

Christopher Newport University
Municipal Separate Storm Sewer System
Program Plan
for the
November 1, 2023 – October 31, 2028 Permit Term
Permit No. VAR040090



Prepared for
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Grounds Department
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Introduction

This Municipal Separate Storm Sewer System (MS4) Program Plan was developed for Christopher Newport University's (CNU) campus in accordance with the *General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems* (VAR040090). The effective date of this permit coverage is November 1, 2023, through October 31, 2028.

The CNU regulated small MS4 is contained within the campus boundaries as shown in Appendix C and includes roads, parking lots, dormitories, academic buildings, building and facilities maintenance, landscaping, libraries, cafeterias, stores, athletic fields, and other areas common to universities. The campus is in the Lower James River watershed within the Hydrologic Unit Codes (HUC) JL38 and JL43. The Campus is also located within the City of Newport News and therefore drains, in part, to the City of Newport News regulated MS4. Part of the CNU regulated MS4 boundary drains to Lake Maury, a BMP within the City of Newport News stormwater regulated MS4. The Lake Maury Watershed Plan is an agreement between CNU, the Mariners' Museum, and the City of Newport News regarding Lake Maury. A copy of the Lake Maury Watershed Plan is provided in Appendix B.

CNU's Program Plan is a management tool to assist in compliance with the six Minimum Control Measures (MCM) and Special Conditions (SC) identified in the Virginia General Permit. Section MCM1 through MCM6 of this program plan describe CNU's plan to comply with the corresponding MCMs as listed below:

MCM 1 – Public Education and Outreach

MCM 2 – Public Involvement and Participation

MCM 3 – Illicit Discharge Detection and Elimination

MCM 4 – Construction Site Stormwater Runoff Control

MCM 5 – Post-Construction Stormwater Management for New or Redevelopment

MCM 6 – Pollution Prevention and Good Housekeeping

These goals and objectives were developed to reduce the discharge of pollutants from the University's MS4 to the "maximum extent practicable", provide adequate progress in meeting water quality standards, and satisfy the appropriate water quality requirements of the State Water Control Law and its attendant

regulations. A description of the roles and responsibilities, policies and procedures, measurable goals, and implementation schedules are provided for each MCM in the corresponding section. Section SC describes CNU’s plan to comply with Chesapeake Bay Total Maximum Daily Load (TMDL) Special Conditions. This Program Plan will be evaluated for appropriateness and updated annually as necessary.

Annual reports summarizing the collective efforts and program changes from the previous reporting year will be submitted to the Virginia Department of Environmental Quality (DEQ) by October 1st of each year. The MS4 Program Plan and annual reports are coordinated through the Grounds Department at CNU. However, many of the MCMs are coordinated through other departments with different people listed as the responsible party and key personnel for each MCM, this can be seen in Appendix A.

Documents incorporated by reference a part of this Plan are presented in **Table 1**, below:

Table 1 – Referenced Documents

Document Title	Date	Available Location
<i>Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management</i>	November 26, 2024	Appendix D of this Document
<i>Chesapeake Bay TMDL Action Plan</i>	Current	Appendix B of this Document
<i>Illicit Discharge Detection and Elimination (IDDE) Policy</i>	Current	Appendix F of this Document
<i>MS4 General Permit</i>	November 1, 2023	https://law.lis.virginia.gov/admincode/title9/agency25/chapter890/section40/
<i>Standard Operating Procedures (SOPS) to Prevent Stormwater Pollution</i>	Current	Appendix E of this Document
<i>Stormwater Pollution Prevention Plan</i>	Current	Appendix E of this Document

Unless otherwise noted, the majority of the above documents can be viewed at CNU’s MS4 webpage: <https://cnu.edu/public/stormwater/>. These documents are updated on an on-going basis and the most recent version should always be referenced.

CNU's MS4 webpage also provides a contact where the public can;

1. Find out more information regarding CNU's MS4 program,
2. Report potential illicit discharges,
3. Report improper disposals,
4. Report spills,
5. Report complaints regarding land disturbing activities,
6. Report other potential stormwater pollution concerns,
7. Provide input on CNU's MS4 Program Plan, or
8. Report other related concerns.

MCM 1 - Public Education and Outreach

Permit Requirements (Part I.E.1)

The Public Education and Outreach Plan shall include:

1. *A list the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;*
2. *The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;*
3. *Identification of the target audience to receive each high-priority stormwater message;*
4. *Nontraditional permittees may identify staff, students, members of the general public, and other users of facilities operated by the permittee as the target audience for education and outreach strategies;*
5. *Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience;*
6. *Staff training required in accordance with Part I.E.6.d does not qualify as a strategy for public education and outreach;*
7. *The strategies from Table 1 of Part I.E.1.d to be used to communicate each high-priority stormwater message; and*
8. *The anticipated time periods the messages will be communicated or made available to the public.*

Responsible Parties and Key Personnel (Refer to Appendix A)

- Director of Grounds
- Grounds Office Manager
- Sustainability Specialist
- Director of Housing
- Director of Building Operations
- Director of Facilities Management
- Associate Director of Grounds

Program Description

CNU has developed a public education and outreach program designed to increase the public's knowledge of how to reduce stormwater pollution. CNU intends to address local water pollution concerns that have been seen on campus in the past. CNU has implemented a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts. CNU has chosen three high-priority stormwater issues to education the public on the above goals, as presented in **Table 2**. Measurable goals by which these strategies will be evaluated are identified in **Table 2**.

Table 2- Public Education and Outreach Table

	Litter and Street Debris	Waste Management	Nutrient Management
Rationale for Selection	Litter and street debris is a water quality issue that is constantly observed and managed by the Grounds Department. In educating the public on this topic, it will minimize the impact of trash on downstream waters.	The University produces a significant amount of waste that has the potential to be reduced and managed more efficiently. In reducing and managing University waste more efficiently refuse storage areas, that have been identified as a high priority stormwater area, can be maintained more easily. This will assist in improving water quality of downstream waterways.	The University takes pride in a clean and green campus but also works to not over-apply nutrients. Excess nutrients can lead to water quality issues in receiving waterways.
Identification of Public Audience	Faculty, staff, students, and visitors	Faculty, staff, and students	Faculty, staff, and students
Applicable Strategies	Alternative materials	Media materials and/or Traditional written materials	Traditional written materials and/or Media materials
Anticipated Time Period Message will be Communicated	Throughout the academic year	Throughout the academic year	Throughout the academic year
Relevant Message	Trash and street debris have a significant impact on receiving waters downstream of campus. Being educated on the impacts litter and street debris can have downstream is an easy step in preventing it.	Waste management advances will reduce waste bound for refuse storage areas and therefore improve water quality impairments to receiving waterways. Being educated on the impacts of excess and/or unnecessary waste can assist in preventing downstream pollution.	Applying nutrients in excess does not help with landscaping. Although the additional nutrients may not seem like a big deal they get washed downstream and impact the waterways and aquatic life.
Potential Materials Used	Drink coasters, stickers, and/or business cards	Social media posts, brochures, and/or newsletters	Factsheets, and/or social media posts

	Litter and Street Debris	Waste Management	Nutrient Management
Distribution Methods	Distribute materials during student move-in or other events.	Post related material on CNU sponsored pages, email newsletters to applicable CNU groups, distribute brochures around campus.	Distribute factsheets around campus, post related material on CNU sponsored pages.
Metric	How many items were distributed?	How many items were distributed and/or how many posts were made?	How many items were distributed and/or how many posts were made?

Measurable Goals

Throughout implementation of the Public Outreach and Education program with a focus on litter and street debris, refuse removal/storage areas, and nutrient management, CNU will annually evaluate the effectiveness of the University's efforts. Progress or changes to these efforts will be noted in the Annual report, along with documentation of:

- Number of traditional and alternative materials passed out;
- Number of media posts; and

Annual Reporting Requirements

1. *A list the high-priority stormwater issues addressed in the public education and outreach program;*
2. *A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues; and*
3. *A description of any changes in high-priority stormwater issues, including, strategies used to communicate high-priority stormwater issues or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of these changes.*
4. *A description of public education and outreach activities conducted that included education regarding climate change.*

MCM 2 - Public Involvement and Participation

Permit Requirements (Part I.E.2)

The Public Involvement and Participation Plan shall include:

1. *The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;*
2. *The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and*
3. *A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup or the number of participants in a hazardous waste collection event.*

Responsible Parties and Key Personnel (Refer to Appendix A)

- Director of Grounds
- Director of Facilities Management
- Communications and Public Relations Office Manager
- Director of Orientation and Student Engagement
- Assistant Director of Greek Life and Student Organizations
- Grounds Office Manager
- Assistant Director of Community Engagement

Program Description

CNU maintains an MS4 webpage at the following link: <https://cnu.edu/public/stormwater/>. The webpage hosts CNU's effective MS4 permit and coverage letter (also located in Appendix B), the most current MS4 Program Plan, the Annual Report for each year covered by the current permit, and the current Chesapeake Bay TMDL Action Plan (also located in Appendix B). The webpage also lists a contact with whom the public can report potential illicit discharges, improper disposal, spills to the MS4, complaints regarding land disturbing activities or other potential stormwater pollution concerns, or input on CNU's MS4 program. CNU will maintain electronic records of all input or complaints received on the MS4 Program Plan and will also maintain electronic records of all responses.

CNU will participate in the following activities, as presented in **Table 3**, to encourage public involvement with stormwater and environmental activities. Measurable goals by which these strategies will be evaluated are identified by each metric in **Table 3**.

Table 3 - Public Involvement and Participation Matrix

Public Involvement Activities	Description	Anticipated Time Periods	Metrics
On-Campus Signage (Pollution Prevention)	CNU installed pet waste stations on campus to encourage faculty, staff, students, and visitors to collect and properly dispose of pet waste. They have also installed storm drain medallions on all campus storm drain inlets to help remind the community about stormwater pollution.	Throughout the academic year	Were the pet waste stations maintained throughout the year? Number of pet waste stations added or removed. Number of storm drain medallions installed or replaced.
Student Engagement Events (Public Education Activity)	CNU works to educate and engage student organizations in stormwater related events. These events can include construction fence painting, eco-friendly car washes, etc.	Throughout the academic year	Number and type of student events held throughout the year.
Community Education Events (Public Education Activity)	CNU hosts booths at events throughout the year that work to reach out and educate the community at large. These events can include the CNU Gardening Symposium, STEM Community Day, Sustainability Fair, etc.	Throughout the academic year	Number and name of events that CNU hosted educational booths at.
Student Clean-up Events (Restoration)	CNU students participate in annual trash cleanup events and other various events around campus and the surrounding community to pick up litter.	Throughout the academic year	Number of student participants and/or number of trash bags collected.

Should CNU be unable to execute one of the programs specified above, an appropriate substitute program will be identified and completed as an alternative.

Measurable Goals

The University's goal is to implement an effective Public Involvement and Participation program, therefore CNU will evaluate the effectiveness of the program annually. Progress, or success, of the program will be measured by how well the information is received by participants and by the metrics listed in **Table 3**.

Annual Reporting Requirements

1. *A summary of any public comments on the MS4 program received and how the permittee responded;*
2. *A summary of stormwater pollution complaints received under the procedures established in Part I.E.2.a.(1), excluding natural flooding complaints, and how the permittee responded;*
3. *A webpage address to the permittee's MS4 program and stormwater website;*
4. *Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website, such as intranet, shall provide evidence of the current internal MS4 program and stormwater pollution prevention webpage;*
5. *A description of the public involvement activities implemented by the permittee, including any efforts to reach out and engage all economic and ethnic groups;*
6. *A description of public education and outreach activities conducted that also included education regarding climate change;*
7. *A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and*
8. *The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.*

MCM 3 – Illicit Discharge Detection and Elimination

Permit Requirements (Part I.E.3)

Illicit Discharge Detection and Elimination shall include:

1. *The MS4 map and outfall information table required by Part I.E.3.a. The map and outfall information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;*
2. *Copies of written notifications of physical interconnections given by the permittee to other MS4s; and*
3. *The IDDE procedures described in Part I.E.3.c.*

Responsible Parties and Key Personnel (Refer to Appendix A)

- Director of Grounds
- Director of Environmental Health and Safety
- Environmental Health and Safety Manager
- Compliance Coordinator

Program Description

CNU has an updated MS4 map, that shows at a minimum the requirements specified in Part I.E.3.a., and can be seen in Appendix C. CNU has three outfalls located in within their regulated MS4 area. As of June 5, 2026, CNU has 22 physical interconnections with the City of Newport News and three standard outfalls. **Table 4**, below, lists all outfalls with their corresponding information. Written notification of physical interconnection is provided in Appendix B.

Table 4 - Outfall Information

Unique Identifier	Coordinates	Estimated Regulated Area Draining to Outfall	Receiving Water	6 th Order Hydrologic Unit Code	Impairment Status	EPA Approved TMDL
Outfall 1	37.05965878, -76.48876307	25.11	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall 2	37.05905633, -76.4898214	7.01	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall 3	37.05913711, -76.49026713	84.5	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay

Unique Identifier	Coordinates	Estimated Regulated Area Draining to Outfall	Receiving Water	6 th Order Hydrologic Unit Code	Impairment Status	EPA Approved TMDL
Outfall C1	37.06174323, -76.49270519	12.41	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C2	37.06203351, -76.49931205	2.55	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C3	37.06234487, -76.4998022	1.24	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C4	37.06240406, -76.49971602	0.75	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C5	37.06274622, -76.50023702	2.08	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C6	37.06325663, -76.50085463	1.57	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C7	37.06356925, -76.5010816	1.91	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C8	37.06362152, -76.50098607	2.15	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C9	37.06562821, -76.5001876	0.77	Warwick River	HUC JL38/020802060901	No	Chesapeake Bay
Outfall C10	37.0658331, -76.49973915	0.94	Warwick River	HUC JL38/020802060901	No	Chesapeake Bay
Outfall C11	37.0681926, -76.49297882	3.89	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C12	37.06893169, -76.49331902	1.36	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C13	37.06902003, -76.49377894	0.02	Warwick River	HUC JL38/020802060901	No	Chesapeake Bay
Outfall C14	37.06216764, -76.48775159	0.08	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C15	37.06194551, -76.48733826	0.17	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C16	37.06491111, -76.49063396	0.69	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C17	37.0652592, -76.4905454	0.39	James River-Cooper Creek	HUC JL43/020802060906	No	Chesapeake Bay

Unique Identifier	Coordinates	Estimated Regulated Area Draining to Outfall	Receiving Water	6 th Order Hydrologic Unit Code	Impairment Status	EPA Approved TMDL
Outfall C18	37.10481783, -76.49215927	0.55	Warwick River	HUC JL38/020802060901	No	Chesapeake Bay
Outfall C19	37.1054192, -76.49294811	0.82	Warwick River	HUC JL38/020802060901	No	Chesapeake Bay
Outfall C20	37.06902556, -76.49372309	0.08	Warwick River	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C21	37.0690497, -76.49361141	0.06	Warwick River	HUC JL43/020802060906	No	Chesapeake Bay
Outfall C22	37.105431, -76.4918287	1.89	Warwick River	HUC JL38/020802060901	No	Chesapeake Bay

CNU prohibits unauthorized non-stormwater discharges into the storm sewer system through the “Illicit Discharges” section of their *Illicit Discharge Detection and Elimination (IDDE) Policy* (found in Appendix F) and contract language.

