities annually aimed at increasing public participation to reduce stormwater pollutant loads, improve water quality, and support local restoration and clean-up projects.	Community service activities are ongoing with various clubs and organizations. See Table 2.2 for more information.	Additional community service opportunities for public education/outreach associated with high-priority water quality issues may also be identified during 2018-2019.



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Minimum Control Measure No. 2 – Public Involvement/Participation

Table 2.2 MCM No. 2 – Outreach/Participation Events

Date	Event	Campus Group	Contact/Advertising	Purpose/Audience
9/8/2018	Newport News Go Green Expo	Roots & Shoots	https://thecompass.cnu.edu/event/2733583	This event is for sharing information about sustainability and environmental responsibility with the community.
9/30/2018	Beach Cleanup	CNU Biology club	bioclub@cnu.edu	Biology club and other student volunteers spent the day cleaning up Buckroe Beach.
10/6/2018	Causeys Mill Riparian Buffer Work Day	Roots & Shoots	https://www.rootsandshoots.org/project/causeys-mill-riparian-buffer	Repair of a riparian buffer at Causey's Mill. The volunteers help ensure the safety of Lake Maury by weeding and planting near the shoreline to prevent erosion
3/14/2019	Collaborative Ecosystems Summit	The Office of Sponsored Programs, Organismal and Environmental Biology and the Office for Sustainability	https://www.floodingresiliency.org/event/the-second-collaborative-ecosystems-summit/	Panels include: Science Communication; Collaboration and Action; and, Perspectives from Higher Education
3/16/2019	Mariners Museum Park/Lake Maury clean up	Roots & Shoots/CNU ROTC	https://www.facebook.com/sustainCNU/	Volunteer clean up event
4/7/2019	Beach Cleanup	CNU Biology club	https://www.facebook.com/pg/CNUBioClub/posts/	Biology club and other student volunteers spent the day cleaning up Buckroe Beach.
4/12/2019	Workshop for 3rd graders at Riverside Elementary School	Roots & Shoots	https://www.facebook.com/rootsandshootsCNU/	Teaching resource conservation to 3rd graders at Riverside elementary, in Newport News, VA



Minimum Control Measure No. 3 – Illicit Discharge Detection and Elimination

4.0 MINIMUM CONTROL MEASURE NO. 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

MCM No. 3 requires a program to detect and eliminate illicit discharges into the regulated small MS4. This MCM includes the development and implementation of an Illicit Discharge Detection and Elimination (IDDE) Policy that effectively prohibits non-stormwater discharges into the MS4. Other BMPs include mapping of the MS4 and development of a table of stormwater outfalls. These items were updated in this permit year and have been provided on the University's website. An additional item created through this MCM is any necessary notification of neighboring or interconnected MS4s. This measure also provides for the development of a process with which CNU will track the number and nature of any illicit discharges, and the manner in which they are eliminated.

CNU developed and adopted an IDDE Policy on July 1, 2010. The IDDE Policy and information about it was added to the university's website and a link to the policy is provided below. CNU developed a procedure and format for tracking training efforts, inspections, and other activities related to the IDDE program, and illicit discharge detection tracking and reporting is an ongoing activity. CNU relies on the City of Newport News to respond to any spill emergencies on campus. Relying on the updated training and capabilities of emergency responders is an integral component of the University's IDDE plan. CNU will document any illicit discharges that are detected annually.

<http://cnu.edu/public/stormwater/>

There were no IDDE investigations for the 2018-2019 permit year.

The CNU MS4 contains one main stormwater outfall (Outfall 1) and a second outfall (Outfall 2) that drains stormwater from the area of the Ferguson Center for the Arts which is part of CNU and within the MS4 boundary. Outfalls are inspected annually as part of the dry weather screening program, and the inspection reports are included in each year's annual report.

CNU implements this MCM through the BMPs provided below. Information concerning each BMP including a detailed description, measurable goals, and implementation dates is provided in Table 3. Additional illicit discharge detection and elimination program information is provided in Appendix A.

- IDDE Policy
- CNU Stormwater Study
- CNU MS4 Website
- Map of Storm Sewer System
- Storm Sewer System Table
- Illicit Discharge Detection Tracking and Reporting
- Outfall Inspections
- Pollution Prevention Materials
- Pollution Prevention Training



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 3 – Illicit Discharge Detection and Elimination

Table 3 MCM No. 3 – Illicit Discharge Detection and Elimination

BMP	Description	Measurable Goal	BMP Status	Future Activities
3.1 – IDDE Policy	Develop and adopt an Illicit Discharge, Detection and Elimination (IDDE) Policy to prevent the discharge of contaminated stormwater runoff from CNU properties and operations into the MS4.	Develop and adopt the IDDE Policy to let the public know about unauthorized stormwater discharges and what to do if one is suspected.	IDDE Policy was adopted by CNU on 7/1/10. Continue to implement University IDDE policy.	Information on the IDDE Policy is on the university’s website. The IDDE policy will be reviewed and updated as needed.
3.2 – CNU Stormwater Study	Develop and maintain an updated storm sewer system map and outfall table. CNU developed a Stormwater Quality and Quantity Study in 2002 which was revised in 2008, 2011, and 2019.	Storm sewer system map and outfall table. Review CNU Stormwater Plan and update any necessary information based on changes to the campus and/or stormwater conveyance system as needed.	Review and update as needed. Information from the stormwater study is provided in Appendix A.	The stormwater study will continue to be reviewed and updated as needed based on changes to the university’s stormwater conveyance system and based on permit requirements.
3.3 – CNU MS4 Website	Update the CNU website to include information on the MS4 Program, MS4 general permit, MS4 Program Plan and annual reports, educational information about stormwater, links to other stormwater-related websites and stormwater incident reporting information.	Update CNU website to include information on the MS4 Program. Review website annually and update any necessary information based on changes to CNU policies and/or staffing.	Website initially updated to include MS4 information in 2009-2010; Additional information was added to the website in subsequent years. Annual reviews and updates as needed.	Additional stormwater information will continue to be added to the website in 2018-2019 as the website is updated.



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 3 – Illicit Discharge Detection and Elimination

<p>3.4 Map of the Storm Sewer System</p>	<p>Maintain a map of the storm sewer system containing:</p> <ul style="list-style-type: none"> • MS4 outfalls • Name and location of receiving waters • Unique identifiers for each mapped item • MS4 regulated service area • Stormwater management facilities 	<p>Evaluate on an annual basis, by October 1 of each year, and update as necessary.</p>	<p>Submitted to DEQ in July 2019 and put on CNU stormwater website. University staff will maintain map and continue to update as necessary.</p>	<p>Evaluate on an annual basis, by October 1 of each year, and update as necessary.</p>
<p>3.5 Storm Sewer System Table Updates</p>	<p>Maintain a table of the storm sewer system. Each outfall should contain:</p> <ul style="list-style-type: none"> • Unique identifiers • estimated drainage acres • Name of receiving waters (6th order HUC) • Unique identifiers • Whether or not it drains to a water on the 2016 303(d) list • EPA approved TMDLs with a wasteload allocation (WLA) 	<p>Evaluate on an annual basis, by October 1 of each year, and update as necessary.</p>	<p>Submitted to DEQ in July 2019 and put on CNU stormwater website. University staff will maintain map and continue to update as necessary.</p>	<p>Evaluate on an annual basis, by October 1 of each year, and update as necessary.</p>



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 3 – Illicit Discharge Detection and Elimination

3.6 – Illicit Discharge Detection Tracking and Reporting	Develop a procedure and format for tracking training efforts, inspections, and other activities related to the IDDE program. As part of the IDDE program, CNU will document any illicit discharges that are detected.	Implementation of the procedure and format for tracking training efforts, inspections, and other activities related to the IDDE program. Documentation of any illicit discharges that are detected on an annual basis.	A standard operating procedure (SOP) for stormwater outfall screening and a standard outfall reconnaissance inventory and sample collection field sheet to be used when staff is conducting illicit discharge inspections of storm drainage system outfalls. Copies of the SOP and field sheet are provided in Appendix C.	Illicit discharge detection tracking and reporting will be an ongoing activity. There were no illicit discharge complaints reported for PY1.
3.7 – Outfall Inspections	Inspect each MS4 outfall on an annual basis. Outfall inspections will be documented and kept as part of the MS4 documentation.	Inspect each MS4 outfall on an annual basis. Maintain records of outfalls that were inspected.	Inspect all outfalls annually using standard operating procedure. Outfalls 1 and 2 were inspected on 4/12/2019.	MS4 outfalls will continue to be inspected on an annual basis.
3.8 – Pollution Prevention Materials	CNU will prepare and distribute educational materials about the impacts of stormwater discharges on water bodies.	Prepare and distribute educational materials regarding pollution prevention to faculty, staff, and students.	Pollution prevention educational materials have been distributed annually. CNU Grounds Department staff hosted a table providing stormwater education materials at the Garden Symposium held at CNU on 3/30/2019. The CNU Sustainability (@sustainCNU) Facebook account posted monthly information on stormwater issues under the hashtag #stormwaterMonday.	Distribution of pollution prevention materials will be an ongoing activity. Materials will be distributed annually.
3.9 – Pollution Prevention Training	CNU will conduct biennial training to applicable staff on pollution prevention.	Conduct biennial training to applicable staff on pollution prevention/good housekeeping SOPs and IDDE. Documentation of each training event including the training date, number of employees attending the training, and the objective of each training event.	CNU updated departmental training for Pollution Prevention /Good Housekeeping, and IDDE using PowerPoint in PY1. Training was conducted on 6/20/18 and 6/21/18. Training is biennial and will be conducted in PY2.	Pollution prevention training will be a biennial and ongoing activity.



Minimum Control Measure No. 4 – Construction Site Stormwater Runoff Control

5.0 MINIMUM CONTROL MEASURE NO. 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Any construction activities that take place on the CNU campus are regulated by the Virginia Stormwater Management Act and Virginia Stormwater Management Program (VSMP) Regulation (9VAC25-870). In addition, all projects must obtain a CGP if the area of disturbance is equal to or greater than one acre or less than one acre that is part of a larger common plan of development or sale. Therefore, this MCM includes provisions to verify that all construction activities are in compliance with these regulations and permits.

CNU developed and submitted annual standards and specifications (AS&S) to DEQ and were approved by DEQ in a letter dated July 6, 2017. The University Architect's office maintains copies of permit authorization letters for all construction projects, reviews each project's Stormwater Pollution Prevention Plan (SWPPP), and reviews copies of all contractors' inspection reports on a quarterly basis to track compliance with the SWPPP.

Because the University has approved Annual Standards and Specifications (AS&S), they no longer have the need to rely on the city of Newport News for permit support or plan review. CNU contracts a DEQ-certified inspector for the purposes of providing enhanced training and oversight for the University's qualified personnel performing routine operator SWPPP inspections. The ESC Inspector performs regular inspections of on campus active construction projects with CGP coverage and documents inspection findings in regular inspection reports. CNU audits the compliance of the contractors on campus by reviewing the inspection documentation, revisions to the SWPPP, and overall site compliance on a quarterly basis.

The contractor for each construction project is required to inspect the project in accordance with the inspection frequency specified in the CGP. CNU audits the compliance of the contractor by reviewing the inspection documentation, revisions to the SWPPP, and overall site compliance quarterly. For PY1, six (6) compliance inspections were conducted by DEQ-certified personnel for active construction projects. No enforcement actions were necessary in 2018-2019.

CNU implements this MCM through the BMPs provided below. Information concerning each BMP including a detailed description, measurable goals, and implementation dates is provided in Table 4. Additional construction site stormwater runoff control information is provided in Appendix D.

- Annual Standards and Specifications
- Project Inspections
- Erosion and Sediment Control (ESC) Contract Provisions
- Construction Site Runoff
- Construction Signage
- Land Disturbing Activities Tracking



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 4 – Construction Site Stormwater Runoff Control

Table 4 MCM No. 4 – Construction Site Stormwater Runoff Control

BMP	Description	Measurable Goal	BMP Status	Future Activities
4.1 – Annual Standards and Specifications	As a state entity, CNU developed annual standards and specifications (AS&S). They were approved by VA DEQ in a letter dated 7/6/17.	Develop and implement annual standards and specifications.	Compliance with annual standards and specifications (AS&S) is mandatory for all phases of all construction projects on campus.	Continue current program, comply with approved annual standards and specifications (AS&S).
4.2 – Project Inspections	The contractor for each construction project is required to inspect the project in accordance with the inspection frequency specified in the CGP. CNU audits the compliance of the contractor by reviewing the inspection documentation, revisions to the SWPPP, and overall site compliance.	Review copies of all contractors' inspection reports and all DEQ-certified inspector's reports. Review each project's Stormwater Pollution Prevention Plan (SWPPP) on a quarterly basis to track compliance with the SWPPP.	Reviewing copies of inspection reports is an ongoing activity; Review of each project's SWPPP on a quarterly basis.	Continue current program, evaluate annually. Records maintained by the University Architect's office.
4.3 – ESC Contract Provisions	Require that for all contracts for construction projects with land-disturbing activities meeting the requirements in the MS4 permit and CGP, the primary contractor must obtain a CGP, and must also carry out all the provisions required of the Construction Site Operator. Keep copies of permit notice of coverage letters for all construction projects and review each project's Stormwater Pollution Prevention Plan (SWPPP) to ensure adequacy of the SWPPP.	Maintain copies of permit notice of coverage letters for all construction projects and review each project's Stormwater Pollution Prevention Plan (SWPPP) on a quarterly basis to track compliance with the SWPPP.	Maintaining copies of permit notice of coverage letters is an ongoing activity; Review of each project's SWPPP on a quarterly basis.	Continue current program, evaluate annually. Records maintained by the University Architect's office.



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Minimum Control Measure No. 4 – Construction Site Stormwater Runoff Control

<p>4.4 – Construction Site Runoff</p>	<p>Construction site runoff was identified as one of the three high-priority water quality issues at CNU. CNU will conduct biennial training for contractors on construction site runoff pollution prevention.</p>	<p>Conduct biennial training to contractors on construction site runoff pollution prevention. Document each training event including the training date, number of people attending the training, and the objective of each training event.</p>	<p>Training logs show that five people or over 80% of the target audience (site contractors, CNU representatives, and general contractors' project managers) were trained with educational information presented by DEQ-certified personnel.</p>	<p>training is planned again for any new contractors and those who did not receive training during 2018-2019. Construction site runoff pollution prevention training will be an ongoing activity, as needed based on active construction projects, for contractors associated with all new regulated land disturbing activities on campus.</p>
<p>4.5 – Construction Signage</p>	<p>Have a sign to be placed on construction site fencing at all on-campus construction projects explaining the importance of proper erosion and sediment control practices and its connection to stormwater quality.</p>	<p>Install educational sign on fencing at all on-campus construction projects. Inspect and replace any missing or damaged signs as needed.</p>	<p>Signs were installed on 3/08/2019 on the fencing surrounding the Fine Arts Center construction site.</p>	<p>Installation of educational signage at new on-campus construction projects will be an ongoing activity. Any missing or damaged signs observed will be replaced.</p>
<p>4.6 – Land Disturbing Activities Tracking</p>	<p>Track regulated land-disturbing activities on campus and submit the number of regulated land-disturbing activities and the total disturbed acreage associated with each. Keep this information on file as part of the MS4 documentation and include as part of the MS4 Annual Report.</p>	<p>Track the number of regulated land-disturbing activities on campus and report the total disturbed acreage.</p>	<p>Updated annually. Regulated land-disturbing activities for PY1 are listed in Appendix D of this annual report.</p>	<p>Continue current program, evaluate annually.</p>



Minimum Control Measure No. 5 – Post-Construction Stormwater Management

6.0 MINIMUM CONTROL MEASURE NO. 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT

All known permanent stormwater management facilities that are operator owned and within the MS4 boundary are inspected by CNU personnel on an annual basis. Inspections are performed based on the *Written Procedures for the Inspection of Operator Owned Stormwater Management Facilities* prepared by CNU during the 2014-2015 reporting year. Copies of the inspection reports are kept on file as part of the MS4 documentation. Records of past BMP inspections are maintained as part of the MS4 program and the inspection program will be continued and evaluated annually. CNU will perform maintenance of permanent stormwater management facilities, if needed, based on the results of the BMP inspections. Any necessary maintenance performed will be documented and included as part of the annual report.