Measurable Goals

The University’s goal is to maintain permit compliance by reducing or eliminating non-stormwater discharges through the implementation of this program. The number of outfalls and interconnected discharge points screened, reported on, and responses recorded each year will be the measurable goal by which these strategies will be evaluated.

Annual Reporting Requirements

1. A confirmation statement that the MS4 map and outfall information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year;
2. The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program; and
3. A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:
 - a. The location and source of illicit discharge;
 - b. The dates that the discharge was observed, reported or both;
 - c. Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);

- d. How the investigation was resolved;*
- e. A description of any follow-up activities; and*
- f. The date the investigation was closed.*

MCM 4 – Construction Site Stormwater Runoff and Erosion and Sediment Control

Permit Requirements (Part I.E.4)

Construction Site Stormwater Runoff and Erosion and Sediment Control shall include:

1. *If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I.E.4.a(1), the local ordinance citation for the VESCP program;*
2. *If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I.E.4.a(2), the county ordinance citations for the VESCP program the town is subject to;*
3. *If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I.E.4.a(3):*
 - a. *The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and*
 - b. *A copy of the most recent standards and specifications approval letter from the department;*
4. *A description of the legal authorities utilized to ensure compliance with Part I.E.4.a. for erosion and sediment control and construction site stormwater runoff control, such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;*
5. *For traditional permittees, written inspection procedures to ensure VESCP requirements are maintained in accordance with 9VAC25-840-90A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60B;*
6. *For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the department in accordance with §62.1-44.15:55 of the Code of Virginia. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following:*
 - a. *An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to ensure continued performance of their intended function; and*
 - b. *A list of all associated documents utilized for inspections, including checklists, department approved erosion and sediment control plans, or the most recently department approved annual standards and specifications, and any other documents utilized;*

7. *Traditional permittees shall maintain written procedures for requiring VESCP compliance through corrective action or enforcement action in accordance with §62.1-44.15.58 of the Code of Virginia.*
8. *Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and*
9. *The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site stormwater runoff control requirements in Part I.E.4.*

Responsible Parties and Key Personnel (Refer to Appendix A)

- Director of Grounds
- Director of Capital Outlay Management
- Architectural Associate

Program Description

Any construction activities that take place on the CNU campus are regulated by the Virginia Stormwater Management Act, Virginia Erosion and Stormwater Management Program (VESMP) Regulation (9VAC25-875), and University *Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management* (AS&S). University AS&S and associated approval letter can be viewed in Appendix D or on the University webpage <https://cnu.edu/public/stormwater/>. 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.

Inspection procedures, forms and checklists can be found in Appendix C or D. 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. On top of this, 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.

If a contractor is found not to be in compliance, CNU has language in their standard contract (General Conditions of the Contract CO-7) which provides the ability for CNU to enforce compliance.

Measurable Goals

The University's Goal is to operate a compliant Erosion and Sediment Control Program. The number of AE firms receiving the AS&S each year, as well as the number of ESC inspections conducted will be the measurable goals by which these strategies are evaluated.

Annual Reporting Requirements

1. *Total number of erosion and sediment control inspections conducted;*
2. *Total number of each type of compliance action and enforcement action implemented; and*
3. *For nontraditional permittees:*
 - a. *A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with current department approved annual standards and specifications for erosion and sediment control;*
 - b. *If any land disturbing projects were conducted without department approved annual standards and specifications, a list of all land disturbing projects that occurred during the reporting period with erosion and sediment control plan approval dates for each project.*

MCM 5 – Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands

Permit Requirements (Part I.E.3)

Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands shall include:

1. *If the permittee implements a VSMP in accordance with Part I.E.5.a(1), (2), or (3):*
 - a. *A copy of the VSMP approval letter issued by the department;*
 - b. *Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and*
 - c. *Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned stormwater management facilities;*
2. *If the permittee implements a post-development stormwater runoff control program in accordance with Part I.E.5.a(4):*
 - a. *The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and*
 - b. *A copy of the most recent standards and specifications approval letter from the department;*
3. *A description of the legal authorities utilized to ensure compliance with Part I.E.5.a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;*
4. *Written inspection and maintenance procedures and other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and*
5. *The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program.*

Responsible Parties and Key Personnel (Refer to Appendix A)

- Director of Grounds
- Environmental Health and Safety Manager
- Compliance Coordinator

Program Description

CNU shall address post-construction stormwater runoff that enters the MS4 by implementing a post-construction stormwater runoff management program in accordance with The Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of Code of Virginia), VESMP Regulations (9VAC25-875) and CNU Annual Standards and Specifications (AS&S) that are submitted to DEQ annually. A copy of the approved AS&S are included in Appendix D as well as on the CNU website. For stormwater management facilities located within the CNU campus, inspections are performed annually, and maintenance is performed on an as needed basis. A copy of the inspection form utilized annually can be found in Appendix C. Employees and/or contractors inspecting stormwater management facilities are required to have appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations. CNU does not have any privately owned stormwater management facilities and therefore is responsible for the inspection and maintenance of all facilities in the regulated area.

Table 5 below lists all known permanent stormwater management facilities within the regulated area, these have also been uploaded to the DEQ BMP Warehouse, and will be updated as needed. A map showing locations of these facilities can be seen in Appendix C.

Table 5 - BMP Information

BMP Label	BMP Description	Type of Structural Stormwater Facility	Coordinates	Geographic Location (HUC)	Where Applicable, the Impaired Surface Water that the Facility Discharges Into	Number of Acres Treated
BMP 2	James River Residence Hall	Extended Detention Basin	37.064330, -76.496709	JL 38 & JL 43/G11	NA	5.37
BMP 5	Parking Lot A	Bioretention	37.060208 -76.489488	JL 43/G11	NA	1.06
BMP 6	Turf Field Replacement	Bioretention	37.063252 -76.498511	JL 43/G11	NA	2.18
BMP 7	Parking Lot C1/C2	Stormkeeper Sediment Strip	37.062798 -76.489513	JL 43/G11	NA	1.39

Measurable Goals

The University's goal is to implement practices that support post construction stormwater management, therefore CNU will evaluate the effectiveness of the program annually. Progress, or success, of the program will be measured by how many BMPs are inspected and maintained, as well as implementation of the VESMP and University AS&S.

Annual Reporting Requirements

1. *If the traditional permittee implements a VSMP in accordance with Part I.E.5.a(1), (2), or (3):*
 - a. *The number of privately owned stormwater management facility inspections conducted;*
and
 - b. *The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;*
2. *Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;*
3. *A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;*
4. *For traditional permittees as specified in Part I.E.5.a(1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III.B.1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);*
5. *A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III.B.1 and 2; and*
6. *A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III.B.5.*

MCM 6 – Pollution Prevention and Good Housekeeping

Permit Requirements (Part I.E.6)

Pollution Prevention and Good Housekeeping shall include:

1. *A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I.E.6.a and b;*
2. *A list of all high-priority facilities owned or operated by the permittee required to maintain an SWPPP in accordance with Part I.E.6.g that includes the facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference;*
3. *A list of locations for which turf and landscape nutrient management plans are required in accordance with Part I.E.6.n and s, including the following information:*
 - a. *The total acreage covered by each nutrient management plan;*
 - b. *The DCR approval date and expiration date for each nutrient management plan;*
 - c. *The location of the nutrient management plan hardcopy or electronic document being maintained;*
4. *A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plan as appropriate; and*
5. *The written training plan as required in Part I.E.6.d.*

Responsible Parties and Key Personnel (Refer to Appendix A)

- Director of Grounds
- Director of Environmental Health and Safety
- Director of Facilities Management
- Director of Building Operations
- Environmental Health and Safety Manager
- Compliance Coordinator
- Associate Director of Grounds

Program Description

Pollution Prevention and Good Housekeeping Standard Operating Procedures

CNU has developed and implemented *Pollution Prevention and Good Housekeeping Standard Operating Procedures* (SOPs) designed to minimize or prevent pollutant discharge from daily operations and maintenance activities such as: equipment maintenance, and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers. The SOPs are available in Appendix E. These SOPs will be made available to all contractors working on campus and must be adhered to.

High Priority Facilities

Table 6, below, lists high-priority facility within CNU’s regulated MS4 boundary.

Table 6 - High Priority Facilities

High Priority Facility	Facility Location	Location in Which Plan is Located
CNU Campus	1 Avenue of the Arts, Newport News, VA 23606	SWPPP is maintained electronically and is available online

CNU has developed and implemented one University-wide SWPPP to encompass all the facilities on campus that have a high potential to discharge pollutants in stormwater. Specific locations that have been identified as having high potential to discharge pollutants are presented in **Table 7**.

Table 7 – Locations with High Potential to Discharge Pollutants

Facility Name	Facility Location
Waste Management Areas	Throughout campus (See SWPPP for specific locations)
Athletics Department Operations	220 Prince Drew Rd, Newport News, VA 23606
CNU Village	12368 Warwick Blvd, Newport News, VA 23606
David Student Union	Avenue of the Arts, Newport News, VA 23606
Facilities Management Building	11 Sweetbriar Dr, Newport News, VA 23606
Ferguson Center	Avenue of the Arts, Newport News, VA 23606
Grounds Department Compound	437 University Place, Newport News, VA 23606
Hidden-Hussey Commons	Avenue of the Arts, Newport News, VA 23606

The SWPPP will be updated as needed to address new areas and uses on campus. CNU will review the SWPPP no later than 30 days after any unauthorized discharge and update the SWPPP within 90 days. The SWPPP is presented in Appendix E.

Nutrient Management Plans

CNU has prepared two NMPs to cover for all turf grounds and athletic fields that receive fertilizer on campus, as required by §10.1-104.4 of the Code of Virginia. One NMP covers the campus grounds/turf and a separate one covers the athletic fields/turf. The most recent NMP approval letter can be found in Appendix E. **Table 8**, below, lists lands for which turf and landscape management plans have been implemented.

Table 8 - Nutrient Management Plans

Area	Total Acreage	DCR Most Recently Approved Plan	Expiration of DCR Most Recently Approved Plan	Location in Which the Plan is Located
CNU Grounds	48	July 5, 2024	July 5, 2027	Director of Grounds Office
CNU Athletic Fields	17	May 6, 2024	May 6, 2027	

Good Housekeeping and Pollution Prevention When Working with Contractors

Employees and contractors hired by the permittee who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act Certification by VDACS Pesticide and Herbicide Applicator program shall constitute compliance with this requirement.

When signing a contract to work with the University all outside parties must agree to the University's standard terms and conditions. If a contractor is found not to be in compliance, CNU has language in their standard contract (General Conditions of the Contract CO-7) which provides the ability for CNU to enforce compliance.

Training Plan

Training regarding CNU SOPs and SWPPP occur at least once every 24 months. Employees and contractors hired by the permittee who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act Certification by VDACS Pesticide and Herbicide Applicator program. Grounds and trades will be trained in hazardous communication and the training will also include the IDDE policy and pollution prevention. In addition, a small amount of introductory training regarding pollution prevention and SOPs will be provided to all new employees during their orientation. A complete training plan can be seen in Appendix E.

Measurable Goals

The University's goal is to implement practices that support pollution prevention and good housekeeping, therefore CNU will evaluate the effectiveness of the program annually. Progress, or success, of the program will be measured by how well the SOPs and SWPPPs are implemented.

Annual Reporting Requirements

1. *A summary of any written procedures developed or modified in accordance with Part I.E.6.a and b during the reporting period;*
2. *A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period;*
3. *A list of any new SWPPPs developed in accordance with Part I.E.6.i during the reporting period;*
4. *A summary of any SWPPPs modified in accordance with Part I.E.6.j, l or m;*
5. *The rationale of any high-priority facilities delisted in accordance with Part I.E.6.l or m during the reporting period;*
6. *The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired);*
7. *A list of the training activities conducted in accordance with Part I.E.6.d, including the following information:*
 - a. *The completion date for the training activity;*
 - b. *The number of employees who completed the training activity; and*
 - c. *The objectives and good housekeeping procedures covered by the training activity.*

APPENDIX A

MCM SUMMARY OF RESPONSIBLE PERSONNEL

MCM 1 – Public Education and Outreach		
Activity	Responsible Party	Key Personnel
Litter and Street Debris Information Distribution	Director of Grounds	Grounds Office Manager Sustainability Specialist
Waste Management	Director of Grounds	Director of Housing Sustainability Specialist Director of Building Operations Director of Facilities Management
Nutrient Management Information Distribution	Director of Grounds	Associate Director of Grounds Grounds Office Manager
MS4 Program Update	Director of Grounds	Director of Grounds
MCM 2 – Public Involvement and Participation		
Activity	Responsible Party	Key Personnel
On-Campus Signage	Director of Grounds	Director of Facilities Management Communications and Public Relations Office Manager
Student Engagement Events	Director of Grounds	Assistant Director of Community Engagement Director of Orientation and Student Engagement Assistant Director of Greek Life and Student Organizations Grounds Office Manager
Community Education Events	Director of Grounds	Assistant Director of Community Engagement Director of Orientation and Student Engagement Assistant Director of Greek Life and Student Organizations Grounds Office Manager
Student Clean-up Events	Director of Grounds	Assistant Director of Community Engagement Director of Orientation and Student Engagement Assistant Director of Greek Life and Student Organizations
MS4 Website Update	Assistant Director of Digital Content	Director of Grounds