Inspection reports to be used for inspections of permanent stormwater management facilities are the DEQ example post-construction BMP inspection checklists from the DEQ Inspector stormwater management training course and materials provided on the DEQ website at the link below.

<http://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CNU will continue to update the electronic spreadsheet with any new or newly discovered BMP, or any BMP that meets a local or Chesapeake Bay TMDL requirement. Also, CNU will add new BMPs to the VA Construction General Permit database to report each facility installed for which a VPDES permit is obtained and will also add new BMPs to the DEQ BMP Warehouse as needed.

There were no new BMPs to report in the 2018-2019 permit year.

CNU implements this MCM through the BMPs provided below. Information concerning each BMP including a detailed description, measurable goals, and implementation dates is provided in Table 5. The MCM Summary Table in Appendix B provides the responsible party and key personnel for each MCM and BMP identified in the approved MS4 Program Plan. Additional post-construction stormwater management information is provided in Appendix E.

- ESC Contract Provisions
- Implement Annual Standards and Specifications
- BMP Inspections
- BMP Tracking
- BMP Maintenance



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 5 – Post-Construction Stormwater Management

Table 5 MCM No. 5 – Post-Construction Stormwater Management

BMP	Description	Measurable Goal	BMP Status	Future Activities
5.1 – CNU Stormwater Study	Develop and maintain an updated storm sewer system map and outfall table. CNU developed a Stormwater Quality and Quantity Study in 2002 which was revised in 2008, 2011, and 2019.	Storm sewer system map and outfall table. Review CNU Stormwater Plan and update any necessary information based on changes to the campus and/or stormwater conveyance system as needed.	Review and update as needed. Information from the stormwater study is provided in Appendix E.	The stormwater study will continue to be reviewed and updated as needed based on changes to the university's stormwater conveyance system and based on permit requirements.
5.2 – ESC Contract Provisions	Require that for all contracts for construction projects with land-disturbing activities meeting the requirements in the MS4 permit and CGP, the primary contractor must obtain a CGP, and must also carry out all the provisions required of the Construction Site Operator. Keep copies of permit notice of coverage letters for all construction projects and review each project's Stormwater Pollution Prevention Plan (SWPPP) to ensure adequacy of the SWPPP.	Maintain copies of permit notice of coverage letters for all construction projects and review each project's Stormwater Pollution Prevention Plan (SWPPP) on a quarterly basis to track compliance with the SWPPP.	Maintaining copies of permit notice of coverage letters is an ongoing activity; Review of each project's SWPPP on a quarterly basis.	Continue current program, evaluate annually. Records maintained by the University Architect's office.
5.3 – Annual Standards and Specifications	As a state entity, CNU developed annual standards and specifications (AS&S). They were approved by VA DEQ in a letter dated 7/6/17.	Develop and implement annual standards and specifications.	Compliance with annual standards and specifications (AS&S) is mandatory for all phases of all construction projects on campus.	Continue current program, comply with approved annual standards and specifications (AS&S).
5.4 – BMP Inspections	Inspect all known permanent stormwater management facilities on an annual basis. Keep copies of inspection reports on file as part of the MS4 documentation.	Continue CNU BMP inspection program. Maintain records of BMPs that were inspected.	BMPs were inspected on 4/12/2019.	Continue current program, evaluate annually.



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 5 – Post-Construction Stormwater Management

<p>5.5 – BMP Tracking</p>	<p>Track all known permanent stormwater management facilities in an electronic format annually including:</p> <ul style="list-style-type: none"> • Install date • Type of facility • Latitude and longitude • Geographic location (6th order HUC) • Acres treated inc. total, pervious, and impervious • Whether part of Ches Bay/local TMDL AP • The date of most recent inspection 	<p>Track all known permanent stormwater management facilities on an annual basis.</p>	<p>Continue current program, evaluate annually.</p>	<p>Continue current program, evaluate annually.</p>
<p>5.6 – BMP Maintenance</p>	<p>Properly maintain all structural BMPs on the CNU campus and/or operated by CNU in accordance with good engineering practices and, where applicable, manufacturer specifications. Maintenance of permanent stormwater management facilities will be performed, if needed, based on the results of BMP inspections performed as part of this MS4 Program Plan.</p>	<p>Continue CNU BMP maintenance program as needed based on results of annual BMP inspections. Maintain records of BMP maintenance activities.</p>	<p>Ongoing. BMP maintenance as needed based on annual BMP inspections. Last maintenance was performed at the Outfall 1 channel on 6/25/18.</p>	<p>Continue current program, evaluate annually. Any necessary maintenance performed on permanent stormwater management facilities will be documented and included as part of the MS4 Annual Report.</p>



Minimum Control Measure No. 6 – Pollution Prevention/Good Housekeeping

7.0 MINIMUM CONTROL MEASURE NO. 6 – POLLUTION PREVENTION/GOOD HOUSEKEEPING

MCM 6 provides for a comprehensive pollution prevention and good housekeeping program. The ultimate goal of pollution prevention/good housekeeping is to prevent or reduce pollutant runoff from campus operations. This measure includes both training and awareness of stormwater impacts to receiving water quality as well as on-campus activities which both prevent and reduce pollutant runoff to the MS4.

This MCM includes a requirement for the development and implementation of written procedures designed to minimize or prevent pollutant discharge from: (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers. These written procedures were required to be completed within 24 months after permit coverage. CNU has developed Standard Operating Procedures (SOPs) for various activities with the potential to impact water quality. The SOPs include the following:

- Equipment maintenance and washing
- Outdoor special events and festivals
- Kitchen waste: fats, oils, and greases (FOG) transfer, storage, and disposal
- Equipment fueling activities
- Landscape maintenance
- Liquid materials loading, unloading, and storage
- Trash & recycling handling, storage, transfer, and disposal
- Parking lot, streets, and roads maintenance
- Pressure washing and exterior surface cleaning
- Spill prevention, control, clean up and reporting

The following webpage contains a link to CNU's SOPs. The site-specific SOPs are also included in departmental training where applicable.

<http://cnu.edu/public/stormwater/>

CNU identified the Grounds (includes Athletics Department staff) and Plant Operations Departments as well as the dumpster refuse area as being high-priority facilities. CNU published and posted on the website the SWPPPs for high-priority facilities. A link to the SWPPPs is provided at the website below.

<http://cnu.edu/public/stormwater/>

This MCM includes a requirement to implement turf and landscape nutrient management plans developed by a certified turf and landscape nutrient management planner on all lands owned or operated by the MS4 operator where nutrients are applied to a contiguous area greater than one acre. The university takes pride in a clean and green campus but also works to not over-apply nutrients and diligently follows the approved Nutrient Management Plans (NMPs) for the campus.



CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR JULY 1, 2018 – JUNE 30, 2019

Minimum Control Measure No. 6 – Pollution Prevention/Good Housekeeping

There are two separate NMPs that cover the CNU campus, one for the main campus grounds/turf and a separate one for the athletics fields/turf.

- The current NMP for the main campus is effective until June 4, 2021 and covers an area of 48 acres.
- The athletics NMP covers an area of 13.73 acres and is effective until February 6, 2021.

The CNU Grounds Department will continue to operate using the approved NMPs and will continue to evaluate/update the NMPs once every three years, as needed. The NMPs will be reviewed/updated again in 2021 and re-submitted to DCR for review and approval.

The CNU Grounds Department currently has two (2) Certified Fertilizer Applicators, and two (2) Certified Nutrient Management Planners through the Virginia Department of Agriculture and Consumer Services (VDACS). In this permit year, the University's turfgrass technician attended the 3-day training course (Virginia Turfgrass Short Course) sponsored by the Virginia Turfgrass Council.

Nutrient training was not conducted in 2018-2019 as the training is planned to be biennial, and pollution prevention training was held in the last permit year. Continued training and awareness by the Grounds Department will ensure that nutrients are managed on campus in such a way as they will not contribute to water quality issues.

CNU continues to perform maintenance by cleaning a portion of the campus stormwater infrastructure (catch basins, storm drain pipes) on an annual basis. Street sweeping of campus roads and parking lots was performed by Hy-Tech Services on May 6-7, 2019. Ziegler Plumbing was contracted to clean selected storm drain pipes on campus, and it was completed on July 3, 2018.

CNU implements this MCM through the BMPs provided below. Information concerning each BMP including a detailed description, measurable goals, and implementation is provided in Table 6. Additional post-construction stormwater management information is provided in Appendix F.

- Pollution Prevention Training
- High Priority facility SWPPP Implementation
- Illicit Discharge Detection Tracking and Reporting
- Nutrient Management Plan
- Nutrient Management Training
- Annual Standards and Specifications (AS&S)
- Underground Infrastructure Cleaning
- Street Sweeping
- Storm Drain Medallions
- Daily Good Housekeeping Standard Operating Procedures (SOPs)



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 6 – Pollution Prevention/Good Housekeeping

Table 6 MCM No. 6 – Pollution Prevention/Good Housekeeping

BMP	Description	Measurable Goal	BMP Status	Future Activities
6.1 – Pollution Prevention Training	CNU will conduct biennial training to applicable staff on pollution prevention.	Conduct biennial training to applicable staff on pollution prevention/Good housekeeping SOPs and IDDE. Documentation of each training event including the training date, number of employees attending the training, and the objective of each training event.	CNU updated departmental training for Pollution Prevention /Good Housekeeping, and IDDE using PowerPoint in PY1. Training was conducted on 6/20/18 and 6/21/18. Training is biennial and will be conducted in PY2.	Pollution prevention training will be biennial and an ongoing activity.
6.2 - High priority facility SWPPP Implementation	Continue to implement stormwater pollution prevention plans for high-priority facilities.	Conduct an annual comprehensive site compliance evaluation.	Ongoing; Annually. Conduct evaluation of high priority facilities and ensure they are following proper good housekeeping procedures. Re-evaluate facilities annually to be sure they are the highest priority on campus.	Evaluations planned for summer 2019.
6.3 – Illicit Discharge Detection Tracking and Reporting	Develop a procedure and format for tracking training efforts, inspections, and other activities related to the IDDE program. As part of the IDDE program, CNU will document any illicit discharges that are detected.	Implementation of the procedure and format for tracking training efforts, inspections, and other activities related to the IDDE program. Documentation of any illicit discharges that are detected on an annual basis.	A standard operating procedure (SOP) for stormwater outfall screening and a standard outfall reconnaissance inventory and sample collection field sheet to be used when staff is conducting illicit discharge inspections of storm drainage system outfalls. Copies of the SOP and field sheet are provided in Appendix F.	Illicit discharge detection tracking and reporting will be an ongoing activity. There were no illicit discharges reported for PY1.



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 6 – Pollution Prevention/Good Housekeeping

6.4 – Nutrient Management Plan	There are two separate approved NMPs that cover the CNU campus. The CNU grounds and athletics departments currently operate using approved NMPs and will continue to evaluate/update the NMPs once every three years and provide any updates, as needed.	Continue operating under approved NMPs for the CNU campus. Review the NMP and update any necessary information.	CNU main campus NMP approved and valid until 6/4/2021; CNU athletics NMP approved and valid until 2/6/2021. Review once every three years and update as needed.	The CNU grounds and athletics departments will continue to operate using the approved NMPs. The NMPs will be reviewed/updated again in 2021 and re-submitted to DCR for approval.
1.9 – Nutrient Management Training	Nutrient management was identified as one of the three high-priority water quality issues at CNU.	Train CNU Grounds Department staff as certified fertilizer applicators and/or Nutrient management Planners to ensure that nutrients are only applied in accordance with CNU's approved Nutrient Management Plans.	Continue to train Grounds Department staff and document training (names, date, etc.) regarding nutrient management. This year, the University's turfgrass technician attended the 3-day training course (Virginia Turfgrass Short Course) sponsored by the Virginia Turfgrass Council.	This is an ongoing program with biennial training. In addition to any in-house training, staff are sent to training courses.
6.6 – Annual Standards and Specifications	As a state entity, CNU developed annual standards and specifications (AS&S). They were approved by VA DEQ in a letter dated 7/6/17.	Develop and implement annual standards and specifications.	Compliance with annual standards and specifications (AS&S) is mandatory for all phases of all construction projects on campus.	Continue current program, comply with approved annual standards and specifications (AS&S).
6.7 – Underground Infrastructure Cleaning	Perform maintenance by cleaning a portion of the campus stormwater infrastructure (catch basins, storm drain pipes) on an annual basis.	Continue CNU underground infrastructure maintenance program.	Ongoing; Annually; Ziegler Plumbing was contracted to clean selected storm drain pipes on campus on 7/3/18.	Continue current program, evaluate annually.



**CHRISTOPHER NEWPORT UNIVERSITY – MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) ANNUAL REPORT – REPORTING YEAR
JULY 1, 2018 – JUNE 30, 2019**

Minimum Control Measure No. 6 – Pollution Prevention/Good Housekeeping

6.8 – Street Sweeping	Continue the ongoing street sweeping program. Vacuum sweep selected campus roads and parking lots on an annual basis. Document the quantity of material collected on an annual basis.	Continue CNU street sweeping program. Record the amount of material that is removed annually.	Ongoing; Selected campus roads and parking lots are vacuum swept on an annual basis. Street sweeping of campus roads and parking lots was performed by Hy-Tech Services on May 6-7, 2019. CNU Grounds personnel also blow debris from roads and parking lot areas onto turf areas to be mulched or picked up with turf maintenance activities on a regular basis.	Continue current program, evaluate annually. Debris removal from roads and parking lots is an ongoing activity.
6.9 – Storm Drain Medallions	Install storm drain medallions on all campus storm drain inlets to help remind the CNU community about stormwater pollution. The medallions read, "No dumping, Drains to Waterway"	Install storm drain medallions on all campus storm drain inlets. Evaluate storm drain medallions annually. Replace any missing or damaged medallions annually.	During this permit year, no new medallions were necessary, and no medallions needed replacement.	Monitoring of the storm drain medallions is an ongoing activity. Any missing or damaged medallions will be replaced. New medallions will be installed on newly constructed campus storm drains.
6.10 – Daily Good Housekeeping Standard Operating Procedures (SOPs)	Develop and implement written procedures designed to minimize or prevent pollutant discharge from: (i) daily operations such as road, street, and parking lot maintenance; (ii) equipment maintenance; and (iii) the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers.	Complete and implement written good housekeeping procedures. Train staff biennially and in new staff orientation.	Daily good housekeeping written procedures were developed and were incorporated in staff training regarding pollution prevention. SOPs are available on the campus stormwater website.	Continue to include written procedures in pollution prevention training; update as needed.