MCM 3 – Illicit Discharge Detection & Elimination		
Activity	Responsible Party	Key Personnel
MS4 Map and Outfall Information Table Update	Director of Grounds	Director of Grounds
IDDE Policy and Procedure Updates	Director of Grounds	Director of Environmental Health and Safety
Dry Weather Screenings	Director of Environmental Health and Safety	Environmental Health and Safety Manager Compliance Coordinator
Illicit Discharge Detection Tracking and Reporting	Director of Environmental Health and Safety	Environmental Health and Safety Manager Compliance Coordinator
MCM 4 – Construction Site Stormwater Runoff Control		
Activity	Responsible Party	Key Personnel
Annual Standards and Specifications Updates	Director of Grounds	Director of Capital Outlay Management
VESCP Inspections	Director of Capital Outlay Management	Architectural Associate Director of Grounds
Inspection Checklist/Procedure Updates	Director of Capital Outlay Management	Architectural Associate Director of Grounds
Construction Site Erosion and Sediment Control Monitoring	Director of Capital Outlay Management	Architectural Associate Director of Grounds
Construction Site Stormwater Runoff Control Monitoring	Director of Capital Outlay Management	Architectural Associate Director of Grounds
MCM 5 –Post-Construction Stormwater Management for New Development and Development on Prior Developed Lands		
Activity	Responsible Party	Key Personnel
Stormwater Management Facility Inspections	Director of Grounds	Environmental Health and Safety Manager Compliance Coordinator
Stormwater Management Facility Inspection Procedure Updates	Director of Grounds	Environmental Health and Safety Manager
Stormwater Management Facility Maintenance	Director of Grounds	Director of Grounds
MCM 6 – Pollution Prevention and Good Housekeeping		
Activity	Responsible Party	Key Personnel
Standard Operating Procedures (SOP) updates	Director of Grounds	Director of Environmental Health and Safety Director of Facilities Management Director of Building Operations

Stormwater Pollution Prevention Plan (SWPPP) updates	Director of Grounds	Director of Environmental Health and Safety Director of Facilities Management Director of Building Operations
Annual SWPPP Inspection	Director of Grounds	Environmental Health and Safety Manager Compliance Coordinator
Field Personnel/ Employee Training	Director of Grounds	Director of Grounds
Nutrient Management Training	Director of Grounds	Associate Director of Grounds
Nutrient Management Plan Updates	Director of Grounds	Associate Director of Grounds

APPENDIX B

REFERENCE DOCUMENTS



Commonwealth of Virginia
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

P.O. Box 1105, Richmond, Virginia 23218

(800) 592-5482

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD. PWS Emeritus
Director

October 30, 2023

Ms. M. Christine Ledford
Vice President for Administration and Auxiliary Services
1 Avenue of the Arts
Newport News, VA 23606

Transmitted electronically: Christine.ledford@cnu.edu

Re: General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems General Permit Number VAR040090, Christopher Newport University

Dear Ms. Ledford:

Department staff has reviewed your Registration Statement and determined that the referenced Municipal Storm Sewer System (MS4) is hereby covered under the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems. The effective date of your coverage under this general permit is November 1, 2023, or the date of this letter, whichever is later. You may obtain a copy of the general permit from <https://law.lis.virginia.gov/admincode/title9/agency25/chapter890/section40/>.

Please submit future permit correspondence and your annual MS4 program reports to David A. Taylor of the DEQ Tidewater Regional Office at david.a.taylor@deq.virginia.gov. The general permit will expire on October 31, 2028. The conditions of the permit require that you submit a new registration statement on or before August 3, 2028, if you wish to have continued coverage under the general permit.

If you have any questions about this letter or the general permit, please contact David A. Taylor at (757) 705-8293 or david.a.taylor@deq.virginia.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Meghan M. Mayfield".

Meghan M. Mayfield
Director, Water Permitting

c: TRO file/ECM

Mr. Dean Whitehead, Director of Grounds, Christopher Newport University

Virginia Administrative Code

Title 9. Environment

Agency 25. State Water Control Board

Chapter 890. Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s)

9VAC25-890-40. General permit.

Any MS4 operator whose registration statement is accepted by the department will receive coverage under the following general permit and shall comply with the requirements in this general permit and be subject to all applicable requirements of the Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870) and the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulations (9VAC25-31).

General Permit No.: VAR04

Effective Date: November 1, 2023

Expiration Date: October 31, 2028

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

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

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

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

Part I

Discharge Authorization and Special Conditions

A. Coverage under this state permit. During the period beginning with the date of coverage under this general permit and lasting until the expiration and reissuance of this state permit, the permittee is authorized to discharge stormwater and those authorized nonstormwater discharges described in 9VAC25-890-20 D in accordance with this state permit from the small municipal separate storm sewer system identified in the registration statement into surface waters within the boundaries of the Commonwealth of Virginia and consistent with 9VAC25-890-30.

B. The permittee shall develop, implement, and enforce an MS4 program designed to reduce the discharge of pollutants from the MS4 to the MEP in accordance with this permit, to protect water quality, and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations. The permittee shall utilize the legal authority provided by the laws and regulations of the Commonwealth of Virginia to control discharges to and from the MS4. This legal authority may be a combination of statute, ordinance, permit, policy, specific contract language, order, or interjurisdictional agreements. The MS4 program shall include the minimum control measures (MCM) described in Part I E. For the purposes of this permit term, implementation of MCMs in Part I E and the Chesapeake Bay and local TMDL requirements in Part II (as applicable) consistent with the provisions of an iterative MS4 program required pursuant to this general permit constitutes compliance with the standard of reducing pollutants to the MEP, provides adequate progress in meeting water quality standards, and satisfies the appropriate water quality requirements of the State Water Control Law and its attendant regulations.

C. The MS4 program plan.

1. The MS4 program plan shall include, at a minimum, the following written items:

a. The roles and responsibilities of each of the permittee's divisions and departments in the implementation of the requirements of the permit tasked with ensuring that the permit requirements are met;

b. If the permittee utilizes another entity to implement portions of the MS4 program, a copy of the written agreement. The description of each party's roles and responsibilities, including any written agreements with third parties, shall be updated as necessary;

c. For each MCM in Part I E, the following information shall be included:

(1) Each specific requirement as listed in Part I E for each MCM;

(2) A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions in Part I E;

(3) All standard operating procedures or policies necessary to implement the BMPs;

(4) The measurable goal by which each BMP or strategy will be evaluated; and

(5) The persons, positions, or departments responsible for implementing each BMP or strategy; and

d. A list of documents incorporated by reference, including the version and date of the document being incorporated.

2. If the permittee is receiving initial coverage under this general VPDES permit for the discharge of stormwater, the permittee shall:

a. No later than six months following the date of permit coverage, submit to the department a schedule for the development of each component of the MS4 program plan in accordance with Part I C 1 that does not exceed October 31, 2028, unless the department

grants a later date; and

b. Provide to the department a copy of the MS4 program plan upon completion of development.

3. If the permittee was previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, the permittee shall update the MS4 program plan to meet the requirements of this permit no later than six months after the effective date of this permit unless otherwise specified in another permit condition and shall post the most up-to-date version of MS4 program plan on the permittee's website or location where the MS4 program plan can be obtained as required by Part I E 2 within 30 days of updating the MS4 program plan. Until such time that the MS4 program plan is updated in accordance with Part I E, the permittee shall continue to implement the MS4 program plan in effect at the time that coverage is issued under this general permit.

4. Revisions to the MS4 program plan are expected throughout the life of this permit as part of the iterative process to reduce pollutant loading and protect water quality to the MEP. As such, revisions made in accordance with this permit as a result of the iterative process do not require modification of this permit. The permittee shall summarize revisions to the MS4 program plan as part of the annual report as described in Part I D 3.

5. The permittee may demonstrate compliance with one or more MCM in Part I E through implementation of separate statutory or regulatory programs provided that the permittee's MS4 program plan identifies and fully describes any program that will be used to satisfy one or more of the minimum control measures of Part I E. If the program that the permittee is using requires the approval of a third party, the program shall be fully approved by the third party, or the permittee shall be working toward getting full approval. Documentation of the program's approval status or the progress toward achieving full approval shall be included in the annual report required by Part I D. The permittee shall remain responsible for compliance with the permit requirements if the other entity fails to implement one or more components of the control measures.

6. The permittee may rely on another entity to satisfy the permit requirements to implement a minimum control measure if:

- a. The other entity, in fact, implements the control measure;
- b. The particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement;
- c. The other entity agrees to implement the control measure on behalf of the permittee; and
- d. The agreement between the parties is documented in writing and retained by the permittee with the MS4 program plan for as long as the agreement is active.

The permittee shall remain responsible for compliance with requirements of the permit and shall document in the annual reports required in accordance with Part I D that another entity is being relied on to satisfy all or part of the state permit requirements. The permittee shall

provide the information required in Part I D.

7. If the permittee relies on another governmental entity regulated under 9VAC25-870-380 to satisfy all of the state permit obligations, including the obligation to file periodic reports required by Part I D, the permittee must note that fact in the registration statement, but is not required to file the periodic reports. The permittee remains responsible for compliance with the state permit requirements if the other entity fails to implement the control measures or components thereof.

D. Annual reporting requirements.

1. The permittee shall submit an annual report to the department no later than October 1 of each year in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department; the required content of the annual report is specified in Part I E and Part II B. The report shall cover the previous year from July 1 to June 30.

2. Following notification from the department of the start date for the required electronic submission of annual reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. The annual report shall include the following general information:

- a. The permittee, system name, and permit number;
- b. The reporting period for which the annual report is being submitted;
- c. A signed certification as per Part IV K;
- d. Each annual reporting item as specified in an MCM in Part I E; and
- e. An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program's effectiveness and whether or not changes to the MS4 program plan are necessary.

4. For permittees receiving initial coverage under this general VPDES permit for the discharge of stormwater, the annual report shall include a status update on each component of the MS4 program plan being developed. Once the MS4 program plan has been updated to include implementation of a specific MCM in Part I E, the permittee shall follow the reporting requirements established in Part I D 3.

5. For those permittees with requirements established under Part II B, the annual report shall include a status report on the implementation of the local TMDL action plans in accordance with Part II B including any revisions to the plan.

6. For the purposes of this permit, the MS4 program plan , annual reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports shall be

maintained as separate documents and submitted to the department as required by this permit as separate documents.

E. Minimum control measures.

1. Public education and outreach.

a. The permittee shall implement a public education and outreach program designed to:

(1) Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;

(2) Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and

(3) Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

b. The permittee shall identify no fewer than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control, BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration projects, and illicit discharges from commercial sites.

c. The high-priority public education and outreach program, as a whole, shall:

(1) Clearly identify the high-priority stormwater issues;

(2) Explain the importance of the high-priority stormwater issues;

(3) Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues; and

(4) Provide a contact and telephone number, website, or location where the public can find out more information.

d. The permittee shall use two or more of the strategies listed in Table 1 per year to communicate to the target audience the high-priority stormwater issues identified in accordance with Part I E 1 b, including how to reduce stormwater pollution.

Table 1 Strategies for Public Education and Outreach	
Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact

	sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, newspaper, or GIS story maps
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials
Public education activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials

	to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, climate change's effects on stormwater management, voluntary residential low impact development, or other stormwater issues

e. The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.

f. The MS4 program plan shall include:

- (1) A list of the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;
- (2) The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;
- (3) Identification of the target audience to receive each high-priority stormwater message;
- (4) Nontraditional permittees may identify staff, students, members of the general public, and other users of facilities operated by the permittee as the target audience for education and outreach strategies;
- (5) Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience;
- (6) Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach;

(7) The strategies from Table 1 of Part I E 1 d to be used to communicate each high-priority stormwater message; and

(8) The anticipated time periods the messages will be communicated or made available to the public.

g. The annual report shall include the following information:

(1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;

(2) A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues;

(3) A description of any changes in high-priority stormwater issues, including, strategies used to communicate high-priority stormwater issues or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of these changes ; and

(4) A description of public education and outreach activities conducted that included education regarding climate change.

2. Public involvement and participation.

a. The permittee shall develop and implement procedures for the following:

(1) The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;

(2) The public to provide comments on the permittee's MS4 program plan;

(3) Responding to public comments received on the MS4 program plan ; and

(4) Maintaining documentation of public comments received on the MS4 program and associated MS4 program plan and the permittee's response.

b. No later than three months after this permit's effective date, the existing permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:

(1) The effective MS4 permit and coverage letter;

(2) The most current MS4 program plan or location where the MS4 program plan can be obtained;

(3) The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department;

(4) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained;

(5) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department;

(6) A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1);

(7) Methods for how the public can provide comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13; and

(8) Federal and state nontraditional permittees with security policies preventing a MS4 program and stormwater pollution prevention webpage from being publicly accessible may utilize an internal staff accessible webpage such as an intranet webpage to meet the requirements of Part 1 E 2 b.

c. Traditional permittees shall implement no fewer than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

d. Nontraditional permittees shall implement, promote, participate in, or coordinate on no fewer than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

Table 2 Public Involvement Opportunities	
Public involveme nt opportunit ies	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoratio n	Stream , watershed, shoreline, beach, or park clean-up day, adopt-a- waterway program, tree plantings, and riparian buffer plantings

Public education activities	Booth at community fair, demonstration of stormwater control projects, climate change's effects on stormwater management, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, voluntary residential low impact development, climate change's effects on stormwater management, or other stormwater issues
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking

	program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.
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e. The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.

f. The permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, groundskeeping, and maintenance duties in order for an event to qualify as a public participation event.

g. Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity solicits participation from target audiences beyond staff or contractors with stormwater, groundskeeping, and maintenance duties.

h. The MS4 program plan shall include:

(1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;

(2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and

(3) A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup or the number of participants in a hazardous waste collection event.

i. The annual report shall include the following information:

(1) A summary of any public comments on the MS4 program received and how the permittee responded;

(2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1), excluding natural flooding complaints, and how the permittee responded;

(3) A webpage address to the permittee's MS4 program and stormwater website;

(4) Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website, such as intranet, shall provide evidence of the

current internal MS4 program and stormwater pollution prevention webpage;

(5) A description of the public involvement activities implemented by the permittee, including any efforts to reach out and engage all economic and ethnic groups;

(6) A description of public education and outreach activities conducted that also included education regarding climate change;

(7) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and

(8) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.

3. Illicit discharge detection and elimination.

a. The permittee shall develop and maintain an accurate MS4 map and information table as follows:

(1) An updated map of the MS4 owned or operated by the permittee within the MS4 regulated service area no later than 24 months after the permit effective date that includes, at a minimum:

(a) MS4 outfalls discharging to surface waters, except as follows:

(i) In cases where the outfall is located outside of the MS4 permittee's legal responsibility, the permittee may elect to map the known point of discharge location closest to the actual outfall; and

(ii) In cases where the MS4 outfall discharges to receiving water channelized underground, the permittee may elect to map the point downstream at which the receiving water emerges above ground as an outfall discharge location. If there are multiple outfalls discharging to an underground channelized receiving water, the map shall identify that an outfall discharge location represents more than one outfall. This is an option a permittee may choose to use and recognizes the difficulties in accessing outfalls to underground channelized stream conveyances for purposes of mapping, screening, or monitoring;

(b) A unique identifier for each mapped item required in Part I E 3;

(c) The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;

(d) MS4 regulated service area; and

(e) Stormwater management facilities owned or operated by the permittee.