Chesapeake BAY TMDL ACTION PLAN IMPLEMENTATION

8.0 CHESAPEAKE BAY TMDL ACTION PLAN IMPLEMENTATION

There are currently no wasteload allocations assigned to the University from any approved local TMDL reports so there is no anticipated TMDL Action Plan for CNU for special conditions other than the Chesapeake Bay TMDL. The Chesapeake Bay TMDL Action Plan was developed by Koontz-Bryant and was submitted under separate cover to the DEQ following the 2014-2015 reporting year. A draft second phase Chesapeake Bay TMDL Action Plan was submitted by CNU to the DEQ on June 1, 2018 as part of the permit reapplication package as required by the Virginia General Permit.

The phosphorus reduction goals for the first permit cycle have been met by the installation of a level 1 bioretention BMP in Parking Lot A. This project resulted in a pollutant reduction of 1.44 lb/yr. The University is now working towards its 2023 goals of 9.43 lb/yr reductions. Table 7 depicts the phosphorus removal goals for all three permit cycles, through 2028.

Table 7: TMDL Phosphorus Reduction Requirement (lb/yr)

End of Permit Cycle	Campus Area (ac)	Acquired Area (ac)	Impervious Area (ac)	First Permit Cycle Reduction Goal (lbs.)	Second Permit Cycle Reduction Goal (lbs.)	Third Permit Cycle Reduction Goal (lbs.)	Total TMDL Reduction (lbs)
2009 (1)	141.87	0	62.14	1.02	7.14	12.23	20.39
2018 (2)	147.24	5.37	71.59	1.15	8.02	13.74	22.90
2018 (3)	158.17	10.93	76.90	1.23	8.61	14.76	24.60
Lake Maury (4)				0.07	0.51	0.88	1.46
2018 Total	158.17	16.30	76.90	1.30	9.12	15.64	26.06
Acquired Property (5)	3.75	3.75	2.65	-	0.31	0.48	0.79
2023/2028 Total	161.92	3.75	79.55	1.30	9.43	16.02	26.85

Keeping in mind pollutant reduction goals, all new construction projects planned in this permit year took steps to find solutions to preserve water quality on and around campus. The Captains Turf Field Replacement project included designs for a new level 1 bioretention which will be providing pollutant removal of 1.92 lb/yr. The Fine Arts Center project replaces Parking Lot B and results in an increase in impervious cover, but 1.74 lbs/yr of offsite credits were purchased for this project. Documentation showing the credit acquisition will be included in the annual report for Permit Year 2, as the project commences at the start of PY2. The C2 Parking project included the installation of a Stormkeeper Sediment Strip which will remove 0.85 lb/yr.

Aside from BMPs to offsite new development/redevelopment, an important aspect of the TMDL action plan implementation is an updated campus-wide master stormwater study that the university invested in in this permit year, in order to effectively plan out the next steps in CNU's pollutant reduction goals. An updated action plan will be provided to VADEQ within twelve months of this permit coverage as directed by the 2018-2023 permit.



CNU MS4 ANNUAL REPORT APPENDICES

Reporting Year July 1, 2018 – June 30, 2019

Appendix A MINIMUM CONTROL MEASURE ONE (MCM1) INFORMATION

CNU Stormwater Website (BMP 1.2, 3.3)

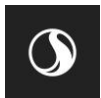
Construction Site Signage (BMP 1.6, 4.5)

Social Media (BMP 1.8, 3.8)

Outreach Items (BMP 1.3)

Other Places for Information on MCM1:

- Public Outreach- Garden Symposium (BMP 1.3, 2.3) in Appendix B
- Contractor Training Records (BMP 1.7, 4.4)



Public Information

Home / Public Information / Stormwater Management

Public Information

University Policies

Campus Safety

Student Achievement

Freedom of Information Act

Free Speech and Expression

Stormwater Management

Privacy Policy

Institutional Research
Analysis and Reports

Stormwater Management

VISIT

In managing the Christopher Newport campus grounds, we strive to be good environmental stewards. We work closely with the Virginia Department of Environmental Quality (DEQ) to ensure our efforts are up to current standards and practices.

If you have any questions, please contact the Grounds Department at (757) 594-8700 or grounds@cnu.edu.

PROGRAM PLAN

The stormwater management program plan is based on six minimum control measures as required by the Virginia General Permit. These goals and objectives were developed to reduce the discharge of pollutants from the university's Municipal Separate Storm Sewer System (MS4) to the maximum extent practicable, protect water quality, ensure compliance with water quality standards, and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations.

MS4 GENERAL PERMIT

The General Virginia Pollutant Discharge Elimination System Permit for Discharges of Stormwater from Small MS4s requires Christopher Newport to develop and implement a comprehensive stormwater management program consistent with the Virginia General Permit.

The University re-registered for continuation of coverage on June 1, 2018 (permit number VAR040090). The new general permit is valid until October 31, 2023.

ANNUAL REPORT

The MS4 Annual Report serves to convey the required information and detail the status of compliance with all permit conditions, as well as the appropriateness of best management practices identified in the MS4 Program Plan toward achieving measurable goals for each minimum control measure.

POLLUTION PREVENTION AND CONTROL

Pollution prevention is any practice that reduces, eliminates or prevents pollution at its source. Reducing the amount of pollution produced means less waste to control, treat or dispose. Less pollution also means fewer hazards are posed to public health and the environment.

Under our permit, we must develop, implement and enforce a program that includes the following six minimum control measures:

1. Public education and outreach
2. Public involvement and participation
3. Illicit discharge detection and elimination
4. Construction site stormwater runoff control
5. Post-construction stormwater management
6. Pollution prevention/good housekeeping

These control measures are designed and implemented to control the discharge of pollutants from our storm sewer system to the maximum extent practicable in a manner that protects the water quality in nearby streams, rivers, wetlands and bays.

Illicit Discharge Detection and Elimination (IDDE)

The IDDE policy and program provide for the protection of the environment at CNU and the surrounding areas.

An illicit discharge is the discharge of any substance into a storm sewer system* that is not stormwater. Some examples of these substances include:

- Wastewater
- Concrete washout
- Cleaning supplies
- Construction waste (e.g., debris, sludge)
- Vehicle washing
- Paint

RELATED DOCUMENTS

[MS4 Program Plan](#)

[MS4 Permit 2018-2023](#)

[MS4 Annual Report](#)

[IDDE Plan and Policy](#)

[CNU Stormwater Pollution Prevention Plan \(SWPPP\)](#)

[Stormwater discharges at the campus](#)

[Standard Operating Procedures \(SOPs\)](#)

[CNU Stormwater Pollution Prevention Training](#)

[Construction Site Signage](#)



The following do not constitute an illicit discharge:

- Discharges or flows from firefighting activities
- Landscape irrigation and lawn watering
- Foundation/footing drains
- Water line flushing
- Discharges from potable (drinkable) water sources
- Street wash water
- Air conditioning condensation

*Storm sewers are designed to carry stormwater and runoff. Storm sewers are not treated and lead directly into our natural environment. Substances that are not stormwater should never be released into the storm sewer system. The University's storm sewer inlets are marked with a "No Dumping – Drains to Bay" medallion.



If you witness an illicit discharge, you can report it to the Grounds Department by calling (757) 594-8700 or University Police at (757) 594-7777.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

As part of our MS4 program the University maintains a Stormwater Pollution Prevention Plan (SWPPP)

An SWPPP is designed to reduce the impact of stormwater runoff on receiving water bodies to the maximum extent practicable and to meet water quality standards, and identifies the following:

- Stormwater pollution prevention team
- Stormwater discharges at the campus
- Actual and potential sources of stormwater contamination
- Structural and non-structural best management practices
- Good housekeeping practices
- Standard operating procedures for activities with the potential to impact water quality

Stormwater Pollution Prevention Training SWPPP training is available to all members of the campus community. We provide training to all employees whose job duties may include activities with the potential to contribute to stormwater pollution.

Public Education and Outreach

Description	PDF
Only Rain Down the Drain A reminder about water pollution with an emergency call list on the back.	
Be a Solution to Water Pollution An informational flier about water pollution.	
Guidelines for Charity Car Wash Fund Raisers Car washes to raise funds for charities, schools activities or community groups often occur in densely populated urban areas. Car-washing activities can affect water quality if not properly managed. Wash water from these activities may flow into surface waters or into a storm drain.	
CNU Garden Symposium The Grounds Department provides an educational stormwater table at the annual Garden Symposium. We provide advice and literature related to rain gardens, stormwater runoff, urban nutrient management and environmentally friendly landscaping.	

Construction Sites

Construction projects that disturb more than one acre are required to obtain a Virginia Stormwater Management Program construction permit from the Virginia Department Environmental Quality.



1 Avenue of the Arts
Newport News, VA 23606
(757) 594-7000

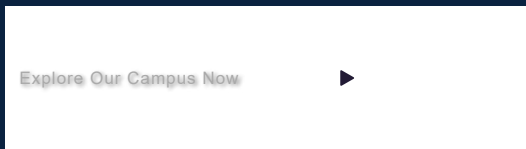


Resources

- Jobs at CNU
- Academic Calendar
- Map & Directions
- Public Information
- Student Consumer Information

Services

- Tribble Library
- Request Admission Information
- Campus Safety
- Title IX and Equal Opportunity
- Emergency Alerts



CONSTRUCTION SITE STORMWATER RUNOFF – PROTECTING WATER QUALITY

Construction projects that disturb more than one acre are required to obtain a Virginia Stormwater Management Program (VSMP) permit from the Virginia Department of Conservation and Recreation (DCR). As part of the permit requirements, a Stormwater Pollution Prevention Plan (SWPPP) must be developed for the project. The SWPPP must identify practices that will help to reduce erosion, minimize sediment loss from the construction site, and address pollution prevention.

- Construction sites without proper erosion and sediment controls can contribute large amounts of sediment and other pollutants to downstream waterways.
- Good housekeeping measures include:
 - Storing waste materials in proper containers;
 - Properly disposing of all waste materials;
 - Preventing spills by tightly sealing containers; and,
 - Storing materials with the potential for contaminating runoff during storm events in watertight containers or under cover so they are not exposed to precipitation.
 - Establish vehicle and equipment parking areas away from waterways and storm drain inlets.
 - Conduct fueling, major maintenance and washing off-site whenever feasible.
- Effective erosion and sediment controls require proper installation and maintenance.
- Concrete trucks should only wash out or discharge surplus concrete or drum wash water at approved locations in accordance with State and local regulations.
- Construction sites should be inspected every seven calendar days or every fourteen calendar days and within 48 hours following any runoff producing storm event. Inspections should include all areas of the site disturbed by construction activity and areas used for storage of materials.

Erosion and sediment controls in combination with pollution prevention and “good housekeeping measures” can reduce the amount of pollution leaving construction

Erosion and Sediment Controls

Properly installed and maintained erosion and sediment control practices help to reduce pollution loading from construction sites.



Construction Entrance



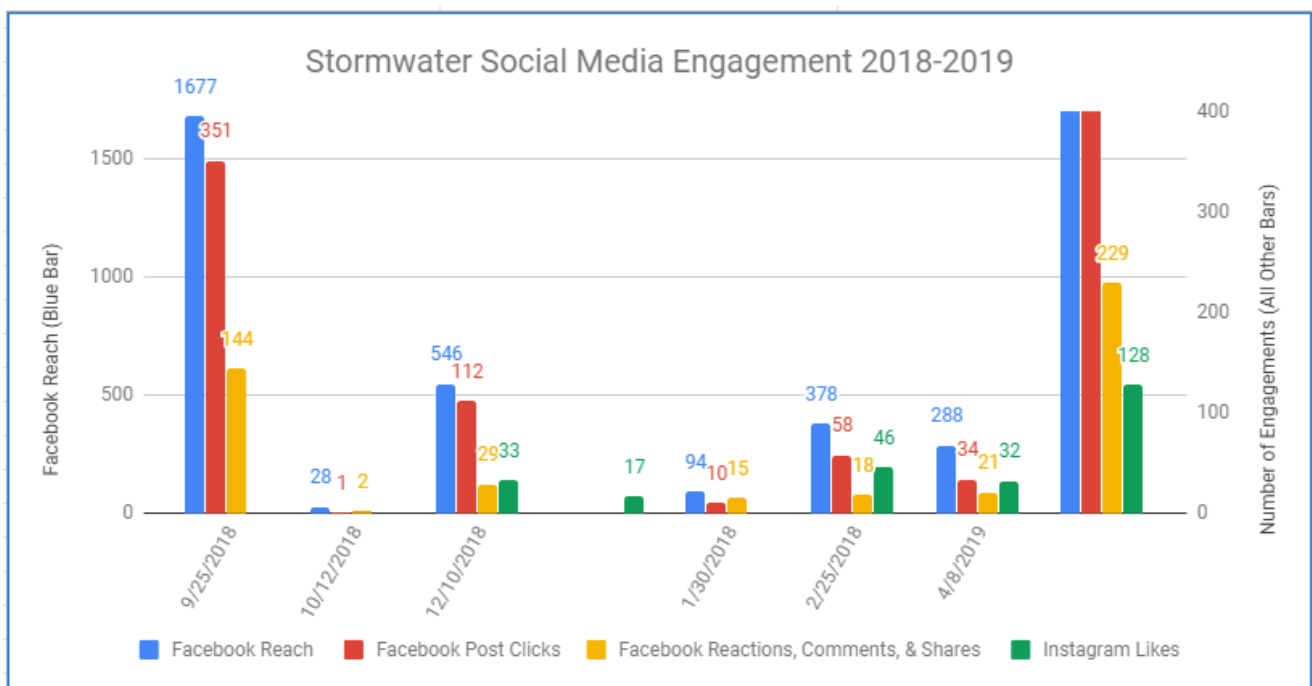
Inlet Protection



Silt Fence

**Stormwater Social Media Posts
Permit Year 1**

Social Media Topic	Facebook Post Date	Reach	Number of Reactions
Planting Native Plants	6/14/2019	NA	5
Biodegradable Confetti	6/6/2019	NA	6
PCBs in surface water	5/17/2019	NA	1
Beach Trash	5/28/2019	NA	6
Planting Native Plants	5/8/2019	NA	8
Beach Use/Cleanup Responsibility	4/8/2019	288	11
Beach Cleanup	3/21/2019	NA	2
FOG	3/5/2019	NA	3
What is stormwater?	2/25/2019	378	11
Composting/Christmas Tree Disposal	12/10/2018	546	29
Rain Barrel Workshop	10/12/2018	28	3
Pollution Prevention	9/25/2018	1677	144



CNU Pollution Prevention Materials (BMP 3.7, 6.1)

CNU distributed drink coasters with stormwater educational information on them at student outreach events.

Outreach Event	# coasters given out
9/6/2018	15
10/4/2018	10
10/10/2018	10
10/18/2019	5
1/24/2019	10
2/6/2019	10
3/14/2019	20
4/10/2019	5



Side 1



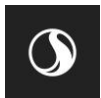
Side 2

Appendix B Minimum Control Measure two (MCM2) Information

Appendix B MINIMUM CONTROL MEASURE TWO (MCM2) INFORMATION

Public Outreach- Garden Symposium (BMP 1.3, 2.3)

Participation and Outreach Events (BMP 2.5)



2019 CNU Garden Symposium

CNU Grounds Department staff hosted a table providing stormwater education materials at the Garden Symposium held at CNU on March 30, 2019. There were approximately 150 attendees at this event.



CNU Outreach and Participation Events 2018-2019

Date	Event	Campus Group	contact/Advertising	Purpose/Audience
8/23/2018	CNU Day of Service	CNU student community	https://www.facebook.com/sustainCNU/	Students removed trash at Lake Maury by canoe and by walking along along the stream channel
9/8/2018	Newport News Go Green Expo	Roots & Shoots	https://thecompass.cnu.edu/event/2733583	This event is for sharing information about sustainability and environmental responsibility with the community.
9/30/2018	Beach Cleanup	CNU Biology club	bioclub@cnu.edu	Biology club and other student volunteers spent the day cleaning up Buckroe Beach.
10/6/2018	Causeys Mill Riparian Buffer Work Day	Roots & Shoots	https://www.rootsandshoots.org/project/causeys-mill-riparian-buffer	Repair of a riparian buffer at Causey's Mill. The volunteers help ensure the safety of Lake Maury by weeding and planting near the shore line, keeping erosion at bay.
3/14/2019	Collaborative Ecosystems Summit	The Office of Sponsored Programs, Organismal and Environmental Biology and the Office for Sustainability	https://www.floodingresiliency.org/event/the-second-collaborative-ecosystems-summit/	Panels include: Science Communication; Collaboration and Action; and, Perspectives from Higher Education
3/16/2019	Mariners Museum Park/Lake Maury clean up	Roots & Shoots/CNU ROTC	https://www.facebook.com/sustainCNU/	Volunteer clean up event
4/7/2019	Beach Cleanup	CNU Biology club	https://www.facebook.com/pg/CNUBioClub/posts/	Biology club and other student volunteers spent the day cleaning up Buckroe Beach.
4/12/2019	Workshop for 3rd graders at Riverside Elementary School	Roots & Shoots	https://www.facebook.com/rootsandshootsCNU/	Teaching resource conservation to 3rd graders at Riverside elementary, in Newport News, VA

Appendix C Minimum Control Measure three (MCM3) Supplemental Information

Appendix C MINIMUM CONTROL MEASURE THREE (MCM3) SUPPLEMENTAL INFORMATION

CNU IDDE Policy (BMP 3.1)

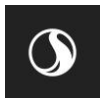
CNU IDDE Standard Procedures (BMP 3.6, 6.3)

Stormwater Master Plan updated study for 2019 – cover page and Table of Contents (BMP 3.2, 5.1)

Dry Weather screening/Outfall Inspections (BMP 3.7)

Other Places for Information on MCM3:

- CNU Stormwater Website (BMP 1.2, 3.3) in Appendix A
- Social Media (BMP 1.8, 3.8) in Appendix A



1. Background

Christopher Newport University (CNU) is the owner and operator of registered small municipal separate storm sewer system (MS4). A Stormwater Quality and Quantity Management Study was developed for the University by Koontz-Bryant in 2002 and revised in 2008. This study contains detailed information on the existing stormwater conveyance system at the University. Based on the stormwater study, the University area encompasses 142.5 acres. The study also provides a map (updated in 2008) showing drainage areas and storm sewer mapping.

2. Purpose of Policy

The purpose of this policy is to provide for the protection of the environment at CNU, and the surrounding areas, through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by federal, state, and local law. This policy establishes MS4 in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process, as implemented through the Virginia Stormwater Management Program (VSMP) permit for CNU. The objectives of this policy are as follows:

- A. To prevent or minimize to the maximum extent practicable, the discharge of pollutants from University properties and operations into the storm drainage system.
- B. To develop, implement and enforce a program to detect and eliminate illicit discharges, as defined by [9VAC25-89-40](#) and [9VAC25-870-10](#), into the regulated small MS4.
- C. To comply with the requirements of CNU's stormwater permit.

3. Definitions

Best Management Practices (BMPs): means schedules of activities, prohibitions of practices, general housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Contractor: means any individual or company, including a subcontractor, hired to perform services on university property.

Hazardous substance: means any substance designated under the Code of Virginia or 40 CFR Part 116 pursuant to § 311 of the CWA.

Illicit discharge: means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a NPDES or VSMP permit (other than the VSMP permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-870-400 D 2 c (3).

Municipal separate storm sewer (MS4): means a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains:

- 1) Owned or operated by a federal, state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction or delegated authority for erosion and sediment control and stormwater management, or a designated and approved management agency under § 208 of the CWA that discharges to surface waters;
- 2) Designed or used for collecting or conveying stormwater;
- 3) That is not a combined sewer; and

4) That is not part of a publicly owned treatment works.

Municipal Separate Storm Sewer System (MS4): means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems or designated under [9VAC25-890-30](#).

Municipal Separate Storm Sewer System Management Program or MS4 Program: means a management program covering the duration of a permit for a municipal separate storm sewer system that includes a comprehensive planning process that involves public participation and intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA and regulations and the Virginia Stormwater Management Act and attendant regulations, using management practices, control techniques, and system, design and engineering methods, and such other provisions that are appropriate.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit: means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC §1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Non-stormwater discharge: means any discharge to the storm drain system that is not composed entirely of stormwater.

Outfall: means, when used in reference to municipal separate storm sewers, a point source at the point where a municipal separate storm sewer discharges to surface waters and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters and are used to convey surface waters.

Point source: means any discernible, confined, and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant: means anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Source: means any building, structure, facility, installation, or activity from which there is or may be a discharge of pollutants.

State waters: means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands (Virginia Code § 62.1-44.3).

Stormwater: means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Wetlands: means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas (Virginia Code § 62.1-44.3).

Visitor: means a person who is not enrolled at, compensated by, or an affiliate of the University.

4. Applicability

This policy is applicable to all students, faculty, staff, contractors, and visitors of the University. This policy shall apply to all water entering the storm drain system generated on any lands owned or operated by the University.

5. Responsibility for Administration.

The University shall administer, implement, and enforce the provisions of this policy.

6. Compatibility with Other Regulations

This policy is not intended to modify or repeal any other policy, ordinance, rule, regulation, or other provision of law. The requirements of this policy are in addition to the requirements of any other policy, ordinance, rule, regulation, or other provision of law, and where any provision of this policy imposes restrictions different from those imposed by any other policy, ordinance, rule, regulation, or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

7. Severability

The provisions of this policy are declared to be severable. If any provision of this policy is held invalid, this determination will not affect the other provisions or application of this policy.

8. Illicit Discharges

No CNU employee, student, visitor, contractor, or department shall cause or allow discharges into the University's storm drainage system which are not composed entirely of stormwater, except for the allowed discharges provided in the Virginia Stormwater Management Program (VSMP) Permit Regulations (9VAC25-870). The spilling, dumping, or disposal of materials other than stormwater to the storm drainage system are strictly prohibited.

Prohibited discharges include, but are not limited to:

- Oil;
- Anti-freeze;
- Grease;
- Chemicals;
- Wash water;
- Paint;
- Animal waste;
- Garbage;
- Litter; and,
- Landscaping debris.

9. Allowed Discharges

The following discharges to the storm drainage system are allowed, as per [9VAC25-870-400 \(D\)\(2\)\(c\)\(3\)](#), as they are considered to be not significant contributors of pollutants to the MS4:

- Discharges that are covered under a separate individual or general VPDES or VSMP permit for non-stormwater discharges.
- Discharges or flows which are not significant contributors of pollutants to the municipal separate storm sewer system:
 - Water line flushing;
 - Landscape irrigation;
 - Diverted stream flows;
 - Uncontaminated groundwater infiltration;
 - Uncontaminated pumped groundwater;
 - Discharges from potable water sources;
 - Foundation drains;
 - Air conditioning condensation;
 - Irrigation water;
 - Springs;
 - Water from crawl space pumps;
 - Footing drains;
 - Lawn watering;
 - Individual residential car washing;
 - Flows from riparian habitats and wetlands;
 - Dechlorinated swimming pool discharges;
 - Street wash water;
 - Discharges or flows from firefighting activities; and,
 - Flows that have been identified in writing by the Department of Environmental Quality as *de minimis* discharges that are not significant sources of pollutants to state waters and not requiring a VPDES permit.

10. Procedures

Inspections

CNU shall, at a minimum, visually inspect all outfalls once per year during dry weather conditions to evaluate the physical condition of the outfalls and to ensure that there no flows present from potential illicit discharges. In the event a flow is observed, or evidence suggests that illicit discharges may exist, further investigation shall be administered by any of the following methods:

1. Tracing discharge up the storm sewer system;
2. Sampling of a discharge for analysis in order to determine if a pollutant is present and to identify the pollutant;
3. Implement BMPs to eliminate illicit discharges;
4. Scheduling of follow up observations; and,
5. Any other appropriate measures deemed necessary.

Flows suspected of containing illicit discharges due to the presence of odors, colors or sheens shall be tested. Test parameters may include but are not limited to ammonia, detergent, chlorine, phosphorus, nitrogen, pH, conductivity, turbidity, temperature, and dissolved oxygen. The results of the inspections and testing shall be maintained in a format to allow tracking of outfall locations,

inspection dates, chemical tests conducted, and follow-up procedures implemented to correct any detected illicit discharge. The physical condition of the outfall shall also be noted during the inspections. Illicit discharge data will be used in the preparation of the annual report to the Virginia Department of Environmental Quality.

Notification of Spills and Illicit Discharges

Once a spill or illicit discharge has been observed, the incident shall be immediately reported to the University MS4 Program Coordinator. In the event the program coordinator is unavailable, any member of the Stormwater Pollution Prevention Team may be notified. Failure to provide notification of the incident shall be a violation of this policy.

The MS4 Program Coordinator, or designee, shall conduct an initial investigation within one business day of receiving notification. The MS4 Program Coordinator shall determine appropriate measures taken in order to prevent further discharge(s) and to begin remediation of pollution.

Tracking

Field surveys and instances of illicit discharges or spills shall be tracked in a database. Data fields to be included shall be:

1. Date discharge observed/reported;
2. Location of discharge;
3. Summary;
 - a. Results of investigation;
 - b. Any follow-up to investigation;
 - c. Resolution of investigation; and,
4. Date investigation closed.

Enforcement and Penalties

Whenever the University finds that a violation of this Policy has occurred, CNU may order compliance by written notice to the responsible party. Such notice may require without limitation:

1. The performance of monitoring, analyses, and reporting;
2. The elimination of prohibited discharges or connections;
3. Cessation of any violating discharges, practices, or operations;
4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property;
5. Payment of any fee, penalty, or fine assessed against Christopher Newport University to cover remediation cost;
6. The implementation of new stormwater management practices; and
7. Disciplinary action up to and including dismissal, where appropriate.

The listed requirements will be at the expense of the responsible party. In the event that adequate measures are not initiated, the University may issue work orders to correct the violation and bill the responsible party for expenses incurred.

11. Training and Education

A training program for Stormwater Pollution Prevention/Good Housekeeping and IDDE is presented to applicable employees upon hire and on an annual basis. Educational materials for Stormwater Pollution Prevention and IDDE are distributed through various forms of media to the members of the University.

MASTER PLAN

Stormwater Management Master Plan

Christopher Newport University



PREPARED FOR



1 Avenue of the Arts
Newport News, VA 23606
757.594.7000

PREPARED BY



4500 Main Street, Suite 400
Virginia Beach, VA 23462
757.490.0132

June 28, 2019

Contents

List of Tables and Appendices	2
Acknowledgements	3
Planning Team	3
List of Abbreviations	4
<hr/>	
Executive Summary	5
<hr/>	
Institutional Background	12
<hr/>	
Existing Conditions	13
• Geotechnical Information	
• Infiltration Information	
• Wetlands Information	
• Chesapeake Bay Preservation Area	
• Tidal Conditions	
• Floodplain	
• Sea Level Rise	
• Major Watersheds/ Outfalls	
<hr/>	
SWM Water Quality Constraints	17
• Regulatory Considerations	
<hr/>	
Methodology	20
<hr/>	
2009 Baseline Condition	21
<hr/>	
2009 to 2018 Existing Condition	21
<hr/>	
2023 Proposed Condition- Under Design	23
<hr/>	
2023 Proposed Condition	24
<hr/>	
2028 Proposed Condition	25
<hr/>	
Stormwater Management Plan	26
• Approach	
• Stormwater Improvement Projects (SIPs)	
• CNU Specific Stormwater Practices	
• Stormwater Conveyance System Overview	
<hr/>	
Recommendations and Conclusions	35
• Maintenance/Repairs	
• Best Management Practices	
• Future Maintenance of the Stormwater Master Plan	
<hr/>	
References	37

List of Tables and Appendices

Table	Description
1	Phase II MS4 - TMDL Reduction Requirement 5
2	Stormwater Improvement Projects Summary 7
3	Capital Improvement Projects Summary 8
4	Operation and Maintenance Cost Summary 11

Appendix	Description
A	Figures – Overall Campus Figure 1: Existing Conditions Figure 2: Proposed Conditions
B	Figures and Calculations - Baseline Condition and TMDL Target
C	Figures and Calculations – Capital Improvement Projects
D	Figures and Calculations – Stormwater Improvement Projects
E	Construction Cost Opinions – Capital Improvement Projects and Stormwater Improvement Projects
F	Long Term Maintenance of Campus Best Management Practices
G	References

Christopher Newport University
Outfall Reconnaissance/Dry Weather Screening
Results 2018 - 2019

Name	Location	Construction Year	Drainage Area	Closed or Open pipe	Inspection Date	Flow Present	Maintenance Needed	Indicators (odor, color, film, etc.)
BMP #1	Lat. 37.059069, Long. -76.489810	2008	Institutional	Closed RCP	4/12/2019	Moderate	None	None
BMP #2	Lat. 37.058908, Long. -76.489148	2005	Institutional	Closed RCP	4/12/2019	Slight	None	None

Appendix D Minimum Control Measure four (MCM4) Supplemental Information

Appendix D MINIMUM CONTROL MEASURE FOUR (MCM4) SUPPLEMENTAL INFORMATION

Annual Standards and Specifications (BMP 4.1, 5.3, 6.6)

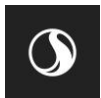
Construction Inspections (BMP 4.2)

Land Disturbing Activities (BMP 4.6)

Contractor Training Records (BMP 1.7, 4.4)

Other Places for Information on MCM4:

- Construction Site Signage (BMP 1.6, 4.5) in Appendix A





COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

July 6, 2017

M. Christine Ledford
Senior Associate Vice President for Administration and Finance
Christopher Newport University
1 University Place
Newport News, VA 23606

Transmitted electronically: christine.ledford@cnu.edu

Subject: Christopher Newport University – Annual Standards and Specification for Erosion & Sediment Control and Stormwater Management

Dear Ms. Ledford:

The Virginia Department of Environmental Quality ("DEQ" or "the Department") hereby approves the Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management for Christopher Newport University dated May 2017.