(2) The permittee shall maintain an outfall information table associated with the MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a). The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following:

- (a) A unique identifier as specified on the MS4 map;
 - (b) The latitude and longitude of the outfall or point of discharge;
 - (c) The estimated regulated acreage draining to the outfall or point of discharge;
 - (d) The name of the receiving water;
 - (e) The 6th Order Hydrologic Unit Code of the receiving water;
 - (f) An indication as to whether the receiving water is listed as impaired in the Virginia 2022 305(b)/303(d) Water Quality Assessment Integrated Report; and
 - (g) The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.
- (3) No later than 24 months after permit issuance, the permittee shall submit to DEQ, a format file geodatabase or two shapefiles that contain at a minimum:
- (a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (2); and
 - (b) A polygon feature class or shapefile for the MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information:
 - (i) MS4 operator name;
 - (ii) MS4 permit number (VAR04); and
 - (iii) MS4 service area total acreage rounded to the nearest hundredth.
- (4) All file geodatabase feature classes or shapefiles shall be submitted in the following data format standards:
- (a) Point data in NAD83 or WGS84 decimal degrees global positional system coordinates;
 - (b) Data projected in Virginia Lambert Conformal Conic format;
 - (c) Outfall location accuracy shall be represented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy (e.g., 37.61741, -78.15279); and
 - (d) Metadata that shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection.
- (5) No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.
- (6) The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.
- b. The permittee shall prohibit, through ordinance, policy, standard operating procedures,

or other legal mechanism, to the extent allowable under federal, state, or local law, regulations, or ordinances, unauthorized nonstormwater discharges into the MS4. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.

c. The permittee shall maintain, implement, and enforce illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping, to the MS4 to effectively eliminate the unauthorized discharge. Written procedures shall include:

(1) A description of the legal authorities, policies, standard operating procedures, or other legal mechanisms available to the permittee to eliminate identified sources of ongoing illicit discharges, including procedures for using legal enforcement authorities.

(2) Dry weather field screening protocols to detect, identify, and eliminate illicit discharges to the MS4. The protocol shall include:

(a) A prioritized schedule of field screening activities and rationale for prioritization determined by the permittee based on such criteria as age of the infrastructure, land use, historical illegal discharges, dumping, or cross connections;

(b) If the total number of MS4 outfalls is equal to or less than 50, a schedule to screen all outfalls annually;

(c) If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years;

(d) The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges;

(e) Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I E 3 c (2) (b) or (2) (c); however, at least 50% of the minimum annual screening events must include outfall screening;

(f) Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however once the resolution of the investigation and the date the investigation was closed has been documented, an observation point may be established for future screening events; and

(g) A checklist or mechanism to track the following information for dry weather screening events:

(i) The unique identifier for the outfall or observation point;

- (ii) Time since the last precipitation event;
 - (iii) The estimated quantity of the last precipitation event;
 - (iv) Site descriptions (e.g., conveyance type and dominant watershed land uses);
 - (v) Observed indicators of possible illicit discharge events, such as floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth);
 - (vi) Whether or not a discharge was observed;
 - (vii) If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall; and
 - (viii) For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point.
- (3) A timeframe upon which to conduct an investigation to identify and locate the source of any observed unauthorized nonstormwater discharge. Priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety. Discharges authorized under a separate VPDES or state permit require no further action under this permit.
- (4) Methodologies to determine the source of all illicit discharges. If the permittee is unable to identify the source of an illicit discharge within six months of beginning the investigation then the permittee shall document that the source remains unidentified. If the observed discharge is intermittent, the permittee shall document that attempts to observe the discharge flowing were unsuccessful.
- (5) Methodologies for conducting a follow-up investigation for illicit discharges that are continuous or that permittees expect to occur more frequently than a one-time discharge to verify that the discharge has been eliminated except as provided for in Part I E 3 c (4);
- (6) A mechanism to track all illicit discharge investigations to document the following:
- (a) The dates that the illicit discharge was initially observed, reported, or both;
 - (b) The results of the investigation, including the source, if identified;
 - (c) Any follow-up to the investigation;
 - (d) Resolution of the investigation; and
 - (e) The date that the investigation was closed.
- d. The MS4 program plan shall include:
- (1) The MS4 map and outfall information table required by Part I E 3 a. The map and outfall information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;
 - (2) Copies of written notifications of physical interconnections given by the permittee to

other MS4s; and

(3) The IDDE procedures described in Part I E 3 c.

e. The annual report shall include:

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

(2) The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program; and

(3) A list of illicit discharges to the MS4, including spills reaching the MS4 with information as follows:

(a) The location and source of illicit discharge;

(b) The dates that the discharge was observed, reported, or both;

(c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);

(d) How the investigation was resolved;

(e) A description of any follow-up activities; and

(f) The date the investigation was closed.

4. Construction site stormwater runoff and erosion and sediment control.

a. The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The permittee shall control construction site stormwater runoff as follows:

(1) If the traditional permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);

(2) If the traditional permittee is a town that has not adopted a VESCP, implementation of a VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840) by the surrounding county shall constitute compliance with Part I E 4 a; such town shall notify the surrounding county of erosion, sedimentation, or other construction stormwater runoff problems;

(3) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Erosion and

Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications; or

(4) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, as follows:

- (a) During or immediately following initial installation of erosion and sediment controls;
- (b) At least once per every two-week period;
- (c) Within 48 hours following any runoff producing storm event; and
- (d) At the completion of the project prior to the release of any performance bond.

(5) If the nontraditional permittee is a school board or other local government body, the permittee shall inspect those projects resulting in a land disturbance as defined in § 62.1-44.15.51 of the Code of Virginia occurring on lands owned or operated by the permittee that result in the disturbance of 10,000 square feet or greater, 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, or in accordance with more stringent thresholds established by the local government, as follows:

- (a) During or immediately following initial installation of erosion and sediment controls;
- (b) At least once per every two-week period;
- (c) Within 48 hours following any runoff producing storm event; and
- (d) At the completion of the project prior to the release of any performance bond.

b. The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.

c. Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;

d. The permittee's MS4 program plan shall include:

(1) If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for

the VESCP program;

(2) If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (2), the county ordinance citations for the VESCP program the town is subject to;

(3) If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department;

(4) A description of the legal authorities utilized to ensure compliance with Part I E 4 a for erosion and sediment control and construction site stormwater runoff control, such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

(5) For traditional permittees, written inspection procedures to ensure VESCP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60 B;

(6) For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the department in accordance with § 62.1-44.15:55 of the Code of Virginia. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following:

(a) An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to ensure continued performance of their intended function; and

(b) A list of all associated documents utilized for inspections, including checklists, department approved erosion and sediment control plans, or the most recently department approved annual standards and specifications, and any other documents utilized;

(7) Traditional permittees shall maintain written procedures for requiring VESCP compliance through corrective action or enforcement action in accordance with § 62.1-44.15:58 of the Code of Virginia;

(8) Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and

(9) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site

stormwater runoff control requirements in Part I E 4.

e. The annual report shall include the following:

- (1) Total number of erosion and sediment control inspections conducted;
- (2) Total number of each type of compliance action and enforcement action implemented; and
- (3) For nontraditional permittees:
 - (a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved annual standards and specifications for erosion and sediment control; and
 - (b) If any land disturbing projects were conducted without department approved annual standards and specifications, a list of all land disturbing projects that occurred during the reporting period with erosion and sediment control plan approval dates for each project.

5. Post-construction stormwater management for new development and development on prior developed lands.

a. The permittee shall address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program as follows:

- (1) If the traditional permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as maintain an inspection and maintenance program in accordance with Part I E 5 b and c;
- (2) If the traditional permittee is a town that has not adopted a VSMP, implementation of a VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) by the surrounding county shall constitute compliance with Part I E 5 a; such town shall notify the surrounding county of erosion, sedimentation, or other post-construction stormwater runoff problems and maintain an inspection and maintenance program in accordance with Part I E 5 c and d;
- (3) If the traditional permittee is a city, county, or town receiving initial permit coverage during the permit term and must obtain VSMP approval from the department, the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Part I E 5 b and c no later than 60 months after receiving permit coverage;
- (4) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations

(9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and maintain an inspection and maintenance program in accordance with Part I E 5 b;

(5) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity, and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b no later than 60 months after receiving permit coverage; or

(6) If the nontraditional permittee is a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b.

b. The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee as follows:

(1) Within six months of the permit effective date, the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities. The permittee may use inspection and maintenance specifications available from the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines;

(2) Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations;

(3) The permittee shall inspect stormwater management facilities owned or operated by the permittee no less frequently than once per year. The permittee may choose to implement an alternative schedule to inspect these stormwater management facilities based on facility type and expected maintenance needs provided that the alternative schedule and rationale is included in the MS4 program plan. The alternative inspection frequency shall be no less often than once per five years; and

(4) If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).

c. For traditional permittees described in Part I E 5 a (1) , (2), or (3), the permittee shall:

(1) Implement an inspection and enforcement program for stormwater management

facilities not owned by the permittee (i.e., privately owned) that includes:

- (a) An inspection frequency of no less often than once per five years for all privately owned stormwater management facilities that discharge into the MS4; and
- (b) Adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a maintenance agreement, including an inspection schedule to the extent allowable under state or local law or other legal mechanism;
- (2) Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner;
- (3) The permittee may develop and implement a progressive compliance and enforcement strategy provided that the strategy is included in the MS4 program plan;
- (4) The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114 C.

d. The MS4 program plan shall include:

- (1) If the permittee implements a VSMP in accordance with Part I E 5 a (1) , (2), or (3):
 - (a) A copy of the VSMP approval letter issued by the department;
 - (b) Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and
 - (c) Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned stormwater management facilities;
- (2) If the permittee implements a post-development stormwater runoff control program in accordance with Part I E 5 a (4):
 - (a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and
 - (b) A copy of the most recent standards and specifications approval letter from the department;
 - (3) A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;
 - (4) Written inspection and maintenance procedures and other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and
 - (5) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program.

e. The annual report shall include the following information:

(1) If the traditional permittee implements a VSMP in accordance with Part I E 5 a (1) , (2), or (3):

(a) The number of privately owned stormwater management facility inspections conducted; and

(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;

(2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;

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

(4) For traditional permittees as specified in Part I E 5 a (1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);

(5) A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and

(6) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee within the MS4 service area.

a. The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee designed to meet the following objectives:

(1) Prevent illicit discharges;

(2) Ensure permittee staff or contractors properly dispose of waste materials, including landscape wastes and prevent waste materials from entering the MS4;

(3) Prevent the discharge of wastewater or wash water not authorized in accordance with

9VAC25-890-20 D 3 u, into the MS4 without authorization under a separate VPDES permit; and

(4) Minimize the pollutants in stormwater runoff.

b. The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities:

(1) Road, street, sidewalk, and parking lot maintenance and cleaning:

(a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with Part I E to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage;

(b) Procedures developed in accordance with Part I E shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus;

(2) Renovation and significant exterior maintenance activities (e.g., painting, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months after permit issuance;

(3) Discharging water pumped from construction and maintenance activities not covered by another permit covering such activities;

(4) Temporary storage of landscaping materials;

(5) Maintenance of permittee owned or operated vehicles and equipment (i.e., prevent pollutant discharges from leaking permittee vehicles and equipment);

(6) Application of materials, including pesticides and herbicides shall not exceed manufacturer's recommendations; and

(7) Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations.

c. The permittee shall require through the use of contract language, training, written procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities described in Part I E 6 b follow established good housekeeping procedures and use appropriate control measures to minimize the discharge of pollutants to the MS4.

d. The written procedures established in accordance with Part I E 6 a and b shall be utilized as part of the employee training program , and the permittee shall develop a written training plan for applicable field personnel that ensures the following:

(1) Applicable field personnel shall receive training in the prevention, recognition, and elimination of illicit discharges no less often than once per 24 months;

(2) Employees performing road, street, sidewalk, and parking lot maintenance shall receive training in good housekeeping procedures required under Part I E 6 b (1) no less often than once per 24 months;

(3) Employees working in and around facility maintenance, public works, or recreational facilities shall receive training in applicable Part I E 6 a and b good housekeeping procedures required no less often than once per 24 months;

(4) Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less often than once per 24 months;

(5) Employees whose duties include emergency spill control and response shall be trained in spill control and response. Emergency responders, such as firefighters and law-enforcement officers, trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan; and

(6) Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification.

e. The permittee shall maintain documentation of each training activity conducted by the permittee to fulfill the requirements of Part I E 6 d for a minimum of three years after training activity completion. The documentation shall include the following information:

(1) The date when applicable employees have completed the training activity;

(2) The number of employees who have completed the training activity; and

(3) The training objectives and good housekeeping procedures required under Part I E 6 a covered by training activity.

f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.

g. Within 12 months of permit coverage, the permittee shall identify any new high-priority facilities located in expanded 2020 census urban areas with a population of at least 50,000.

h. Within 36 months of permit coverage, the permittee shall implement SWPPPs for high-priority facilities meeting the conditions of Part I E 6 i and which are located in expanded 2020 census urban areas with a population of at least 50,000.

i. The permittee shall maintain and implement a site specific SWPPP for each high-priority facility as defined in 9VAC25-890-1 that does not have or require separate VPDES permit

coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt, or runoff:

- (1) Areas where residuals from using, storing, or cleaning machinery or equipment remain and are exposed to stormwater;
- (2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;
- (3) Material handling equipment;
- (4) Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);
- (5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- (6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated, or leaking storage drums, barrels, tanks, and similar containers;
- (7) Waste material except waste in covered, nonleaking containers (e.g., dumpsters);
- (8) Application or disposal of process wastewater (unless otherwise permitted); or
- (9) Particulate matter or visible deposits of residuals from roof stacks, vents, or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

j. Each SWPPP as required in Part I E 6 g shall include the following:

- (1) A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies;
- (2) A description and checklist of the potential pollutants and pollutant sources;
- (3) A description of all potential nonstormwater discharges;
- (4) A description of all structural control measures, such as stormwater management facilities and other pollutant source controls, applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to the SWPPP), such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4;
- (5) A maintenance schedule for all stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4);
- (6) Site specific written procedures designed to reduce and prevent pollutant discharge that incorporate by reference applicable good housekeeping procedures required under Part I E 6 a and b;
- (7) A description of the applicable training as required in Part I E 6 d (4);
- (8) An inspection frequency of no less often than once per year and maintenance

requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP;

(9) A log of each unauthorized discharge, release, or spill incident reported in accordance with Part IV G including the following information:

(a) Date of incident;

(b) Material discharged, released, or spilled; and

(c) Estimated quantity discharged, released, or spilled;

(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and

(11) The point of contact for SWPPP implementation.

k. No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which an SWPPP has not been developed to determine if the facility meets any of the conditions described in Part I E 6 g. If the facility is determined to need an SWPPP, the permittee shall develop an SWPPP meeting the requirements of Part I E 6 h no later than December 31 of that same year. The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain an SWPPP in accordance with Part I E 6 g and this list shall be available upon request.

l. The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part IV G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

m. The SWPPP shall be kept at the high-priority facility and utilized as part of employee SWPPP training required in Part I E 6 d (4). The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

n. If activities change at a facility such that the facility no longer meets the definition of a high-priority facility , the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.

o. If activities change at a facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage.

p. The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than

one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.

q. Within 12 months of permit coverage, the permittee shall identify contiguous areas greater than one acre located in expanded 2020 census urban areas with population of at least 50,000 and within the permittee's MS4 service area requiring turf and landscape nutrient management plans.

r. Within 36 months of permit coverage, the permittee shall implement turf and landscape nutrient management plans on contiguous areas greater than one acre located in expanded 2020 census urban areas with a population of least 50,000 and within the permittee's MS4 service area.

s. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization.

t. Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval.

u. Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal within six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee.

v. Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

w. Nontraditional permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement.

x. The MS4 program plan shall include:

(1) A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I E 6 a and b;

(2) A list of all high-priority facilities owned or operated by the permittee required to maintain an SWPPP in accordance with Part I E 6 g that includes the facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference;

(3) A list of locations for which turf and landscape nutrient management plans are required

in accordance with Part I E 6 n and s, including the following information:

- (a) The total acreage covered by each nutrient management plan;
- (b) The DCR approval date and expiration date for each nutrient management plan;
- (c) The location of the nutrient management plan hardcopy or electronic document being maintained;
- (4) A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate; and
- (5) The written training plan as required in Part I E 6 d.

y. The annual report shall include the following:

- (1) A summary of any written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period;
- (2) A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period;
- (3) A list of any new SWPPPs developed in accordance Part I E 6 i during the reporting period;
- (4) A summary of any SWPPPs modified in accordance with Part I E 6 j, 6 l, or 6 m;
- (5) The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period;
- (6) The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired);
- (7) A list of the training activities conducted in accordance with Part I E 6 d, including the following information:
 - (a) The completion date for the training activity;
 - (b) The number of employees who completed the training activity; and
 - (c) The objectives and good housekeeping procedures covered by the training activity.

Part II

TMDL Special Conditions

A. Chesapeake Bay TMDL special condition.

1. The Commonwealth in its Phase I , Phase II, and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I , Phase II , and Phase III WIPs to meet the Level 2 (L2) scoping run for existing developed lands as it

represents an implementation of an additional 60% of L2 as specified in the Phase I , Phase II, and Phase III WIPs. In combination with the 40% reduction of L2 that has already been achieved, a total reduction no later than October 31, 2028, of 100% of L2 shall be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

2. The following definitions apply to Part II of this state permit for the purpose of the Chesapeake Bay TMDL special condition for discharges in the Chesapeake Bay Watershed:

"Existing sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.

"New sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.

"Pollutants of concern" or "POC" means total nitrogen and total phosphorus.

"Transitional sources" means regulated land disturbing activities that are temporary in nature and discharge through the MS4.

3. Reduction requirements for permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018. No later than October 31, 2028, the permittee shall reduce the load of total nitrogen and total phosphorus from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least 100% of the Level 2 (L2) Scoping Run Reductions. The 100% reduction is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; (iii) the second phase reduction of at least 40% of the L2 Scoping Run, which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023; and (iv) the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable:

Table 3a Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven, and Little Creek Basins							
		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr) ¹	Existing developed lands as of 6/30/09 served by the MS4	Load(lbs/yr) ³	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction Required by 10/31/2028 (lbs/yr) ⁴	Sum of 100% cumulative reduction (lb/yr) ⁵

			within the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	9.39			9%		
	Regulate d urban pervious	6.99			6%		
Phosphor us	Regulate d urban impervio us	1.76			16%		
	Regulate d urban pervious	0.5			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsorce cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3b

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Potomac River Basin

		A	B	C	D	E	F
Pollutant	Subsour ce	Loadin g rate (lbs/ac/ yr) ¹	Existin g develop ed lands as of 6/30/09 served by the MS4 within	Load (lbs/ yr) ³	Percenta ge of MS4 required Chesapea ke Bay total L2 loading reductio n	100% cumulati ve reductio n required by 10/31/20 28 (lbs/yr) ⁴	Sum of 100% cumulati ve reductio n (lb/yr) ⁵

			the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	16.86			9%		
	Regulate d urban pervious	10.07			6%		
Phosphor us	Regulate d Urban Impervio us	1.62			16%		
	Regulate d urban pervious	0.41			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsorce cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3c

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Rappahannock River Basin

		A	B	C	D	E	F
Pollutant	Subsour ce	Loadin g rate (lbs/ac/ yr) ¹	Existin g develop ed lands as of 6/30/09 served by the MS4 within	Load (lbs/ yr) ³	Percenta ge of MS4 required Chesapea ke Bay total L2 loading reductio n	100% cumulati ve reductio n Require d by 10/31/20 28 (lbs/yr) ⁴	Sum of 100% cumulati ve reductio n (lb/yr) ⁵

			the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	9.38			9%		
	Regulate d urban pervious	5.34			6%		
Phosphor us	Regulate d urban impervio us	1.41			16%		
	Regulate d urban pervious	0.38			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsorce cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3d

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the York River and Poquoson Coastal Basin

		A	B	C	D	E	F
Pollutant	Subsour ce	Loadin g rate (lbs/ac/ yr) ¹	Existin g develop ed lands as of 6/30/09 served by the MS4 within	Load (lbs/ yr) ³	Percenta ge of MS4 required Chesapea ke Bay total L2 loading reductio n	100% cumulati ve reductio n required by 10/31/20 28 (lbs/yr) ⁴	Sum of 100% cumulati ve reductio n (lb/yr) ⁵

			the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	7.31			9%		
	Regulate d urban pervious	7.65			6%		
Phosphor us	Regulate d urban impervio us	1.51			16%		
	Regulate d urban pervious	0.51			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsurface cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

4. No later than October 31, 2028, the permittee shall offset 100% of the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply:

- a. The activity disturbed one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent pollutant load for new sources of nitrogen meeting the requirements of this condition.

5. No later than October 31, 2028, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply:

- a. The activity disturbs one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 to develop the equivalent pollutant load for grandfathered sources of nitrogen meeting the requirements of this condition.

Table 4 Ratio of Phosphorus Loading Rate to Nitrogen Loading Rates for Chesapeake Bay Basins		
Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphor us Loading Rate (lbs/acre)	Nitrog en Loadin g Rate (lbs/ac re)
James River Basin, Lynnhaven, and Little Creek Basins	1.0	5.2
Potomac River Basin	1.0	6.9
Rappahann ock River Basin	1.0	6.7
York River Basin (including Poquoson Coastal Basin)	1.0	9.5

6. Reductions achieved in accordance with the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems effective July 1, 2013, and November 1, 2018, shall be applied toward the total reduction requirements to demonstrate compliance with Part II A 3, A 4, and A 5.

7. 40% of L2 reductions for total nitrogen and total phosphorus shall be maintained by the permittee during the permit term.

8. Reductions shall be achieved in each river basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered

project occurred.

9. Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.

10. Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:

- a. BMPs approved by the Chesapeake Bay Program;
- b. BMPs approved by the department; or
- c. A trading program described in Part II A 11.

11. The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of Virginia for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, and Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:

- a. The credits are generated and applied to a compliance obligation in the same calendar year;
- b. The credits are generated and applied to a compliance obligation in the same tributary;
- c. The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;
- d. No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits; and
- e. Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia.

12. Chesapeake Bay TMDL action plan requirements.

- a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information:

(1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5 ;

(2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a:

(a) Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern;

(3) A preliminary schedule for implementation of the BMPs included in the Chesapeake Bay TMDL action plan; and

(4) A summary of any comments received as a result of public participation required in Part II A 14, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

b. For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018, no later than 12 months after the permit effective date, the permittee shall submit a third phase Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:

(1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.

(2) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin.

(4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL, including:

(a) The date of implementation; and

(b) The reductions achieved.

(5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:

- (a) Type of BMP;
 - (b) Project name;
 - (c) Location;
 - (d) Percent removal efficiency for each pollutant of concern;
 - (e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and
 - (f) A preliminary schedule for implementation of the BMPs included in the Chesapeake Bay TMDL action plan.
- (6) A summary of any comments received as a result of public participation required in Part II A 13, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

13. Prior to submittal of the action plan required in Part II A 12 a and b, permittees shall provide an opportunity for public comment for no fewer than 15 days on the additional BMPs proposed in the third phase Chesapeake Bay TMDL action plan .

14. Chesapeake Bay TMDL implementation annual status report.

- a. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall submit a Chesapeake Bay TMDL implementation annual status report in a method (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.
- b. Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.
- c. The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL action plan received and how the permittee responded.
- d. Each Chesapeake Bay TMDL implementation annual status report shall include the following information:
 - (1) A list of Chesapeake Bay TMDL action plan BMPs, not including annual practices, implemented prior to the reporting period that includes the following information for reported BMP;

- (a) The number of BMPs for each BMP type;
 - (b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and
 - (c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using the DEQ BMP Warehouse in accordance with Part III B 5.
- (2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period:
- (a) The BMP type and a description of the location for each BMP;
 - (b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and
 - (c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.
- e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired.
- f. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented.
- g. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen and total phosphorus.
- h. Any revisions made to the Chesapeake Bay TMDL action plan.
- i. A list of BMPs that are planned to be implemented during the next reporting period.

15. Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, that are located in the expanded 2020 census urban areas with a population of at least 50,000, and within the permittee's MS4 service area, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.), if the following conditions apply:

- a. The activity disturbed one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent nitrogen pollutant load for new sources meeting the requirements of this condition.

16. Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from projects grandfathered in

accordance with 9VAC25-870-48 that are located in the expanded 2020 census urban areas with a population of least 50,000, and within the permittee's MS4 service area, and began construction after July 1, 2014, if the following conditions apply:

- a. The activity disturbs one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 6 to develop the equivalent nitrogen pollutant load for grandfathered sources meeting the requirements of this condition.

B. Local TMDL special condition.

1. Permittees applying for initial coverage under this general permit shall develop a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee. The permittee shall develop action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable. Each local TMDL action plan shall be provided to the department no later than October 31, 2028, unless the department grants a later date.

2. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 2 a and 2 b:

a. For TMDLs approved by EPA prior to July 1, 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate or update as applicable the local TMDL action plans to meet the conditions of Part II B 4, B 6, B 7, and B 8, as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Updated action plans shall include:

- (1) An evaluation of the results achieved by the previous action plan; and
- (2) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation.

b. For TMDLs approved by EPA on or after July 1, 2018, and prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8, as applicable no later than 30 months after the permit effective date.

3. The permittee shall complete implementation of the TMDL action plans as determined by the schedule. TMDL action plans may be implemented in multiple phases over more than one permit cycle using the adaptive iterative approach provided adequate progress is achieved in

the implementation of BMPs designed to reduce pollutant discharges in a manner that is consistent with the assumptions and requirements of the applicable TMDL.

4. Each local TMDL action plan developed by the permittee shall include the following:

- a. The TMDL project name;
- b. The EPA approval date of the TMDL;
- c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable;
- d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants of concern means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;
- e. The BMPs designed to reduce the pollutants of concern in accordance with Part II B 5, B 6, B 7, and B 8;
- f. Any calculations required in accordance with Part II B 5, B 6, B 7, or B 8;
- g. For action plans developed in accordance with Part II B 5, B 6, and B 8, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and
- h. A schedule of anticipated actions planned for implementation during this permit term.

5. Bacterial TMDLs.

- a. Traditional permittees shall select and implement at least three of the strategies listed in Table 5 designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in Part II B 4 d.
- b. Nontraditional permittees shall select at least one strategy listed in Table 5 designed to reduce the load of bacteria to the MS4 relevant to sources of bacteria applicable within the MS4 regulated service area. Selection of the strategies shall correspond to sources identified in Part II B 4 d.

Table 5 Strategies for Bacteria Reduction Stormwater Control/Management Strategy	
Source	Strategies (provided as an example and not meant to be all inclusive or limiting)

Domestic pets (dogs and cats)	Provide signage to pick up dog waste, providing pet waste bags and disposal containers. Adopt and enforce pet waste ordinances or policies, or leash laws or policies. Place dog parks away from environmentally sensitive areas. Maintain dog parks by removing disposed of pet waste bags and cleaning up other sources of bacteria. Protect riparian buffers and provide unmanicured vegetative buffers along streams to dissuade stream access.
Urban wildlife	Educate the public on how to reduce food sources accessible to urban wildlife (e.g., manage restaurant dumpsters and grease traps, residential garbage, feed

	pets indoors). Install storm drain inlet or outlet controls. Clean out storm drains to remove waste from wildlife. Implement and enforce urban trash management practices. Implement rooftop disconnection programs or site designs that minimize connections to reduce bacteria from rooftops. Implement a program for removing animal carcasses from roadways and properly disposing of the same (either through proper storage or through transport to a licensed facility).
Illicit connections or illicit discharges to the MS4	Implement an enhanced dry weather screening and illicit discharge, detection, and elimination program

	beyond the requirements of Part I E 3 to identify and remove illicit connections and identify leaking sanitary sewer lines infiltrating to the MS4 and implement repairs. Implement a program to identify potentially failing septic systems. Educate the public on how to determine whether their septic system is failing. Implement septic tank inspection and maintenance program. Implement an educational program beyond any requirements in Part I E 1 through E 6 to explain to citizens why they should not dump materials into the MS4.
Dry weather urban flows (irrigations, car washing, powerwashing, etc.)	Implement public education programs to reduce dry weather flows

	from storm sewers related to lawn and park irrigation practices, car washing, powerwashing and other nonstormwater flows. Provide irrigation controller rebates. Implement and enforce ordinances or policies related to outdoor water waste. Inspect commercial trash areas, grease traps, washdown practices, and enforce corresponding ordinances or policies.
Birds (Canadian geese, gulls, pigeons, etc.)	Identify areas with high bird populations and evaluate deterrents, population controls, habitat modifications and other measures that may reduce bird-associated bacteria loading. Prohibit feeding of birds.

Other sources	Enhance maintenance of stormwater management facilities owned or operated by the permittee. Enhance requirements for third parties to maintain stormwater management facilities. Develop BMPs for locating, transporting, and maintaining portable toilets used on permittee-owned sites. Educate third parties that use portable toilets on BMPs for use. Provide public education on appropriate recreational vehicle dumping practices.
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6. Local sediment, phosphorus, and nitrogen TMDLs.