To ensure compliance with approved specifications, the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act, DEQ staff will conduct random site inspections, respond to complaints, and provide on-site technical assistance with specific erosion and sediment control and stormwater management measures and plan implementation.

Please note that your approved Annual Standards and Specifications include the following requirements:

1. Variance requests must be submitted separately from this Annual Standards and Specifications submission to DEQ. DEQ may require project-specific plans associated with variance requests to be submitted for review and approval.
2. The following information must be submitted to DEQ for each project at least two weeks in advance of the commencement of land-disturbing activities. Notifications shall be sent by email to: hannah.zegler@deq.virginia.gov
 - i: Project name or project number (including any associated CGP permit number);
 - ii: Project location (including nearest intersection, latitude and longitude, access point);
 - iii: On-site project manager name and contact info;
 - iv: Responsible Land Disturber (RLD) name and contact info;
 - v: Project description;

- vi: Acreage of disturbance for project;
- vii: Project start and finish date;
- viii: Any variances/exemptions/waivers associated with this project;

3. Project tracking of all regulated land disturbing activities (LDA) must be submitted to the DEQ on a quarterly basis. Project tracking records shall contain the same information as required in the two week e-notifications for each regulated LDA.

Section 62.1-44.15:55.E of the Virginia Erosion and Sediment Control law and Section 62.1-44.15:31.D of the Virginia Stormwater Management Act authorizes the state to charge fees for costs incurred in implementing the standards and specifications program. Please see the enclosed invoice for Annual Standards and Specifications services.

To ensure an efficient information exchange and response to inquiries, the DEQ Central Office is your primary point of contact. Central Office staff will coordinate with our Regional Office staff as appropriate.

Thank you very much for your submission and continued efforts to conserve and protect Virginia's precious natural resources.

Sincerely,



Jaime L. Bauer
Stormwater Manager,
Office of Water Permits

Cc: Ron W. Etter, Koontz-Bryant, P.C. (retter@koontzbryant.com)
Ben Leach, DEQ-CO
Hannah Zegler, DEQ-CO

Case Decision Information:

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

**CNU Record of Land Disturbing Activities
and Compliance Inspections
2018 - 2019**

Project Name	Total Disturbed Acres	Compliance Inspection Dates	Enforcement Action Necessary
Warwick Parking Lot C1/C2	2.13	12/9/2018	None
		1/4/2019	None
Turf Field Replacement	5.30	5/15/2019	None
		6/20/2019	None
Fine Arts Center	4.00	5/15/2019	None
		6/20/2019	None

Note: These compliance inspections were performed by a contracted VADEQ certified inspector. These inspections are in addition to the on-site SWPPP inspections performed by construction staff regularly and in conjunction with rain events.

CNU Contractor Training

Permit Year 1

Date: 2/18/19

Training: CNU Contractor Training

Company	Name	Title
Whiting-Turner	Brian Barham	PM
Whiting-Turner	Patrick O'Bryen	Superintendent
DEWIS/KOHL BATHURST	MARK MILLUS	CONTRACTOR
WHITING-TURNER	TYLER YATES	APM
Whiting-Turner	Stephen Beckickio	SFE
CNU	Ken Hiatt	Clerk of the Works

CNU Stormwater Pollution Prevention (SWPPP) Training for Contractors

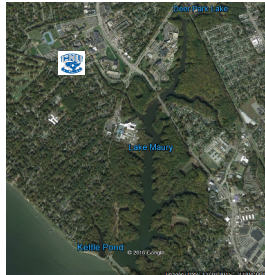
Provided by:
Dean Whitehead
Director of Grounds & Stormwater Coordinator

CHRISTOPHER NEWPORT UNIVERSITY

1

Where does that drain go?

- At CNU, the majority of stormwater flows through underground piping directly to Lake Maury and then to the Bay without any filtration or treatment.



CHRISTOPHER NEWPORT UNIVERSITY

4

Agenda


- Stormwater 101
- Stormwater Pollution Prevention
- Illicit Discharges
- Best Management Practices (BMPs)
- Spill Response

CHRISTOPHER NEWPORT UNIVERSITY

2

Why is it necessary to protect stormwater?

- Pollutants can contaminate the habitats of plants and animals and the local water quality.




CHRISTOPHER NEWPORT UNIVERSITY

5

What is Stormwater?

- Stormwater is rainwater or snowmelt that runs off of rooftops, streets, sidewalks, etc. It can carry oil, grease, trash and other pollutants with it into storm drains.



CHRISTOPHER NEWPORT UNIVERSITY

3

Construction Pollutants in Stormwater

- During construction, stormwater runoff can also pickup and transport construction related waste and other pollutants that can contaminate waterways and property




<https://www.deq.virginia.gov/ConnectWithDEQ/Training/Certification/CourseMaterial/ESCInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

6

Construction Pollutants in Stormwater

- Dirt (soil) erosion
- Fuel storage
- Trash & other debris
- Portable toilets
- Machinery & equipment
 - Metals
 - Oil & grease
- Solvents
- Antifreeze



<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/ESCSInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

7

MS4 Permit Requirements



- CNU implements DEQ approved Annual Standards & Specifications for Erosion & Sediment Control (ESC) and Stormwater (SWM)
- Contractors for CNU construction projects must inspect the project in accordance with the project's VPDES Construction General Permit (CGP) from the DEQ

CHRISTOPHER NEWPORT UNIVERSITY

10

Regulatory Information

- CNU is registered with the VA Dept. of Environmental Quality (DEQ) as an owner and operator of a small MS4
 - MS4 = Municipal Separate Storm System
 - General Permit #VAR040090
 - Covers roads with drainage, catch basins, curb gutters, manmade channels and drains that are owned and/or operated by CNU

CHRISTOPHER NEWPORT UNIVERSITY

8

MS4 Permit Requirements

- CNU audits the compliance of the contractor by:
 - Maintaining copies of permit coverage letters for construction projects
 - Reviewing SWPPPs and contractors' inspection documentation
 - Inspecting construction projects on a periodic basis for permit compliance

CHRISTOPHER NEWPORT UNIVERSITY

11

Overview of CNU's MS4 Program

- MS4 Permit Requirements
- Address TMDLs/WLAs
- Six Minimum Control Measures (MCMs):
 1. Public education & outreach
 2. Public involvement/participation
 3. Illicit discharge detection & elimination
 4. Construction site runoff controls
 5. Post-construction site runoff controls
 6. Pollution prevention/good housekeeping
- Annual Progress Reports to DEQ

CHRISTOPHER NEWPORT UNIVERSITY

9

CNU MS4 Inspections

- CNU (or contracted firm) will periodically inspect construction projects for:
 - Compliance with approved ESC plan
 - Compliance with approved SWM plan
 - Review of development, updating and implementation of pollution prevention (P2) plan
 - Review of development and implementation of any additional control measures for impaired and TMDL waterways

CHRISTOPHER NEWPORT UNIVERSITY

12

Stormwater Pollution Prevention

CHRISTOPHER NEWPORT UNIVERSITY

13

Stormwater Pollution Prevention Plan (SWPPP) Updates

1. SWPPP must be amended if:
 - Change in the design, construction, operation, or maintenance that has significant effect on the discharge of pollutants to surface waters and that was not previously addressed in SWPPP

<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

16

Stormwater Pollution Prevention Plan (SWPPP)

- Written Document
- Identifies a Pollution Prevention Team
- Identifies Potential Pollutants
 - Where are they located?
 - What are the pollutants?
 - What activities could contribute to pollution?
- Establishes Best Management Practices (BMPs)
- Outlines MS4 Permit Compliance

CHRISTOPHER NEWPORT UNIVERSITY

14

Stormwater Pollution Prevention Plan (SWPPP) Updates

2. SWPPP must be amended if:
 - Inspections or investigations by the qualified personnel, or local, state, or federal officials, determined that the existing control measures are ineffective in minimizing pollutants in discharges from construction activity
 - Revisions must include additional or modified control measures designed and implemented to correct the problems
 - If approval needed, revisions completed no later than **7 calendar days** following approval

<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

17

Stormwater Pollution Prevention Plan (SWPPP)

- Cornerstone of stormwater program
- Each SWPPP must:
 - Be site-specific
 - Address potential sources of pollution that may be generated during and after construction
 - Be updated throughout construction
 - Inspectors must review

CHRISTOPHER NEWPORT UNIVERSITY

15

Stormwater Pollution Prevention Plan (SWPPP) Updates

3. SWPPP must clearly identify the contractor that will implement and maintain each control measure listed in SWPPP
 - SWPPP must be amended to identify new contractors

<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

18

Stormwater Pollution Prevention Plan (SWPPP) Updates

4. SWPPP must be updated no later than **7 days following any modification to implementation**

- Modifications or updates must be noted and include:
 - a. A record of dates when:
 - 1) Major grading activities
 - 2) Activities temporarily or permanently stop on a portion of site
 - 3) Stabilization measures initiated
 - b. Documentation of replaced or modified controls
 - c. Areas that have reached final stabilization and no SWPPP inspections apply
 - d. Properties no longer under legal control of operator and dates

https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMinstructorCourseMaterial.aspx

CHRISTOPHER NEWPORT UNIVERSITY

19

Illicit Discharges

CHRISTOPHER NEWPORT UNIVERSITY

22

Stormwater Pollution Prevention Plan (SWPPP) Updates

4. SWPPP must be updated no later than **7 days following any modification to implementation**

- Modifications or updates must be noted and include:
 - e. Date of prohibited discharges, volume released and actions take to minimize impact
 - f. Measures take to prevent reoccurrence of prohibited discharge
 - g. Measures taken to address any evidence identified as a result of a qualified person's SWPPP inspection

5. Amendments, modifications, or updates to SWPPP must be signed by operator or duly authorized representative

https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMinstructorCourseMaterial.aspx

CHRISTOPHER NEWPORT UNIVERSITY

20

Illicit Discharge Policy and Reporting

- Illicit Discharge Detection and Elimination Policy (IDDE)
 - <http://cnu.edu/public/stormwater/>
- Purpose
 - Prevent pollutants from getting into the stormwater



CHRISTOPHER NEWPORT UNIVERSITY

23

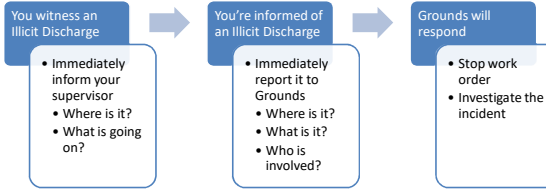
MS4 & Pollution Prevention Team

- MS4 Contact & SWPPP Coordinator
 - Dean Whitehead - Director of Grounds
- Pollution Prevention Team:
 - Senior Assoc. V.P. for Administration & Finance
 - Asst. Director of Grounds
 - Director of Facilities Management
 - Environmental Health and Safety Manager
 - Sustainability Coordinator

CHRISTOPHER NEWPORT UNIVERSITY

21

Illicit Discharge Policy and Reporting



```



    graph LR
      A[You witness an Illicit Discharge] --> B[You're informed of an Illicit Discharge]
      B --> C[Grounds will respond]
      A --- A1[• Immediately inform your supervisor]
      A --- A2[• Where is it?]
      A --- A3[• What is going on?]
      B --- B1[• Immediately report it to Grounds]
      B --- B2[• Where is it?]
      B --- B3[• What is it?]
      B --- B4[• Who is involved?]
      C --- C1[• Stop work order]
      C --- C2[• Investigate the incident]
    
```

CHRISTOPHER NEWPORT UNIVERSITY

24

Allowed Discharges



- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising groundwaters
- Uncontaminated groundwater infiltration
- Uncontaminated pumped groundwater
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Flows from riparian habitats and wetlands
- Street wash water
- Discharges of flows from firefighting activities

CHRISTOPHER NEWPORT UNIVERSITY

25

Illicit Discharge Examples

CHRISTOPHER NEWPORT UNIVERSITY

28

Illicit Discharges

- An illicit discharge is when any of the following enter a storm drain:
 - Chemicals
 - Vehicle Fluids
 - Oil
 - Grease
 - Paint
 - Wash Water
 - Animal Waste
 - Garbage
 - Dirt
 - Salt




CHRISTOPHER NEWPORT UNIVERSITY

26

Prohibited Discharges



- Wastewater from washout of concrete



CHRISTOPHER NEWPORT UNIVERSITY

29

Illicit Discharge Examples





CHRISTOPHER NEWPORT UNIVERSITY

27

Prohibited Discharges

- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials




CHRISTOPHER NEWPORT UNIVERSITY

30

Prohibited Discharges

- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance



<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

31


Best Management Practices (BMPs)

CHRISTOPHER NEWPORT UNIVERSITY

34

Prohibited Discharges

- Oils, toxic substances, or hazardous substances from spills or other releases



<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

32

Best Management Practices (BMPs)

- Best Management Practices "BMP" means to reduce the pollution of surface waters from the impacts of human activity:
 - Structural devices
 - Non-structural practices
 - Prohibitions of practices
 - Schedules of activities
 - Maintenance procedures




CHRISTOPHER NEWPORT UNIVERSITY

35

Prohibited Discharges

- Soaps, solvents, or detergents used in equipment and vehicle washing



<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

33

Best Management Practices (BMPs)

- Structural or Non-Structural
 - Structural
 - Stormwater basin or pond
 - Silt fence
 - Non-Structural
 - Maintenance practices
 - Prohibition of activities
- Permanent or Temporary
 - Temporary BMPs
 - Erosion control blanket
 - Silt fence
 - Permanent BMPs
 - Stormwater basin or pond
 - Level spreaders




<https://www3.epa.gov/rpddeis/pubs/siltfences.pdf>

CHRISTOPHER NEWPORT UNIVERSITY

36

General BMPs

- Clean up your area on a regular basis
 - Sweeping and picking up litter
- Know how to report a spill or leak
- Never pour or wash anything down the storm drain



CHRISTOPHER NEWPORT UNIVERSITY

37

Waste Management

- Dumpsters should be covered at all times
- Do not allow containers to overflow
- Do not store trash (even temporarily) on the ground
- Litter and debris cleaned up daily
- Waste collection is located away from streets, gutters, waterways, and storm drains
- Waste collection area has signage



CHRISTOPHER NEWPORT UNIVERSITY

40

Potential Pollutant Sources

- Sediment
- Waste Management
- Equipment Maintenance and Repair
- Outdoor Handling and Storage of Materials
- Loading/Receiving Areas
- Equipment Fueling
- Concrete Washout
- Portable Restrooms

CHRISTOPHER NEWPORT UNIVERSITY

38

Equipment Maintenance and Repair

- Store leaky vehicles and equipment indoors or, if stored outdoors, store on concrete surfaces and use drip pans until repaired
- Perform all vehicle and/or equipment cleaning on the wash pad
 - Do not wash on a rainy day
- Drain fluids from equipment and vehicles that are no longer in service or will remain unused for extended periods of time