- a. The permittee shall reduce the loads associated with sediment, phosphorus, or nitrogen through implementation of one or more of the following:
 - (1) One or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65 or other approved BMPs found on the Virginia Stormwater BMP Clearinghouse website;
 - (2) One or more BMPs approved by the Chesapeake Bay Program. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented; or

(3) Land disturbance thresholds lower than Virginia's regulatory requirements for erosion and sediment control and post development stormwater management.

b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented or sediment, phosphorus, or nitrogen credits acquired. BMPs implemented and nutrient and sediment credits acquired to meet the requirements of the Chesapeake Bay TMDL in Part II A may also be utilized to meet local TMDL requirements as long as the BMPs are implemented or the credits are generated in the watershed for which local water quality is impaired.

c. The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in Part II B 4 f.

d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department an update on the progress made toward achieving local TMDL action plan goals and the anticipated end dates by which the permittee will meet each wasteload allocation for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with Part II B 3.

7. Polychlorinated biphenyl (PCB) TMDLs.

a. For each PCB TMDL action plan, the permittee shall include an inventory of potentially significant sources of PCBs owned or operated by the permittee that drains to the MS4 that includes the following information:

(1) Location of the potential source;

(2) Whether or not the potential source is from current site activities or activities previously conducted at the site that have been terminated (i.e., legacy activities); and

(3) A description of any measures being implemented or to be implemented to prevent exposure to stormwater and the discharge of PCBs from the site.

b. If at any time during the term of this permit, the permittee discovers a previously unidentified significant source of PCBs within the permittee's MS4 regulated service area, the permittee shall notify DEQ in writing within 30 days of discovery.

c. As part of its annual reporting requirements, the permittee shall submit results of any action plan PCB monitoring or product testing conducted and any adaptive management strategies that have been incorporated into the updated action plan based upon monitoring or product testing results if the permittee has elected to perform monitoring or product testing or both.

8. Chloride TMDLs.

a. No later than 36 months after the permit effective date, permittees shall develop an anti-icing and deicing agent education and outreach strategy that identifies target audiences for increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and de-icing agents used for snow and ice management.

b. Anti-icing and deicing agent education and outreach strategies shall contain a schedule to implement two or more of the strategies listed in Part I E 1 d Table 1 per year to communicate to target audiences the importance of responsible anti-icing and deicing agent application, transport, and storage.

c. No later than 36 months after permit issuance, the permittee shall review good housekeeping procedures for anti-icing and deicing agent application, handling, storage, and transport activities required under Part I E 6 b (1) (a) and identify a minimum of two strategies for implementing enhanced BMPs that promote efficient management and application of anti-icing and deicing agents while maintaining public safety.

9. Prior to submittal of the action plan required in Part II B 2, the permittee shall provide an opportunity for public comment for no fewer than 15 days on the proposal to meet the local TMDL action plan requirements .

10. The MS4 program plan as required by Part I B of this permit shall incorporate each local TMDL action plan. Local TMDL action plans may be incorporated by reference into the MS4 program plan provided that the program plan includes the date of the most recent local TMDL action plan and identification of the location where a copy of the local TMDL action plan may be obtained.

11. For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.

C. Inspection and maintenance of ecosystem restoration projects used for TMDL compliance.

1. Within 36 months of permit issuance the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of ecosystem restoration projects as defined in 9VAC25-890-1 and implemented as part of a TMDL action plan developed in accordance with Part II A, B, or both. The permittee may utilize inspection and maintenance protocols developed by the Chesapeake Bay Program or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines.

2. The permittee shall inspect ecosystem restoration projects owned or operated by the permittee and implemented as part of a current TMDL action plan developed in accordance with Part II A or B no less than once every 60 months.

Part III

DEQ BMP Warehouse Reporting

A. For the purpose of Part III of this permit, "best management practice" or "BMP" means a practice that achieves quantifiable nitrogen, phosphorus, or total suspended solids reductions, including stormwater management facilities, ecosystem restoration projects, annual practices, and other practices approved by the department for reducing nitrogen, phosphorus, and total suspended solids pollutants.

B. No later than October 1 of each year the permittee shall electronically report new BMPs

implemented and inspected as applicable between July 1 and June 30 of each year using the DEQ BMP Warehouse.

1. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part III B 5 , including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830), if applicable, and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.
 2. The permittee shall use the DEQ BMP Warehouse to report BMPs that were not reported in accordance with Part III B 1 or B 5 and were implemented as part of a TMDL action plan to achieve nitrogen, phosphorus, and total suspended solids reductions in accordance with Part II A or B.
 3. The permittee shall use the DEQ BMP Warehouse to report any BMPs that were not reported in accordance with Part III B 1, B 2, or B 5.
 4. The permittee shall use the DEQ BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I E 5 b or 5 c, or in accordance with Part II C and the most recent associated TMDL action plan.
 5. Traditional permittees specified in Part I E 5 a (1) shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.
- C. The following information for each new BMP reported in accordance with Part III B 1, B 2, B 3, or B 5 shall be reported to the DEQ BMP Warehouse as applicable:
1. The BMP type;
 2. The BMP location as decimal degree latitude and longitude;
 3. The acres treated by the BMP, including total acres and impervious acres;
 4. The date the BMP was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use 06/2005;
 5. The 6th Order Hydrologic Unit Code in which the BMP is located;
 6. Whether the BMP is owned or operated by the permittee or privately owned;
 7. Whether or not the BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;
 8. If the BMP is privately owned, whether a maintenance agreement exists;
 9. The date of the permittee's most recent inspection of the BMP; and

10. Any other information specific to the BMP type required by the DEQ BMP Warehouse (e.g., linear feet of stream restoration).

D. No later than October 1 of each year, the permittee shall electronically report the most recent inspection date for any existing BMP that was previously reported and re-inspected between July 1 and June 30 using the BMP Warehouse. If an existing BMP has not been previously reported, the BMP shall be reported as new in accordance with Part III B and Part III C. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

E. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

Part IV

Conditions Applicable to All State and VPDES Permits

NOTE: Discharge monitoring is not required for compliance purposes by this general permit. If the operator chooses to monitor stormwater discharges for informational or screening purposes, the operator does not need to comply with the requirements of Part IV A, B, or C.

A. Monitoring.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitoring activity.
2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this state permit. Analyses performed according to test procedures approved under 40 CFR Part 136 shall be performed by an environmental laboratory certified under regulations adopted by the Department of General Services (1VAC30-45 or 1VAC30-46).
3. The operator shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Monitoring records and reports shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The dates and times analyses were performed;
 - d. The individuals who performed the analyses;
 - e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this state permit, and records of all data used to complete the registration statement for this state permit, for a period of at least three years from the date of the sample, measurement, report, or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the operator, or as requested by the department.

C. Reporting monitoring results.

1. The operator shall submit the results of the monitoring as may be performed in accordance with this state permit with the annual report unless another reporting schedule is specified elsewhere in this state permit.

2. Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved, or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included. Following notification from the department of the start date for the required electronic submission of monitoring reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the operator monitors any pollutant specifically addressed by this state permit more frequently than required by this state permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this state permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this state permit.

D. Duty to provide information. The operator shall furnish within a reasonable time, any information that the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this state permit or to determine compliance with this state permit. The department or EPA may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and Virginia Stormwater Management Act. The operator shall also furnish to the department or EPA upon request, copies of records required to be kept by this state permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress

reports on, interim and final requirements contained in any compliance schedule of this state permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized stormwater discharges. Pursuant to § 62.1-44.5 of the Code of Virginia, except in compliance with a state permit issued by the department, it shall be unlawful to cause a stormwater discharge from a MS4.

G. Reports of unauthorized discharges. Any operator of a MS4 who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, or § 62.1-44.34:19 of the Code of Virginia that occurs during a 24-hour period into or upon surface waters or who discharges or causes or allows a discharge that may reasonably be expected to enter surface waters shall notify the department of the discharge immediately (see Part IV I 4) upon discovery of the discharge, but in no case later than within 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this state permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge, including a bypass in Part IV U or an upset in Part IV V, should occur from a facility and the discharge enters or could be expected to enter surface waters, the operator shall promptly notify (see Part IV I 4), in no case later than within 24 hours, the department after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part IV I 2. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the facilities; and
4. Flooding or other acts of nature.

I. Reports of noncompliance.

1. The operator shall report any noncompliance that may adversely affect surface waters or may endanger public health.
 - a. A report to the department shall be provided within 24 hours from the time the operator becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under Part IV I:
 - (1) Any unanticipated bypass; and
 - (2) Any upset that causes a discharge to surface waters.
 - b. A written report shall be submitted within five days and shall contain:
 - (1) A description of the noncompliance and its cause;
 - (2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - (3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The department may waive the written report on a case-by-case basis for reports of noncompliance under Part IV I if the report has been received within 24 hours and no adverse impact on surface waters has been reported.
2. The operator shall report all instances of noncompliance not reported under Part IV I 1 b, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part IV I 2.
3. The immediate (within 24 hours) reports required in Part IV G, H, and I shall be made to the department. Reports may be made by telephone, email , or online at <https://www.deq.virginia.gov/our-programs/pollution-response/pollution-data-and-reporting> . For reports outside normal working hours, the online portal shall be used. For emergencies, call the Virginia Department of Emergency Management's Emergency Operations Center (24-hours) at 1-800-468-8892.
4. Where the operator becomes aware of a failure to submit any relevant facts, or submittal of incorrect information in any report, including a registrations statement, to the department, the operator shall promptly submit such facts or correct information.

J. Notice of planned changes.

1. The operator shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The operator plans an alteration or addition to any building, structure, facility, or installation that may meet one of the criteria for determining whether a facility is a new source in 9VAC25-870-420:

b. The operator plans an alteration or addition that would significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this state permit; or

2. The operator shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with state permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this chapter, 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 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;

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

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this chapter, a principal executive officer of a public agency includes:

(1) The chief executive officer of the agency, or

(2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by state permits, including annual reports, and other information requested by the department shall be signed by a person described in Part IV K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part IV K 1;

b. 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 operator. (A duly authorized representative may thus be either a named

individual or any individual occupying a named position.); and

c. The signed and dated written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part IV K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the MS4, a new authorization satisfying the requirements of Part IV K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part IV K 1 or K 2 shall make the following 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."

L. Duty to comply. The operator shall comply with all conditions of this state permit. Any state permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act, except that noncompliance with certain provisions of this state permit may constitute a violation of the Virginia Stormwater Management Act but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for state permit termination, revocation and reissuance, or modification; or denial of a state permit renewal application.

The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this state permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the operator wishes to continue an activity regulated by this state permit after the expiration date of this state permit, the operator shall submit a new registration statement at least 90 days before the expiration date of the existing state permit, unless permission for a later date has been granted by the department. The department shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit.

N. Effect of a state permit. This state permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this state permit shall be construed to preclude the institution of any legal action under, or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in state permit conditions on bypassing in Part IV U and

upset in Part IV V nothing in this state permit shall be construed to relieve the operator from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this state permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law or § 311 of the Clean Water Act.

Q. Proper operation and maintenance. The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the operator to achieve compliance with the conditions of this state permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by the operator only when the operation is necessary to achieve compliance with the conditions of this state permit.

R. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering surface waters and in compliance with all applicable state and federal laws and regulations.

S. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this state permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this state permit.

U. Bypass.

1. "Bypass," as defined in 9VAC25-870-10, means the intentional diversion of waste streams from any portion of a treatment facility. The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Part IV U 2 and U 3.

2. Notice.

- a. Anticipated bypass. If the operator knows in advance of the need for a bypass, the operator shall submit prior notice to the department, if possible at least 10 days before the date of the bypass.

- b. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in Part IV I.

3. Prohibition of bypass.

- a. Except as provided in Part IV U 1, bypass is prohibited, and the department may take

enforcement action against an operator for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The operator submitted notices as required under Part IV U 2.
- b. The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three conditions listed in Part IV U 3 a.

V. Upset.

1. An "upset," as defined in 9VAC25-870-10, means an exceptional incident in which there is unintentional and temporary noncompliance with technology based state permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based state permit effluent limitations if the requirements of Part IV V 4 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
3. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
4. An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the operator can identify the causes of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The operator submitted notice of the upset as required in Part IV I; and
 - d. The operator complied with any remedial measures required under Part IV S.
5. In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The operator shall allow the department , EPA, or an authorized

representative (including an authorized contractor), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this state permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this state permit;
3. Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this state permit; and
4. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the Clean Water Act and the Virginia Stormwater Management Act, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. State permit actions. State permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the operator for a state permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any state permit condition.

Y. Transfer of state permits.

1. State permits are not transferable to any person except after notice to the department. Except as provided in Part IV Y 2, a state permit may be transferred by the operator to a new operator only if the state permit has been modified or revoked and reissued, or a minor modification made, to identify the new operator and incorporate such other requirements as may be necessary under the Virginia Stormwater Management Act and the Clean Water Act.
2. As an alternative to transfers under Part IV Y 1, this state permit may be automatically transferred to a new operator if:
 - a. The current operator notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new operators containing a specific date for transfer of state permit responsibility, coverage, and liability between them; and
 - c. The department does not notify the existing operator and the proposed new operator of its intent to modify or revoke and reissue the state permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV Y 2 b.

Z. Severability. The provisions of this state permit are severable, and if any provision of this state permit or the application of any provision of this state permit to any circumstance is held invalid,

the application of such provision to other circumstances, and the remainder of this state permit, shall not be affected thereby.

Statutory Authority

§62.1-44.15:28 of the Code of Virginia.

Historical Notes

Former 4VAC50-60-1240, derived from Virginia Register Volume 21, Issue 3, eff. January 29, 2005; amended, Virginia Register Volume 24, Issue 20, eff. July 9, 2008; Volume 29, Issue 4, eff. November 21, 2012; Volume 29, Issue 17, eff. July 1, 2013; amended and renumbered, Virginia Register Volume 30, Issue 2, eff. October 23, 2013; amended, Virginia Register Volume 35, Issue 2, eff. November 1, 2018; Volume 40, Issue 3, eff. November 1, 2023; Volume 40, Issue 4, eff. October 9, 2023.

Marlene McGraw

From: Marlene McGraw
Sent: Friday, June 5, 2026 1:53 PM
To: Marlene McGraw
Subject: FW: notification to downstream adjacent MS4 (CNU)

----- Forwarded message -----

From: **Allison V. Watts** <wattsav@nnva.gov>
Date: Fri, Feb 20, 2026 at 4:18 PM
Subject: notification to downstream adjacent MS4 (CNU)
To: Dean Whitehead <dean.whitehead@cnu.edu>
Cc: Louis J. Bott <bottlj@nnva.gov>

Good afternoon Dean,

Hope you are doing well.