CHRISTOPHER NEWPORT UNIVERSITY


41

Sediment

- Keep sediment out of storm inlets
- Outlets and channels must be protected to prevent erosion



Good



Bad

CHRISTOPHER NEWPORT UNIVERSITY

39

Outdoor Handling and Storage of Materials

- Properly label containers
- Ensure that containers are in good condition
- Locate materials, equipment, and activities away from storm drains
- Place materials in low traffic areas to prevent accidents
- Store materials in appropriate weather proof containers
- Shelter materials that must be stored outside
- Clean up spills and leaks promptly



CHRISTOPHER NEWPORT UNIVERSITY

42

Loading/Receiving Areas

- Keep area free of trash or other debris
- Schedule deliveries of potentially polluting materials on dry days
- Ensure that delivery vehicles are parked away from unprotected storm drains
- Clean up spills and leaks promptly

<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

43

Portable Restrooms

- Located away from waterways and storm drains
- Inspected for leaks
- Maintained and cleaned




<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

46

Equipment Fueling

- Don't top off fuel tanks to prevent spills due to overfilling
- Periodically clean fueling areas using approved methods to remove accumulated fuel and grease
- Transport equipment to a designated fueling area (e.g. concrete surfaces)
- Secondary containment (spill berms, decks, spill containment pallets) is provided
- Cover is provided where appropriate
- Spill kits are readily available; keep absorbent materials on site for use in prompt cleanup of spills



<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

44


Spill Response

CHRISTOPHER NEWPORT UNIVERSITY

47

Concrete Washout

- Concrete wash water must be directed into a leak-proof container or leak-proof settling basin
- Container or basin cannot overflow
- Hardened and liquid concrete waste must be removed and properly disposed



<https://www.deq.virginia.gov/ConnectWithDEQ/TrainingCertification/CourseMaterials/SWMInspectorCourseMaterial.aspx>

CHRISTOPHER NEWPORT UNIVERSITY

45

Spill Response Procedures

- Spills include, but are not limited to, releases of oil or hazardous substances in reportable quantities
 - 1) If possible, shut off the source
- Notify your supervisor (if a danger or threat to people or property call CNU Police)
 - 1) *What spilled, how much, where is it*
 - 1) Use proper PPE
 - 2) Contain the spill
 - 3) Cover/block and storm drains

CHRISTOPHER NEWPORT UNIVERSITY

48

Liquid Spills

- Use absorbent materials or mop up small liquid spills. Do not hose the spill to a storm drain.
- Remove the absorbent materials promptly and follow procedures for proper disposal.




Photo: https://www.fishbase.org/species/O2582/2582_74233964/458022288
445/USR/2017/6240-4647-5e49-9b35d31100.jpg?w=6387

CHRISTOPHER NEWPORT UNIVERSITY

49


Questions?

CHRISTOPHER NEWPORT UNIVERSITY

52

Dry Material Spills

- Cover a powder spill with plastic sheeting to keep it from blowing until the spill can be cleaned up.
- Do not hose the spill to a storm drain.
- If usable, place spilled material in original or properly marked container.
- Follow procedures for disposal of spilled material that cannot be used.



CHRISTOPHER NEWPORT UNIVERSITY

50

Spill Reporting

- The VPDES Construction General Permit (CGP) requires reporting unauthorized discharges (of reportable quantity):
 - Immediately upon discovery of the discharge; but
 - No later than within 24 hours of discovery
- A written report must be submitted to the DEQ and the VSMP Authority within 5 days of discovery

CHRISTOPHER NEWPORT UNIVERSITY

51

Appendix E Minimum Control Measure five (MCM5) supplemental Information

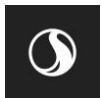
Appendix E MINIMUM CONTROL MEASURE FIVE (MCM5) SUPPLEMENTAL INFORMATION

Post Construction BMP Inspections BMP (5.4)




BMP E-tracking (BMP 5.5)

Other Places for Information on MCM5:

- Stormwater Master Plan updated study for 2019 (BMP 3.2, 5.1) in Appendix C
- Annual Standards and Specifications (BMP 4.1, 5.3, 6.6) in appendix D



CNU Post Construction BMP Inspection Permit Year 1

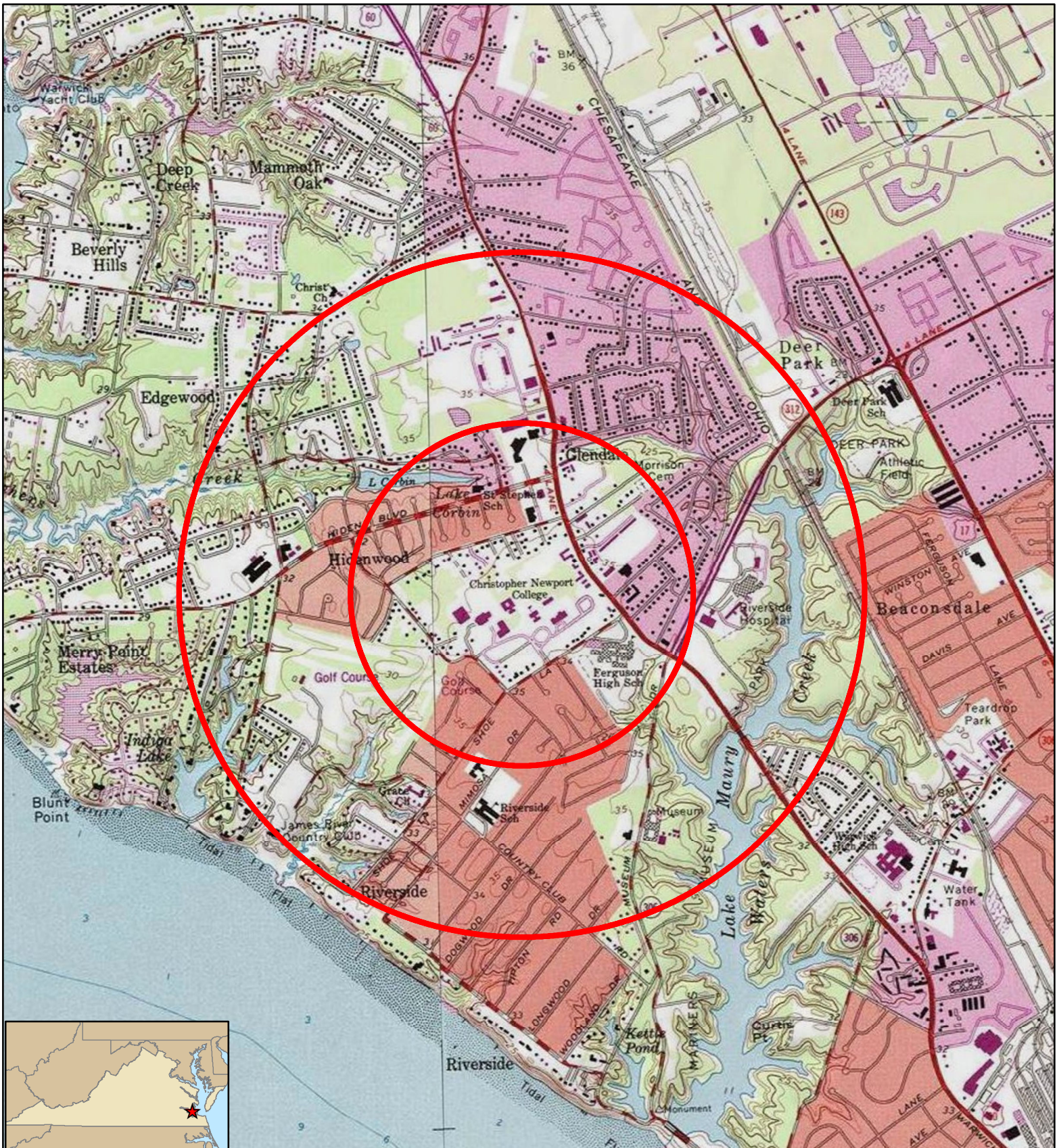
BMP	Location	Type	Inspection Date	Condition	Notes	Photos
BMP 2	James River Residence Hall	Extended Detention	4/12/2019	Acceptable	Re-seed bare areas to reduce erosive impacts	
BMP 3	Stadium Seating	Extended Detention	4/12/2019	Acceptable	This BMP will be replaced by BMP 6 next permit year.	
BMP 4	Lake Maury	Retention	N/A	N/A	This BMP is inspected by the City of Newport News	N/A
BMP 5	Parking Lot A	Bioretention	4/12/2019	Acceptable	New Bioretention as of 2017-2018 permit year. Plants healthy.	
BMP 6 Under Construction	Turf Field Replacement	Bioretention	N/A	N/A	N/A	N/A
BMP 7 Online This Permit Year	Parking Lot C1/C2	Stormkeeper Sediment Strip	N/A	N/A	N/A	N/A

Notes: BMPs 2 and 3 are owned and maintained by CNU but were removed from the CNU Stormwater Master Plan when Lake Maury was approved as the CNU BMP.

Christopher Newport University
BMPs 2018 - 2019

BMP	Description	Type	Coordinates	HUC	Discharge into Impaired Water	Acres Treated
BMP 2	James River Residence Hall	Extended Detention	Lat. 37.064330 Long -76.496709	JL 38 & 43	N/A	5.37
BMP 3	Stadium Seating	Extended Detention	Lat. 37.063347 Long. -76.498495	JL 38	N/A	1.7
BMP 4	Lake Maury	Retention	Lat. 37.056520 Long. -76.484747	JL 38 & 43	N/A	153.7
BMP 5	Parking Lot A	Bioretention	Lat. 37.060194 Long. -76.489635	JL 38 & 43	N/A	1.06
BMP 6 Under Construction	Turf Field Replacement	Bioretention	Lat. 37.063347 Long. -76.498495	JL 38 & 44	N/A	2.18
BMP 7	Parking Lot C1/C2	Stormkeeper Sediment Strip	Lat. 37.063249, Long. -76.490021	JL 38 & 45	N/A	1.39

Notes: BMPs 2 and 3 are owned and maintained by CNU but were removed from the CNU Stormwater Master Plan when Lake Maury was approved as the CNU BMP. These BMPs will continue to be inspected until they are removed from the campus. The Lake Maury BMP project was completed during the 2011-2012 reporting year. BMP 1 was removed with the Freeman Center Expansion under an approved plan. BMP 7 came online this permit year.



The red concentric circles represent a radius of 0.5 miles and 1 mile from the center of the University.

0 0.15 0.3 0.45 0.6



Miles

N



1:24,000

1 inch=2,000 feet

Figure 1: SWPP Site Locus

Christopher Newport University
 1 Ave. of the Arts
 Newport News, VA
 June 2016





Legend

- Buildings
- Chesapeake Bay Preservation Areas
- CNU MS4 Boundary
- Half Mile Radius
- PavedAreas
- Roads
- Schools
- WaterBodies
- Wetlands
- T Outfalls

0 500 1,000



Feet
N



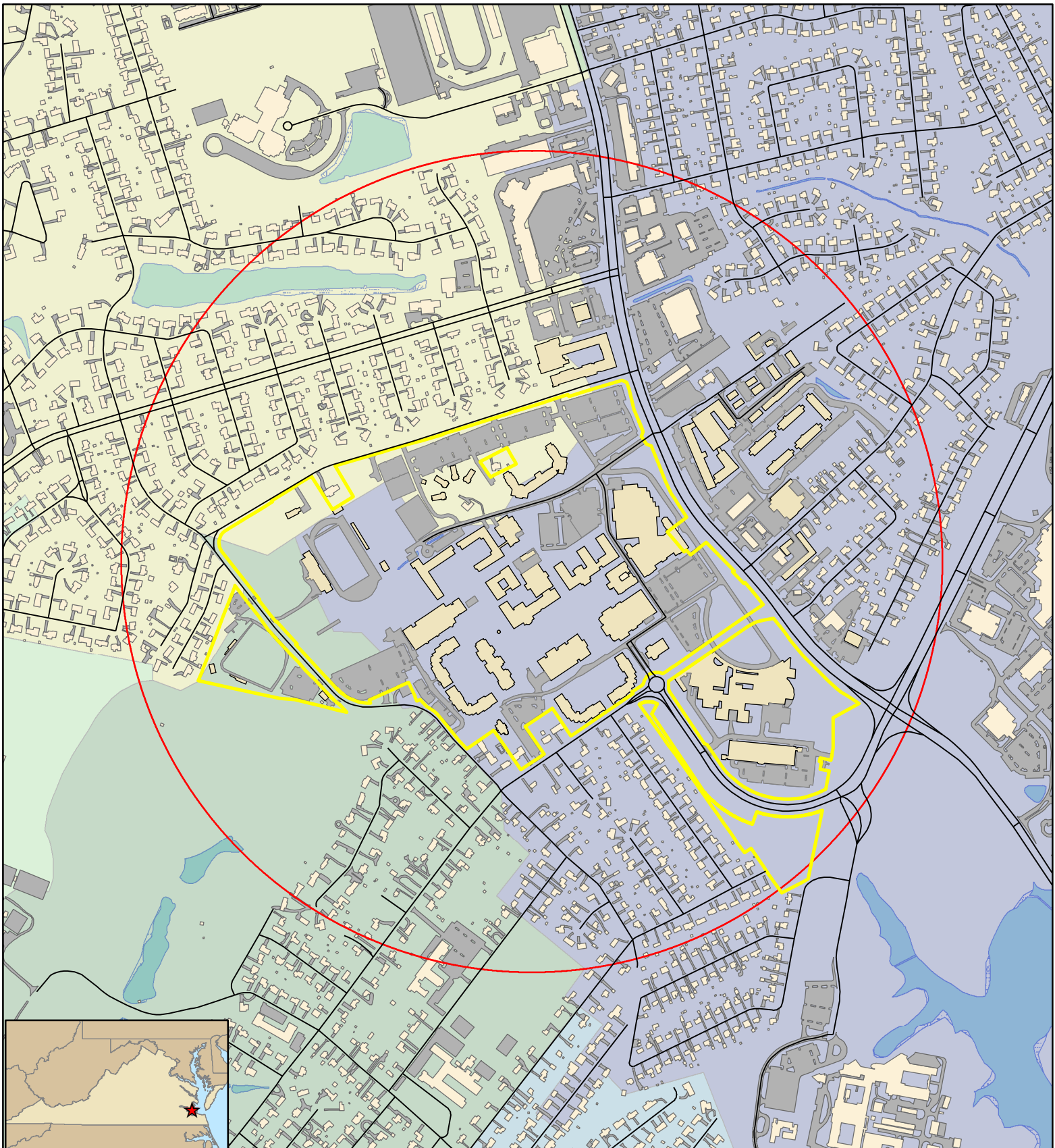
1:10,000

1 inch~833 feet

Figure 2: SWPP GIS Data

Christopher Newport University
1 Ave. of the Arts
Newport News, VA
June 2016





Legend	
	Buildings
	CNU MS4 Boundary
	Half Mile Radius
	PavedAreas
	Roads
	WaterBodies
	Wetlands
Drainage Basins	
	Deep Creek
	Fishers Creek
	Indigo Lake
	Lake Maury
	North Riverside
	South Riverside

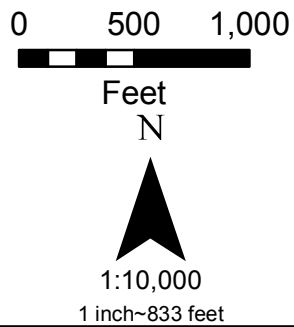


Figure 2.1: SWPP Drainage Basins
Christopher Newport University
1 Ave. of the Arts
Newport News, VA
June 2016



Service Layer Credits: MS4 Boundary derived from Koontz-Bryant, PC; 2014. All other data derived from City of Newport News GIS; 2015.