Our 2024-2029 MS4 Permit contains the following language:

*The permittee shall provide written notification to any downstream adjacent MS4 of any **new** physical interconnection from the permittee-owned system to another regulated MS4 **established or discovered after the effective date of this permit.***

While we've not recently discovered any *new* outfalls or physical points of interconnection between the City of Newport News and CNU, I wanted to make sure this permit requirement is met by sending this email. Therefore, this email serves as a reminder that the City interconnects with CNU in various locations.

Thank you! Please let me know if you have any questions or would like an updated map of the City's outfalls or MS4 service area.

Allison Watts

Environmental Compliance Administrator

Department of Engineering

City of Newport News

2400 Washington Avenue

Newport News, VA 23607

757-933-2332

www.nnva.gov



LAKE MAURY WATERSHED PLAN

THIS AGREEMENT, made this 19th day of January, 2005, by and among THE MARINERS' MUSEUM, a Virginia corporation, hereinafter "Museum" and the CITY OF NEWPORT NEWS, a municipal corporation, hereinafter the "City," CHRISTOPHER NEWPORT UNIVERSITY, a public State agency, hereinafter "CNU."

WHEREAS, the City Manager of the City presented to the Newport News City Council on or about September 10, 2002 a "white paper" entitled "Lake Maury Watershed Management Plan" attached hereto as Exhibit A; and

WHEREAS, the City Manager further updated City Council by Memorandum dated May 9, 2003, and Memorandum dated June 12, 2003, which are attached hereto as Exhibits B and C, respectively; and

WHEREAS, City Council adopted a Resolution Number 10474-03 authorizing and directing that the City Manager develop and implement a Lake Maury Watershed Management Plan, said Resolution attached hereto as Exhibit D.

NOW, THEREFORE, WITNESSETH: That for and in consideration of the mutual promises, covenants, and conditions contained herein, and to document their agreement to implement this Lake Maury Watershed Plan, the parties do agree as follows:

Article 1. Objectives.

1.1 The objectives of this Lake Maury Watershed Management Plan (the "Plan") are to

- 1.1.1 develop studies from time to time to evaluate the adequacy of the hydraulic control structure that regulates the lake level and outflow, evaluate dredging needs, identify cost effective watershed and lake management practices,

- identify locations in the lake where "in-lake" facilities may provide for the long-term protection and viability of Lake Maury, and identify cost effective, water quality enhancing, watershed and lake management practices;
- 1.1.2 provide a plan to fund the long-term, non-routine maintenance of Lake Maury;
 - 1.1.3 provide for the water quality protection for the main body of Lake Maury;
 - 1.1.4 provide for the development of in-lake, and/or upstream storm water management structures;
 - 1.1.5 provide for engineering services related to developing the Plan and updating it from time to time;
 - 1.1.6 provide a funding mechanism to provide a financial resource for City to meet the obligations assumed hereunder;
 - 1.1.7 to document the undertakings of CNU; and
 - 1.1.8 document the undertakings of the Museum.

Article 2. Establishment of "In-lake" and/or upstream Storm Water Management Structures.

2.1 Contemplation. It is the contemplation of the parties hereto that the objective of enhancing the water quality protection for the main body of Lake Maury is promoted by the development of storm water management structures. In specific agreed-upon coves of Lake Maury, these structures will be designed to remove pollutants from storm water run-off and to trap silt in the cove to prevent the pollutants and the silt from entering the main body of Lake Maury (each

improved cove to be described as a "Cove Facility") and, thus, provide additional protection to the James River and the Chesapeake Bay.

2.2 First Cove Facility. The first Cove Facility to be established will be designed to accept the storm water run-off from improvements being done by CNU to its property and the widening of Warwick Boulevard ("Lakeside Cove"). The design of Lakeside Cove facility will be approved by the parties hereto. The cost of the design and the permitting of Lakeside Cove will be paid for by CNU (said cost currently estimated to be \$85,000.00).

2.3 Second Cove Facility. In consideration for an easement related to Sweetbriar Drainage Improvements to be dedicated to City by Museum, City agrees to designate the cove area immediately northeast of Riverside Hospital where the Sweetbriar Drainage Improvements discharge as the location for the Second Cove Facility. City will promptly begin design of a storm water management facility for that cove to be complete approximately December 2005, with construction to be complete based on a mutually agreed schedule depending on funding. The design will address water quality protection of Lake Maury and aesthetic considerations to the appropriate standard of care. Museum will be provided opportunity for comment at 60% and 90% design levels.

2.4 Additional Cove Facilities. Museum and City anticipate that additional Cove Facilities may be established in Lake Maury in other coves of Lake Maury, all as might be subsequently agreed by Museum and City. It is understood that the availability of funding for both initial construction and on-going maintenance shall be a factor guiding decisions related to additional Cove Facilities..

2.5 Undertaking by City. Each Cove Facility will have to be maintained, dredged and cleaned out from time to time. City hereby assumes responsibility to maintain, dredge, and clean out each Cove Facility that may be established.

Article 3. Long-term, Non-Routine Maintenance.

3.1 Non-routine maintenance of Lake Maury is understood to mean:

3.1.1 dredging of the main body of Lake Maury,

3.1.2 the maintenance and upgrades to major structure elements, such as the dam structure and spillways (hydraulic control structure that regulates lake level and outflow);

3.1.3 agreed-upon watershed and lake management practices (such as shore line stabilization); and

3.1.4 agreed-upon cost effective, water quality enhancing, watershed and lake management practices.

3.2 The City and the Museum recognize that the Lake Maury Account discussed in Article 6 will likely be insufficient to fund all the long-term, non-routine maintenance. The City and the Museum agree to further discuss the establishment of a satisfactory funding mechanism for the non-routine maintenance of Lake Maury after completion of the study referenced in Article 8.

Article 4. Routine Maintenance to be Performed by Museum.

4.1 The routine maintenance of Lake Maury consists of removing, if necessary, downed trees and other debris, including trash, that might enter into Lake Maury, monitoring from time to time the water quality of Lake Maury, cooperating with the Virginia Department of Game and Inland Fisheries to maintain and monitor the fish population of the Lake, and cooperating with other such City, State, and Federal agencies as might be appropriate.

4.2 Museum hereby assumes the responsibility for the routine maintenance of Lake Maury as aforesaid.

Article 5. Routine Maintenance to be Performed by City.

5.1 In addition to 2.4 above, City hereby reaffirms and hereby agrees to maintain its practice of maintaining ditches and storm water channels maintained by the storm water divisions of the departments of Engineering and Public Works of the City of Newport News, including any drainage easements that had heretofore been granted by Museum to City.

Article 6. Establishment of the Lake Maury Account.

6.1 In order to assist City and to provide a source of funding for City's obligations hereunder, City agrees to establish a Lake Maury Account (the "Account") within City's Storm Water Management fund as follows:

- 6.1.1 CNU and Museum will each contribute to the Account on an annual basis \$10,000.00 per year, to be increased every three years based on the difference in the cost of living for the three year period: the Washington-Baltimore Consumer Price Index – All Urban Consumers shall be the CPI statistic used.
- 6.1.2 The annual storm water management fees collected by the City from the Museum and CNU will be contributed to the Lake Maury Fund. Each of CNU and Museum agree to continue to pay the storm water management fees assessed by City.
- 6.1.3 City will manage the Account and all expenditures from the Account will be agreed upon by Museum and City.
- 6.1.4 City will identify other significant users of Lake Maury Watershed and seek contributions, where appropriate, in its discretion from such users to the Account.

6.1.5 City may further identify other storm water management fees which, in its discretion, would be appropriate to be part of the Account.

6.1.6 City recognizes that the long-term, non-routine maintenance may require significant expenditures that would require borrowing. It is anticipated such borrowings may be repaid from the Account by specific agreement between City and Museum. The City agrees to consider using its borrowing capacity to fund such long-term, non-routine maintenance.

Article 7. VDOT Allocation.

7.1 A sum of \$400,000.00 is anticipated to be paid by VDOT to Museum by reason of the establishment of Lakeside Cove. Museum will contribute this entire fund to the Account, except for the necessary funds to fund (estimated to be \$105,000.00) the Study described in Article 8 hereof. The City will use these funds to build the Lakeside Cove (estimated to be \$250,000.00) and any funds not so utilized will be added to the Lake Maury Fund.

Article 8. Study.

8.1 Purpose of the Study.

8.1.1 Museum will retain a consultant acceptable to City to conduct a Study that will, in general,

8.1.1.1 update a 1979 Malcolm Pirnie Study to obtain an accurate depiction of the existing drainage conditions and patterns, including the adequacy of the existing outfall structure;

8.1.1.2 make recommendations for necessary improvements;

8.1.1.3 evaluate the adequacy of the control structure that regulates

- the level of Lake Maury and outflow that should be utilized;
- 8.1.1.4 evaluate dredging needs of Lake Maury;
 - 8.1.1.5 identify the cost effective, water quality enhancing, watershed and lake management practices; and
 - 8.1.1.6 identify other locations where in-lake facilities may provide for the long-term protection of Lake Maury.

8.2 Uses by City and Museum

- 8.2.1. The City and the Museum will use the Study to develop the priorities for the implementation of the non-routine maintenance of the Lake and Dam.
- 8.2.2. The Study will be used by City and Museum to seek state and federal resources to assist in the funding of the implementation of the Study recommendations.
- 8.2.3 City may use the Study to identify the need for and location of Cove Facilities.

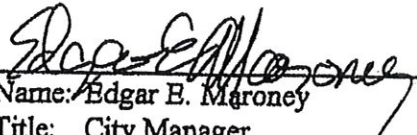
IN WITNESS WHEREOF, the parties acknowledge their agreement by the signatures of their duly authorized representatives on the date above written.

THE MARINERS' MUSEUM, a Virginia Corporation

By: [Signature]
Name: Sam B. McQuinn
Title: PRESIDENT

CITY OF NEWPORT NEWS, VIRGINIA, a
Municipal Corporation

By:


Name: Edgar E. Maroney
Title: City Manager

ATTEST:

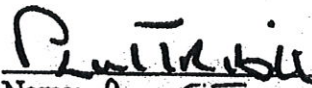

City Clerk

APPROVED AS TO FORM:


City Attorney

CHRISTOPHER NEWPORT UNIVERSITY,
a Public State Agency

By:


Name: PAUL S. TRIPLE, JR.
Title: PRESIDENT

sdm2902

MASTER PLAN

Chesapeake Bay TMDL Master Plan

Christopher Newport University



PREPARED FOR



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Newport News, VA 23606
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PREPARED BY



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April 2025

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Acknowledgements

Vanasse Hangen Brustlin, Inc. (VHB) would like to thank our collaboration partners who provided guidance and vision in the planning and preparation of this document.

Christopher Newport University

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David Guglielmo – Director of Facilities Planning and Sustainability

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Virginia Department of Environmental Quality

David Taylor – DEQ State MS4 Compliance Coordinator, Central Office

Planning Team

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List of Abbreviations

Title	Abbreviation
Best Management Practice.....	BMP
Chesapeake Bay Preservation Act.....	CBPA
Capital Improvement Project.....	CIP
Christopher Newport University.....	CNU
Virginia Department of Conservation and Recreation	DCR
Virginia Department of Environmental Quality.....	DEQ
Department of General Services.....	DGS
Division of Engineering & Buildings	DEB
Edge of Stream.....	EOS
Environmental Protection Agency.....	EPA
Intensely Developed Area	IDA
Leadership in Energy and Environmental Design	LEED
Low Impact Design.....	LID
Minimum Control Measure	MCM
Minimum Standard.....	MS
Municipal Separate Storm Sewer Systems.....	MS4
National Pollution Discharge Elimination System.....	NPDES
Pollutant of Concern	POC
Resource Protection Area.....	RPA
Stormwater Improvement Project	SIP
Stormwater Management.....	SWM
Stormwater Management Masterplan.....	SWMP
Stormwater Pollution Prevention Plan.....	SWPPP
Total Maximum Daily Load.....	TMDL
Total Nitrogen	TN
Total Phosphorus.....	TP
Total Suspended Solids.....	TSS
Vanasse Hangen Brustlin.....	VHB
Virginia Erosion and Sediment Control Program	VESCP
Virginia Pollution Discharge Elimination System.....	VPDES
Virginia Stormwater Management Handbook	VSMH
Virginia Stormwater Management Program	VSMP
Watershed Implementation Plan.....	WIP

1. Introduction

Purpose

This Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan was written to describe the means and methods by which Christopher Newport University (CNU) intends to meet the Special Condition for the Chesapeake Bay TMDL. This Special Condition is located in the General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems which was effective as of July 1, 2013, and states that Small Municipal Separate Storm Sewer Systems (MS4) must create a TMDL Action Plan and submit the plan to the Virginia Department of Environmental Quality (DEQ).

The University's MS4 permit (VAR040090) requires action plans to be implemented for the impaired bodies of water to which CNU discharges stormwater runoff. The ultimate discharge point for CNU is the Chesapeake Bay. The CNU campus has four (4) major outfalls which discharge to Lake Maury and Cooper Creek. A TMDL is assigned to determine a waste load allocation to the University that establishes the maximum amount of pollutant that can enter an impaired water without violating water quality standards.

The TMDL for the Chesapeake Bay was established by the EPA in 2010 and targets specific Pollutants of Concern (POCs). POCs included in the TMDL are total nitrogen (TN), total phosphorous (TP), and total suspended solids (TSS). Virginia developed a Chesapeake Bay TMDL Watershed Implementation Plan (WIP) that implements an outline for meeting the Chesapeake Bay TMDL. The WIP requires a phased approach over three five-year permit cycles for meeting required POC reductions for the final TMDL target goal. The reductions include:

- 5% first permit cycle reduction, met at the end of the first permit cycle (June 30, 2018)
- 35% second permit cycle reduction, which will need to be accomplished by the end of the second permit cycle (June 30, 2023)
- 60% third permit cycle reduction which will need to be accomplished by the end of the third permit cycle (June 30, 2028). The total reduction thus is 100% of the TMDL requirement.

Reductions are applied to 2009 Edge of Stream (EOS) loading rates for each POC as defined by the Chesapeake Bay Program Watershed Model Phase 5.3.2 for the James River Basin. A target reduction percent in the 2009 EOS loading rates must be met in order meet the TMDL target goal at the end of the third permit cycle. The reduction target percent is defined for each POC by the Chesapeake Bay WIP. Target reduction percentages are further broken into two categories for impervious and pervious cover. Impervious areas must show a reduction of 9.0% for nitrogen loads, 16% for phosphorous loads, and 20% for total sediment loads.

Pervious areas must show a reduction of 6.0% for nitrogen, 7.25% for phosphorous, and 8.75% for total sediment loads.