Legend

- CNU MS4 General Permit Boundary
- CNU Property under Newport News' MS4
- Roads
- ⓘ Outfalls

0 450 900

Feet

N

1:7,000

1 inch ~ 600 feet

Figure 3: SWPP Orthophotograph

Christopher Newport University
 1 Ave. of the Arts
 Newport News, VA
 June 2016





Legend

- Roads
- CNU MS4 General Permit Boundary
- CNU Property under Newport News' MS4
- High Priority Areas**
- Facilities Support Operations
- Food Services - Waste Management Area
- Landscaping Operations
- Waste Management Area

0 450 900

Feet

N



1:7,000

1 inch ~ 600 feet

Figure 4: SWPP Areas of High Priority

Christopher Newport University
 1 Ave. of the Arts
 Newport News, VA
 June 2016



Appendix F Minimum Control Measure six (MCM6) supplemental Information

Appendix F MINIMUM CONTROL MEASURE SIX (MCM6) SUPPLEMENTAL INFORMATION

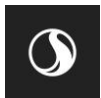
High Priority SWPPPs – Cover Page and Table of Contents (BMP 6.2)

Nutrient Management Plans (BMP 6.4)

Standard Operating Procedures (BMP 6.10)

Other Places for Information on MCM6:

- CNU IDDE Standard Procedures (BMP 3.6, 6.3) in Appendix C
- Annual Standards and Specifications (BMP 4.1, 5.3, 6.6) in Appendix D



Stormwater Pollution Prevention Plan (SWPPP)

Contents

Revision History.....	5
Section 1: Introduction	6
1.1 Area of Coverage.....	6
1.2 Allowable Non-Stormwater Discharges	6
1.3 Permit Compliance.....	7
1.4 Contents of the SWPPP	7
1.5 SWPPP Availability	8
1.6 Additional Documentation Requirements.....	8
1.7 Record Keeping Requirements	8
Section 2: Stormwater Pollution Prevention Team.....	9
Section 3: Site Description	10
3.1 University Activities	10
3.2 High Priority Areas	10
3.2.1 Waste Management Areas	10
3.2.2 Plant Operations Building.....	11
3.2.3 Grounds Department Compound	11
3.2.4 Athletics Department Operations.....	11
3.2.5 David Student Union	12
3.2.6 Hiden-Hussey Commons	12
3.2.7 Commonwealth Hall.....	12
3.3 General Location Map.....	13
3.4 Site Maps.....	13
Section 4: Potential Pollutant Sources	14
4.1 Summary of Potential Pollutant Sources	14
4.1.1 Site Activities & Potential Pollutants.....	14
4.1.3 Spills and Leaks	15
4.1.4 Non-stormwater Discharges.....	15
4.1.5 Sampling Data	15
Section 5: Control Measures.....	16
5.1 Control Measure Selection and Design Considerations.....	16
5.2 Minimize Exposure.....	16
5.3 Good Housekeeping.....	17

5.3.1 Parking Lots, Streets, and Roads Maintenance	17
5.3.2 Equipment and Vehicles	17
5.3.3 Outdoor Buildings	18
5.3.4 Grounds & Landscaping.....	18
5.3.5 Application and Storage of Pesticides, Herbicides, and Fertilizers	19
5.3.6 Exterior Material Storage	19
5.3.7 Chemical Storage	19
5.4 Maintenance	20
5.5 Spill Prevention and Response Procedures.....	20
5.6 Erosion and Sediment Controls	21
5.7 Management of Runoff.....	21
5.8 Salt Storage.....	21
5.9 Employee Training	21
5.10 Water Quality-Based Effluent.....	22
5.10.1 Water Quality.....	22
5.10.2 Discharges to Quality Impaired Waters.....	22
Section 6: Schedules and Procedures.....	23
6.1 Inspections	23
6.1.1 Routine Inspections.....	23
6.1.2 Quarterly Visual Assessment of Stormwater Discharges	24
Section 7: Signature Requirements.....	26
7.1 Plan Certification	26

Tables

Table 1: SWPP Plan Elements.....	7
Table 2: Pollution Prevention Team Roster and Responsibilities	9
Table 3 Waste Management Areas	10
Table 4: Potential Pollutant Sources Associated with University Operations Error! Bookmark not defined.	
Table 5: Potential Pollutants Associated with University Activities	14

Matthew J. Strickler
Secretary of Natural Resources

Clyde E. Cristman
Director



Rochelle Altholz
Deputy Director of
Administration and Finance

Russell W. Baxter
Deputy Director of
Dam Safety & Floodplain
Management and Soil & Water
Conservation

Thomas L. Smith
Deputy Director of Operations

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

Chris Webb
1 Avenue of the Arts
Newport News, VA 23606

8/2/2018

Subject: Christopher Newport University: Main Campus Nutrient Management Plan Approval

The following nutrient management plan has been reviewed by Chantel Wilson and approved by the Virginia Department of Conservation & Recreation as compliant with the provisions of the Code of Virginia 10.1-104.4. Please note that this plan has not been reviewed for compliance with more restrictive requirements from other specific legislative, regulatory or incentive programs.

Plan Name	Planner	Acres	Start Date	Expiration Date
Christopher Newport University: Main Campus	Chris Webb	48.0	6/4/2018	6/4/2021

A copy of this letter should be kept with your nutrient management plan. Initiation of plan revision is recommended by the Department to occur at least six months prior to the expiration date. If you have any questions concerning this letter or approvals, please contact me via phone or email.

Sincerely,

A handwritten signature in cursive script, appearing to read "Chantel Wilson".

Chantel Wilson
Urban Nutrient Management Specialist
Department of Conservation and Recreation
600 East Main St., 24th Floor
Richmond, Virginia 23219
(804) 887-8917
chantel.wilson@dcr.virginia.gov

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

*State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation*

Matthew J. Strickler
Secretary of Natural Resources

Clyde E. Cristman
Director



Rochelle Altholz
*Deputy Director of
Administration and Finance*

Russell W. Baxter
*Deputy Director of
Dam Safety & Floodplain
Management and Soil & Water
Conservation*

Thomas L. Smith
Deputy Director of Operations

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

Dean Whitehead
1 Avenue of the Arts
Newport News, VA 23606

3/1/2018

Subject: Christopher Newport University: Athletics Nutrient Management Plan Approval

The following nutrient management plan has been reviewed by Chantel Wilson and approved by the Virginia Department of Conservation & Recreation as compliant with the provisions of the Code of Virginia 10.1-104.4. Please note that this plan has not been reviewed for compliance with more restrictive requirements from other specific legislative, regulatory or incentive programs.

Plan Name	Planner	Acres	Start Date	Expiration Date
Christopher Newport University: Athletics	Dean Whitehead	17.0	2/6/2018	2/6/2021

A copy of this letter should be kept with your nutrient management plan. Initiation of plan revision is recommended by the Department to occur at least six months prior to the expiration date. If you have any questions concerning this letter or approvals, please contact me via phone or email.

Sincerely,

A handwritten signature in black ink, appearing to read "Chantel Wilson".

Chantel Wilson
Urban Nutrient Management Specialist
Department of Conservation and Recreation
600 East Main St., 24th Floor
Richmond, Virginia 23219
(804) 887-8917
chantel.wilson@dcr.virginia.gov

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

*State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation*

Standard Operating Procedures (SOPs) for: Landscape Maintenance	
Last Revision:	9/28/2016
Purpose of SOP:	Stormwater pollution prevention procedures for grounds keeping maintenance activities.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_Landscape.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
2. Storm drain inlet protection devices (drain covers, booms, berms)
3. Tarps with tie downs

Standard Operating Procedures

General Landscaping Maintenance

- a. Remove litter, debris, and trash from the landscaped and surrounding areas prior to mowing activities. Properly dispose of the materials in a designated receptacle.
- b. During blowing operations take care not to blow clippings, dirt, sand, or debris into storm drains or stormwater conveyance structures.
- c. After mowing activities collect all clippings/trimming/waste and take to the designated area. Do not hose down outside areas.
- d. Five day weather forecast is checked to avoid fertilizing before heavy rain or during a drought. Fertilizers applications are made during period of maximum plant uptake based on plant species.
- e. Whenever possible control soil erosion by seeding, sod, mats, mulching, terracing or other approved methods.
- f. Do not apply bark or mulch on top of plastic sheeting unless the area is enclosed. Bark or mulch on plastic is easily washed off by heavy rainfall.

Landscaping Materials Storage

- a. All bagged materials (i.e. fertilizer, ice melt, etc.) must be stored indoors whenever possible. If they must be stored outdoors, place them under cover.
- b. All dry materials stored outside should be covered and when possible have secondary containment.
 - i. When storing stockpiles of sand, salt, dirt, mulch, gravel cover piles with a tarp in good condition
 - ii. Contain stormwater run-off from stock piles using a barrier or berm
- c. Place containers on paved or impervious surfaces and as far from (or at a lower elevation than) storm drain inlets and drainage ditches as possible.
- d. Provide a spill kit near storage areas.
- e. Clean-up any spills, leaks or discharges promptly.
- f. Inspect all containers stored outdoors regularly
- g. If a container is found to be leaking, either empty the contents into a leak-tight container or place entire leaking container inside of a larger leak-tight container. Clean up any spills or leaks promptly.
- h. Do not drain accumulated water from secondary containment structures unless approved by a supervisor.

Contractors

- a. Contracts should include Stormwater pollution prevention language (e.g. The contractor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
- b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

Standard Operating Procedures (SOPs) for: Equipment Maintenance and Washing	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for the proper management of equipment maintenance and washing.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_equipment_maint.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
2. Drip pans
3. Wash Pad

Standard Operating Procedures

Equipment Maintenance and Repair

- a. Move leaking equipment indoors or onto impervious surface and under cover.
 - i. Use drip pans or absorbent pads.
- b. If equipment is inoperable tag equipment "**DO NOT USE**"
- c. Perform all maintenance activities (except for emergencies) indoors.
- d. Transfer fluids from drip pans to appropriate waste containers.
- e. Routinely check equipment for signs of leaks.
 - i. Notify supervisor if a leak is discovered or suspected.
- f. Sweep and pick up trash in maintenance and repair areas daily.

Equipment Washing

- a. Small equipment should only be washed inside at designated washing areas.
- b. Large equipment in good condition, with no signs of leaks, may be washed at the wash pad located at Grounds Department.
 - a. Contact Grounds to schedule a time.
 - b. Only wash on non-rainfall days.
 - c. Perform fewer than 30 wash events per week.
- c. Make sure equipment is properly drained of all fluids prior to washing at the wash pad.
 - a. In the event of leak or spill, immediately reposition the equipment, and notify your supervisor
- d. Only use approved water-based or detergent cleaners.
- e. Mop buckets and mop water may only be dumped inside at designated areas.

References and Related Procedures

BMP: Good Housekeeping & Spill Prevention
 SOP: Spill Prevention, Control, Clean Up and Reporting
 SOP: Kitchen Waste: Fats, Oils, and Greases (FOG) Transfer, Storage, and Disposal
 Policy: Illicit Discharge Detection and Elimination (IDDE)

Standard Operating Procedures (SOPs) for: Outdoor Special Events & Festivals	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for outdoor special events to prevent wastes or wastewater from entering storm drains and waterways.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_EVENTS.docx

Prerequisites

Event organizers, points of contact, and contractors should review the IDDE Policy and the SWPPP training. Individuals responsible for the procedures in this SOP should read and refer to materials in the References Section. If animals are going to present at the event, the University's [Institutional Animal Care and Use Committee \(IACUC\)](#) requires a protocol submission.

Stormwater Protection Equipment and Materials

1. Covered waste and recycling containers
2. Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
3. Storm drain inlet protection (drain covers, booms, berms)

Standard Operating Procedures

General Stormwater Protection

- a. Do NOT dump any liquids or other materials outside.
- b. Have the proper equipment available to clean-up spills and be ready to clean-up spills immediately.
- c. Ensure that vendors dispose of the wastes in an appropriate manner.
- d. Ensure storm drains have adequate inlet protection.

Waste Management and Disposal

- a. Provide an adequate number of receptacles to prevent litter.
- b. Empty waste and recycling containers as needed to prevent overflow
- c. Waste and recycling receptacles should have a weather proof cover.

Cleaning Up After the Event

- a. Clean the area using dry methods (sweeping, absorbents, etc.).
- b. Pick up all litter and garbage and properly dispose. Do not sweep anything into a storm drain.
- c. Discard waste drinks down a kitchen drain.

Spills

- a. Refer to SOP: Spill Prevention, Control, Clean Up and Reporting
- b. Small spills (<5 gallons) that pose no immediate danger to human life or property notify CNU Police (4-7777)
 - i. What spilled?
 - ii. How much ?
 - iii. Where is it?
- c. Small Spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police 4-7777.
- d. Large Spills (>5 gallons) report to CNU Police (4-7777)

References and Related Procedures

SOP: Spill Prevention, Control, Clean Up, and Reporting

Policy: Illicit Discharge Detection and Elimination (IDDE)

Policy: [IACUC Policies and Procedures](#)

Training: SWPPP Training

Standard Operating Procedures (SOPs) for: Kitchen Waste: Fats, Oils, and Greases (FOG) Transfer, Storage, and Disposal	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for the proper management, handling, and storage of kitchen grease to prevent the discharge of pollutants to stormwater.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_FOG.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Weather proof and double walled FOG containers
2. Tight sealing transfer containers
3. Tarps and tie downs
4. Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)

Standard Operating Procedures

Kitchen Management of Fats, Oils, and Greases (FOG)

- a. Scrape, wipe, or sweep off FOG using dry methods (e.g. paper towels) before washing any cooking equipment.
- b. Equipment (including trays, carts, pots, pans, etc.) may only be washed indoors.
- c. Use dry methods (absorbents) to clean up spills in the kitchen.
- d. Mop water may only be disposed of into indoor drains connected to the sanitary sewer.
- e. Empty collection pans or grease recovery devices before they become full.
- f. Collect used oil into transfer container with a sealing lid.

Transfer of FOG from Kitchen to Exterior FOG Container

- a. Prepare your route from the kitchen to the exterior FOG container.
 - i. Eliminate and obstacles that might lead to a slip, trip, fall and potential spill
 - ii. Ensure that a spill kit is easily accessible in the event of spill
 - iii. Place absorbent pads in the FOG transfer area
- b. Use a container with a sealing lid to bring waste FOG outside to the Grease Receptacle. Do not transport waste FOG with pots, pans, trays, or other containers that lack a sealing lid.
 - i. It is safer to make multiple transfers of smaller volumes than to attempt to handle larger quantities at once.
 - ii. Whenever possible, only transfer to the exterior FOG container when it is not raining.
- c. Using both hands carefully transfer the waste FOG from transfer container to the exterior FOG container. Pour the FOG in such a way to minimize splashes and drips.
 - i. In the event of a spill notify your supervisor immediately and refer to SOP: Spill Prevention, Clean Up and Reporting
- d. Ensure that the exterior FOG container is properly covered
- e. Return transfer container inside and wipe any excess FOG with a paper towel

Contractor Pickup of Exterior FOG Container

- a. The disposal truck driver shall check in with the University upon arrival.
- b. The University representative shall ensure that the appropriate spill cleanup and response equipment and personal protective equipment are readily available and easily accessible. Refer to SOP - Spill Prevention, Control, Clean Up and Reporting
- c. The University representative shall verify that the volume of waste FOG in the tank does not exceed the available capacity of the disposal hauler's vehicle.
- d. Catch basins and drain manholes are adequately protected.
- e. The truck driver and the University representative shall both remain with the vehicle during the tank draining process.
- f. When draining is complete and the hoses are removed, buckets should be placed underneath connection points to catch drippings.

Standard Operating Procedures (SOPs) for: Landscape Maintenance	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for grounds keeping maintenance activities.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_Landscape.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
2. Storm drain inlet protection devices (drain covers, booms, berms)
3. Tarps with tie downs

Standard Operating Procedures

General Landscaping Maintenance

- a. Remove litter, debris, and trash from the landscaped and surrounding areas prior to mowing activities. Properly dispose of the materials in a designated receptacle.
- b. During blowing operations take care not to blow clippings, dirt, sand, or debris into storm drains or stormwater conveyance structures.
- c. After mowing activities collect all clippings/trimming/waste and take to the designated area. Do not hose down outside areas.
- d. Whenever possible control soil erosion by seeding, sod, mats, mulching, terracing or other approved methods.
- e. Do not apply bark or mulch on top of plastic sheeting unless the area is enclosed. Bark or mulch on plastic is easily washed off by heavy rainfall.

Landscaping Materials Storage

- a. Store all containers indoors whenever possible. If containers must be stored outdoors, place them under cover.
- b. All dry materials stored outside should be covered and when possible have secondary containment.
 - i. When storing stockpiles of sand, salt, dirt, mulch, gravel cover piles with a tarp in good condition
 - ii. Contain stormwater run-off from stock piles using a barrier or berm
- c. Place containers on paved or impervious surfaces and as far from (or at a lower elevation than) storm drain inlets and drainage ditches as possible.
- d. Provide a spill kit near storage areas.
- e. Clean-up any spills, leaks or discharges promptly.
- f. Inspect all containers stored outdoors regularly
- g. If a container is found to be leaking, either empty the contents into a leak-tight container or place entire leaking container inside of a larger leak-tight container. Clean up any spills or leaks promptly.
- h. Do not drain accumulated water from secondary containment structures unless approved by a supervisor.

Contractors

- a. Contracts should include Stormwater pollution prevention language (e.g. The contractor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
- b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

Standard Operating Procedures (SOPs) for: Liquid Materials Loading, Unloading, and Storage	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for the proper management of the loading, unloading, and storage of liquid materials.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_liquid_mats.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
2. Drip pans
3. Storm drain pollution control devices (berms or covers)
4. Wheel chocks

Standard Operating Procedures

Transfer of Liquid Materials

- a. Direct delivery and receiving vehicles to park in a designated area where leaks can be contained and where they will not enter a storm drain or ditch.
- b. Only transfer liquids only over paved (impervious) surfaces. Spills on soils are very difficult to clean up.
- c. Do not load or unload materials near a storm drain inlet unless it is equipped with a shut-off valve, drain cover or seal or other method to keep spills out of the storm sewer or the drain is at a higher elevation.
- d. If transfers must take place near a storm drain inlet, place a cover or mat over the inlet to protect it during transfer operations.
- e. Only load or unload a vehicle after it is immobilized (e.g., wheels are chocked) and (if flammable materials are involved) grounding cables are attached. These measures will prevent accidental movement and static build-up.
- f. At least one qualified University representative must attend any transfer operation for the entire duration of the loading or unloading operation.
- g. Place drip pans or buckets under all hose or pipe connections and leave them in- place until the loading or unloading operation is complete. Dispose of any leaked material properly.
- h. Keep loading and unloading areas neat and tidy. Sweep outdoor areas as needed.

Contractors

- a. Contracts should include Stormwater pollution prevention language (e.g. The contractor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
- b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

References and Related Procedures

BMP: Good Housekeeping & Spill Prevention

SOP: Spill Prevention, Control, Clean Up and Reporting

Policy: Illicit Discharge Detection and Elimination (IDDE)

Standard Operating Procedures (SOPs) for: Trash & Recycling Handling, Storage, Transfer, and Disposal	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for the proper management, handling, and storage of waste, trash, or recycling to prevent the discharge of pollutants to stormwater.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_MSW.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Dumpster lids/covers
 - a. Tarps with tie-downs are acceptable
2. Storm drain inlet protection devices (drain covers, booms, berms, and/or filter fabric)

Standard Operating Procedures

Trash & Recycling Handling, Storage, Transfer, and Disposal

- a. All waste and recycle receptacles must be leak-tight with tight-fitting lids or covers.
- b. Keep lids on dumpsters and containers closed at all times unless adding or removing material.
 - i. In the event that a dumpster lid is missing or damaged report it to Plant Operations
 - ii. If using an open top roll off dumpster, cover and tie down with a tarp unless adding materials
- c. Place waste or recycle receptacles indoors or under a roof or overhang whenever possible.
- d. Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
- e. Prior to transporting waste, trash, or recycling ensure that containers are not leaking (double bag if needed) and properly secure to the vehicle.
- f. Clean and sweep up around outdoor waste containers regularly.
- g. Clean up any liquid leaks or spills with dry clean-up methods. (See SOP: Spill Prevention, Clean Up and Reporting).
- h. Arrange for wastes or recyclables to be picked up regularly and disposed at approved disposal facilities.
- i. Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster, recycle or trash receptacle.
 - i. Please contact the Environmental Health Safety Department for information on proper disposal
- j. If any liquid, non-hazardous waste is generated, it must be disposed in the sanitary sewer (if approved), transported to a disposal site that will accept that type of wastewater, or cleaned up using dry methods.
- k. Do not wash out waste containers (trash cans) or recycling containers outdoors or in a parking lot.
- l. Containers, compactors and dumpsters must be returned to the waste disposal contractor for cleaning at the contractor's facility.
- m. When working in the field, place all wastes in appropriate containers near the work site. If no public containers are available, containerize or bag the wastes and bring them back the shop for proper disposal.

Dumpster Areas

- a. Regularly pick up trash and debris.
- b. Regularly sweep the area.

Compactor Areas

- a. Regularly check the hydraulic fluid hoses and reservoir to ensure there are no cracks or leaks
 - i. In the event of leak report it immediately to the compactor service contractor and refer to SOP: Spill Prevention, Clean Up and Reporting
- b. Regularly sweep the area.

Standard Operating Procedures (SOPs) for: Parking Lot, Streets, and Roads Maintenance	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for general maintenance of parking lots, parking garages, elevated parking structures, streets, or roads.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_Parking_Lot_Maint.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
2. Storm drain inlet protection devices (drain covers, booms, berms, and/or filter fabric)

Standard Operating Procedures

General Maintenance

- a. Clean leaves, trash, and other debris from parking lots and garages including stormwater conveyance systems regularly.
- b. Sweep parking lots with a street sweeper annually.
 - i. Sweeping should occur after sanding/deicing events
 - ii. Sweeping should occur after special events or construction
- c. Use dry clean-up methods (e.g. absorbents) to clean up any automotive spills/leaks and dispose of properly.
- d. Ensure any storm drains/catch basins are marked with a stormwater medallion.

Paving, Patching, Re-surfacing, and Concrete Projects

- a. Re-seal, pave, or patch on dry days when no rain is expected and stop paving activities well before rainfall is expected.
- b. Use cold patch products when possible.
- c. Pre-heat, transfer, or load hot asphalt far away from storm drain inlets.
- d. Protect or block nearby, downstream, storm drain inlets from debris from maintenance work (asphalt cap, chip sealing, concrete breaking, or saw cutting). Leave inlet protection in place until the job is complete. Clean up debris from around inlets and dispose of properly.
- e. Designate a "Concrete Wash-Out Area" on the job site - in a grassy or graveled area where pooled water can soak into the ground. If no "Wash-Out Area" is available, wash out into a container (pool, bucket or wheelbarrow) and dispose of material properly.

Painting and Striping

- a. Schedule painting, marking, and striping projects during dry weather only. Cease all activities when rain threatens.
- b. Set-up a preparation area on a tarp/drop cloth to catch any drips or spills.
- c. Block nearby storm drain inlets (within 25 feet and down gradient of project) when painting or striping.
- d. Take care not to paint over storm drain medallions.
- e. Properly clean painting supplies at your shop, do not wash out paint to the storm drains.

Contractors

- a. Contracts should include Stormwater pollution prevention language (e.g. The contractor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).
- b. Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.

Standard Operating Procedures (SOPs) for: Pressure Washing and Exterior Surface Cleaning	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for the cleaning of exterior surfaces such as sidewalks, building exteriors, and graffiti removal
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_Pressure_wash_exterior_cleaning.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

Spill kit and equipment for dry clean up (socks, absorbent pads, absorbent materials, broom, and dustpan)
Wet vacuum and holding tank
Storm drain inlet protection devices (drain covers, booms, berms)

Standard Operating Procedures

General Surface Cleaning and Pressure Washing

- a. Use dry clean-up methods prior to any pressure washing. Use absorbents (kitty litter, rags, sand, etc) to clean up spills, sweeping, vacuuming, and scrapping off dried debris. The waste material should be disposed of as solid waste.
- b. Pressure wash with minimal water.
- c. If you do not use any chemicals or detergents and are only cleaning surfaces of ambient dust, then you may direct the wastewater to nearby landscaping or vegetated area or contain it onsite and allow it to evaporate.
- d. When discharging wash water to landscaping, make sure water is absorbed into vegetated or permeable surfaces (gravel, porous pavement) and does not cause erosion or run off into a storm drain or paved area.
- e. All other wash water must be captured for proper disposal.
- f. Solids should be removed from the area prior to pressure washing and a filter bag or similar filtration device should be used to remove suspended solids from the wastewater.
- g. A visible sheen must not be evident in the discharge. Use an absorbent pad or boom to eliminate any oil from the discharge.
- h. Do not pressure wash an entire building. Spot clean, steam clean, or scrape dirty areas rather than pressure washing the entire structure.

Heat Transfer Equipment and HVAC Equipment Cleaning

- a. HVAC or chiller condenser tube flushing liquid must be captured and disposed of properly.

Storm Drain Protection

- a. Prior to pressure washing, identify where all storm drains are located; wash water must not be allowed to flow down gutters or enter storm drains.
- b. Block or cover all storm drains with booms and weighted storm drain covers before pressure washing.
- c. Determine where water will pool for collection. Use a wet vacuum up the wastewater or allow water to evaporate.

Disposal of Wash Water

- a. Use a wet vacuum to collect water for disposal to the sanitary sewer.
- b. Once water is collected, dispose of it properly. Check with CNU Grounds to see if collected wash water may be disposed of into a sanitary sewer drain.

Contractors

- a. Contracts should include Stormwater pollution prevention language (e.g. The contractor, including any associated subcontractors, shall use the correct controls to ensure that all activities do not cause a condition of pollution at the University).

Standard Operating Procedures (SOPs) for: Spill Prevention, Control, Clean Up and Reporting	
Last Revision:	6/30/2016
Purpose of SOP:	Stormwater pollution prevention procedures for the spill prevention, control, clean up and reporting.
SOP Administrator:	Grounds Department
Location of SOP:	Z:\Sustainability Committee\EHS\SWPPP\SOPs\SOP_SPILLS.docx

Prerequisites

Employees should attend stormwater pollution prevention training prior to performing the activities in this SOP. Employees performing the procedures in this SOP should read and refer to the materials in the References and Related Procedures section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
2. Storm drain inlet protection (drain covers, booms, berms)
3. Stormwater Pollution Prevention Plan

Standard Operating Procedures

Spill Prevention

- a. Whenever possible, liquid or hazardous materials should be handled, used, stored, re-packing, and transferred indoors or under cover.
- b. Deliveries of bulk liquids should be supervised. Down gradient storm drain inlets should be covered during deliveries.
- c. Cover and contain containers, materials, and wastes.

Spill Kit Maintenance

- a. Spill kits are located at each high priority area identified in the SWPPP.
- b. Each department manager is responsible for spill kit(s) inventory and the reordering of supplies.

Spill Clean Up and Storm Drain Protection

- a. Clean up minor spills (< 5 gallons) immediately.
- b. Block any down gradient storm drains with berms, covers, absorbent socks or "pigs".
- c. Never hose down spills or leaks.
- d. Always use "Dry Clean-up Methods" for clean-up of liquid spills (gasoline, diesel, paint, kitchen grease)
 - i. Spread absorbents (loose absorbents, sheets, pillows, pigs, or socks) on the spill.
 - ii. Sweep up or pick up the absorbed materials.
 - iii. Dispose of wastes properly and in accordance with all regulations.
- e. If fluids are leaking or have spilled on an impermeable surface, such as a roadway, locate nearest down gradient storm drain and dike or berm the drain to prevent fluids from entering it.
- f. After clean up, be sure to sweep up the contaminated absorbent and remove the berm or dike at storm drain.
- g. If fluids are leaking or have spilled on a permeable surface, such as gravel, soil or grass, mark the area and report the spill your supervisor.

Internal Reporting of Spills

For Employees (Non-supervisors)

- a. Notify your direct supervisor immediately
 - i. What spilled
 - ii. How much
 - iii. Where is it

For Supervisors

- Small spills (<5 gallons) that pose no immediate danger to human life or property notify CNU Police (4-7777)
- Small spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police 4-7777.
- Large Spills (>5 gallons) report to CNU Police (4-7777)

Regulatory (External) Reporting of Spills

- a. If a spill or leak is of a hazardous substance that exceeds 1 pint or is of an unknown substance of any amount, call **CNU Police at 4-7777**
 - Notify the **Virginia Department of Environmental Quality (757-518-2000)**
 - If spill occurs during *nights, weekends, or holidays* notify the **Virginia Department of Emergency Management's 24-hour hotline (800-468-8892)**
 - Notify the **National Response Center (800-424-8802)**
- b. Any spill or discharge of any pollutant (ex: oil, paints, fuels, hazardous liquids, sediment, or super-chlorinated water) that reaches storm drains or enters "Waters of the State" must be reported to the Virginia Department of Environmental Quality (757-518-2000) within 24 hours of the release or suspected release.
- c. If the spill is more than 25 gallons of a petroleum product from a regulated storage tank or delivery truck or any amount that causes a sheen on nearby surface water, it must be reported immediately to:
 - Virginia Department of Environmental Quality (757-518-2000)
 - National Response Center (800-424-8802)

References and Related Procedures

BMP: Good Housekeeping & Spill Prevention

Policy: Illicit Discharge Detection and Elimination (IDDE)