This plan establishes how CNU intends to meet the 35% and 60% reduction requirements by the end of the second and third permit cycles to stay in compliance with their MS4 Permit and the Chesapeake Bay TMDL Special Condition Guidance developed by DEQ. This report follows the order specified in Guidance Memo No. 15-2005 set forth by DEQ and dated May 18, 2015.

The following elements are included within this Action Plan:

1. Current Program and Existing Legal Authority
2. New or Modified Legal Authority
3. Means and Methods to Address Discharges from New Sources
4. Estimated Existing Source Loads and Calculated Total Pollutant of Concern Required Reductions
5. Means and Methods to Meet the Required Reductions and Schedule
6. Means and Methods to Offset Increased Loads from New Sources Initiating Construction Between July 1, 2009 and June 30, 2014
7. Means and Methods to Offset Increased Loads from Grandfathered Projects that Begin Construction After July 1, 2014
8. List of Future Projects and Associated Acreage that Qualify as Grandfathered
9. An Estimate of the Expected Cost to Implement the Necessary Reductions
10. Public Comments on Draft Action Plan

MS4 Permit Compliance

Table 1 provides the requirements of CNU's MS4 permit and the specific section of this report where the requirement is met by CNU's MS4 Program Plan. Additionally, *Table 1* describes actions CNU has taken to meet the MS4 permit requirements.

Table 1: MS4 Permit Compliance

CNU TDML Action Plan Section	Element from DEQ TMDL Special Condition Guidance	MS4 General Permit Section	MS4 Permit Requirement
2	Part VI.1 - Current Program and Existing Legal Authority	I.C.2.a(1)	A review of the current MS4 program implemented as a requirement of this state permit including a review of the existing legal authorities and the operator's ability to ensure compliance with this special condition

2	Part VI.2 - New or Modified Legal Authority	I.C.2.a(2)	The identification of any new or modified legal authorities such as ordinances, state and other permits, orders, specific contract language, and interjurisdictional agreements implemented or needing to be implemented to meet the requirements of this special condition
3	Part VI.3 - Means and Methods to Address Discharges from New Sources	I.C.2.a(3)	The means and methods that will be utilized to address discharges into the MS4 from new sources
4	Part VI.4 - Estimated Existing Source Loads and Calculated Total Pollutants of Concern (POC) Required Reductions	I.C.2.a(4) and I.C.2.a(5)	An estimate of the annual POC loads discharged from the existing sources as of June 30, 2009, based on the 2009 progress run. The operator shall utilize the applicable versions of Tables 2 a-d in this section based on the river basin to which the MS4 discharges by multiplying the total existing acres served by the MS4 on June 30, 2009, and the 2009 Edge of Stream (EOS) loading rate. A determination of the total pollutant load reductions necessary to reduce the annual POC loads from existing sources utilizing the applicable versions of Tables 3 a-d in this section based on the river basin to which the MS4 discharges. This shall be calculated by multiplying the total existing acres served by the MS4 by the corresponding permit cycle required reduction in loading rate. For the purposes of this determination, the operator shall utilize those existing acres identified by the 2000 U.S. Census Bureau urbanized area and served by the MS4
5	Part VI.5 - Means and Methods to Meet the Required Reductions and Schedule	I.C.2.a(6)	The means and methods, such as management practices and retrofit programs that will be utilized to meet the required reductions included in subdivision 2 a (5) of this subsection, and a schedule to achieve those reductions. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions

Summary

In accordance with the MS4 Permit, the University must calculate required permit cycle reductions and offsets for the following:

- Existing sources as of June 30, 2009
- Sources beginning construction between July 1, 2009 and June 30, 2014,
- Grandfathered sources beginning construction after July 1, 2014

The additional treatment provided by existing best management practices (BMPs) that were constructed to meet project development goals met the offset for the required first permit cycle reductions.

Two of the Stormwater Improvement projects outlined in the 2019 CNU Stormwater Master Plan, if implemented, will provide the pollutant offset required for the third permit cycle reductions.

Total POC Load Reductions required by the permit cycles and associated offsets can be found in *Table 2*. A breakdown of total phosphorus removal provided by the existing BMPs and project requirements can be found in *Appendix B*.

2. Current Program and Legal Authority

Current Program and Existing Legal Authority

As an operator of an MS4, Christopher Newport University must develop, implement, and enforce an MS4 Program Plan as stated in Phase II MS4 regulations. CNU has created an MS4 Program Plan that is continually updated and monitored to ensure CNU meets MS4 regulations. This MS4 Program Plan ensures the CNU is acting in the most effective manner to reduce pollutant discharge, protect water quality, and ensure compliance with water quality standards. Additionally, the MS4 Program Plan ensures that CNU is adhering to the Clean Water Act, the MS4 permit regulations, and other associated regulations.

The CNU MS4 Program Plan is managed by the Grounds Department and includes updating the MS4 Program Plan and the MS4 General Permit Annual Report. Six minimum control measures (MCMs) are outlined in the Phase II MS4 General Permit:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Stormwater Runoff Control
- Post Construction Stormwater Management
- Pollution Prevention and Good Housekeeping for Municipal Operations

Best Management Practices have been integrated into these six MCMs to assist in protecting the water quality within the regulated acreage that ultimately discharges into the Chesapeake Bay. The University's MS4 Program Plan lists each of the six MCMs and activities that CNU is pursuing to meet them.

Stormwater policies have been implemented by CNU within the MS4 Program Plan to administer the Program and comply with the MCMs. These policies can be found on CNU's Stormwater Management Webpage.

- Stormwater Management Master Plan, June 2019
- Illicit Discharge Detection and Elimination Program, August 2022
- Stormwater Pollution and Prevention Plan (SWPPP), June 2016
- Standard Operating Procedures (SOPs), September 2016
- Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management, December 2019

New or Modified Legal Authority

New or modified legal authorities are not required for compliance with the Special Condition for the Chesapeake Bay TMDL. CNU possesses the authorities necessary to meet pollution reduction goals.

CNU and neighboring MS4 jurisdictions are responsible for the drainage within their boundaries. If an agreement is made with a neighboring MS4 operator (City of Newport News) to meet pollution reduction goals, this TMDL Action Plan will be updated.

On January 19, 2005, CNU established a Lake Maury Watershed Plan with The Mariners' Museum and the City of Newport News to detail the maintenance of the Lake as well as shoreline stabilization and cost-effective water quality measures. Any maintenance or stormwater upgrades to the Lake will be required to be discussed with both The Mariners' Museum and the City of Newport News.

3. Means and Methods to Address Discharges from New Sources

The University must introduce and implement means and methods to offset pollutant loads from new sources. To offset pollutant loads, provisions of the Virginia Stormwater Management Handbook (VSMH), as of the 2014 revisions, require that if a redevelopment project site is less than 1 acre, phosphorus loadings from that site be reduced by 10% as compared to the existing developed conditions. Phosphorous loadings must be reduced by 20% when the project area is greater than 1 acre. Virginia Stormwater Management Program (VSMP) Regulations identify phosphorus loading as the "keystone" indicator of runoff water quality. As phosphorus is present in stormwater runoff in both particulate and soluble form, its concentration in stormwater runoff is considered indicative of the presence of other pollutants (nitrogen, TSS) that exist in either form. VSMP regulations requires all new

developments to remove 0.41 pounds of phosphorus per acre per year. The VSMH evaluates BMP pollutant removal performance in terms of percentage of Total Phosphorus (TP) removed. Total phosphorus removal loads are used to determine TN and TSS removal loads through use of pollutant loading ratios found in *Table 4* of the MS4 General Permit regulations.

For the plan approval and application process, refer to CNU Annual Standards and Specifications. Construction documents are developed by a design team hired by CNU which includes surveyors, engineers, and landscape architects. Plans are designed to the Virginia Standards and to comply with the MS4 General Permit regulations.

Following plan approval, general contractors are responsible for obtaining the necessary land disturbance permits and attending preconstruction meetings with CNU officials. A purpose of the preconstruction meeting is to review all erosion and sediment controls once they are installed on site and to confirm they comply with the approved plans. The contractor is also responsible for maintaining the latest approved set of plans and the SWPPP on-site for each project during the extent of construction. A certified inspector is responsible for making sure each inspection is completed for the site.

A preconstruction meeting is also held prior to installation of any permanent water quality BMPs. Following construction, permanent stormwater facilities are inspected for conformance with plans, specifications, and standards. Annual inspection of stormwater facilities will be conducted with maintenance being performed as required by the contractor, or CNU Facilities Management & Grounds Department staff.

In addition to measures discussed within this TMDL Action Plan, CNU has completed a Stormwater Master Plan in 2019. This Master Plan outlines several Stormwater Improvement and Capital Improvement projects that can be implemented on campus to meet future Permit Cycle pollutant reduction goals. Campus wide Stormwater Pollution Prevention Plans are to be submitted as part of the University's MS4 Program Plan to assist in facilitating the measures for maintaining current and future best management practices.

4. Estimated Existing Source Loads and Calculated Total Pollutant of Concern (POC) Required Reductions

MS4 Area Delineation

In order to estimate the existing source loads within CNU's regulated area, an MS4 boundary for the campus must be outlined. The MS4 area delineation as well as areas of pervious and impervious regulated land were determined based on data from the 2019 Stormwater Master Plan (SWMP). Area delineation was calculated in the SWMP using GIS data and survey for the CNU campus that was generated from previous CAD files and the City of Newport News GIS system. GIS data was supplemented by various record drawings of completed projects on the

CNU campus. If CNU expands or reduces its current campus area, the MS4 area delineation will need to be revised. A map of CNU's MS4 boundary can be found in *Appendix A*.

In accordance with DEQ's Chesapeake Bay TMDL Special Guidance, the University may exclude from its MS4 service area land regulated under any general VPDES permit that addresses industrial stormwater or forested land one half contiguous acre or more that meets specific criteria. The University has not identified any property with a VPDES industrial stormwater permit or forested area within its MS4 boundary. In the event that a property within the CNU campus obtains an industrial stormwater permit, further analysis would be necessary to determine if this property meets specific criteria to be excluded from the MS4 service area delineation.

Existing Source Loads

Existing source loads for phosphorus, nitrogen, and total suspended solids were calculated using 2009 Edge of Stream (EOS) loading rates specified in the MS4 General Permit. Since the CNU campus is the James River watershed, 2009 EOS rates were taken from *Table 3* of the MS4 General Permit. Loading rates were applied to impervious and pervious cover and summed in order to determine total existing source loads.

Refer to *Figure 2: TMDL Reduction Requirements* for existing source load calculations.

Total POC Reduction Requirements

Total pollutant of concern (POC) reduction requirements were calculated using 2009 EOS loading rates that were reduced to meet the final TMDL target goals as required by the Chesapeake Bay Watershed Implementation Plan (WIP). Loading rates for the James River watershed can be found in *Table 3* of the MS4 Permit. The loading rate reduction percentage is defined by the Chesapeake Bay WIP for each specific POC and land cover type. MS4 Impervious areas must show a reduction of 9.0% for nitrogen loads, 16% for phosphorous loads, and 20% for total sediment loads. MS4 Pervious areas must show a reduction of 6.0% for nitrogen, 7.25% for phosphorous, and 8.75% for total sediment loads. Reduced loading rates were then used to determine reduced final POC loads required at the end of the third permit cycle.

After determining the total net reduction required to meet TMDL target goals, the percent reduction for each POC for each permit cycle was calculated. Reduction required for pervious and impervious cover were summed to determine a total reduction required for each POC for each permit cycle. *Table 2* summarizes POC reduction requirements.

Table 2: TMDL Reduction Requirements
Table 3a

		A	B	C	D	E	F	G	H	I	J
Pollutant	Subsource	Loading Rate (lbs/ac/ yr) ¹	Existing developed lands as of 6/30/09 served by the MS4 withn the 2010 CUA (acres) ²	Loads (lbs/yr) ³	Percentage of MS4 required Chesapeake Bay Total L2 loading	Percentage of L2 Required by 6/30/2023 (lbs/yr)	40% Cumulative reduction required by 6/30/2023 (lbs/yr) ⁴	Sum of 40% cumulative reduction (lbs/yr) ⁵	Percentage of L2 Required by 6/30/2028 (lbs/yr)	100% Cumulative reduction required by 6/30/2028 (lbs/yr) ⁶	Sum of 100% cumulative reduction (lbs/yr) ⁷
Nitrogen	Regulated Urban Impervious	9.39	76.90	722.09	9%	40%	26.00	39.79	100%	64.99	99.47
	Regulated Urban Pervious	6.99	82.22	574.72	6%	40%	13.79		100%	34.48	
Phosphorus	Regulated Urban Impervious	1.76	76.90	135.34	16%	40%	8.66	9.85	100%	21.66	24.64
	Regulated Urban Pervious	0.5	82.22	41.11	7.25%	40%	1.19		100%	2.98	
Sediment	Regulated Urban Impervious	676.94	76.90	52,056.69	20%	40%	4164.53	4455.41	100%	10411.34	11138.53
	Regulated Urban Pervious	101.08	82.22	8,310.80	8.75%	40%	290.88		100%	727.19	

1. Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2

2. To determine the existing developed acres required in column B, permittees should first determine the existing of their regulated service area based on the 2010 Census urbanized

3. Column C= Column A x Column B

4. Column F= Column C x Column D x Column E

5. Column G= The sum of subsource cumulative reduction required by 6/30/23 (lbs/yr) as calcaulted in Column F

6. Column I= Column C x Column D x Column H

7. Column J= The sum of subsource cumulative reduction required by 6/30/28 (lbs/yr) as calcaulted in Column I

Note: From Christopher Newport University- Municipal Separate Storm Sewer System (MS4) Annual Report- Reporting Year July 1, 2017-June 30, 2018. Revised for property on Shoe Lane, University Place, Sweetbriar Drive, Yoder Barn, President's House, and 232 Prince Drew Road.

Table 3a

		A	B	C	D	E	F	G	H	I	J
Pollutant	Subsource	Loading Rate (lbs/ac/ yr) ¹	Existing developed lands as of 6/30/09 served by the MS4 withn the 2010 CUA (acres) ²	Loads (lbs/yr) ³	Percentage of MS4 required Chesapeake Bay Total L2 loading	Percentage of L2 Required by 6/30/2023 (lbs/yr)	40% Cumulative reduction required by 6/30/2023 (lbs/yr) ⁴	Sum of 40% cumulative reduction (lbs/yr) ⁵	Percentage of L2 Required by 6/30/2028 (lbs/yr)	100% Cumulative reduction required by 6/30/2028 (lbs/yr) ⁶	Sum of 100% cumulative reduction (lbs/yr) ⁷
Nitrogen	Regulated Urban Impervious	9.39	2.65	24.88	9%	40%	0.90	1.08	100%	2.24	2.70
	Regulated Urban Pervious	6.99	1.10	7.69	6%	40%	0.18		100%	0.46	
Phosphorus	Regulated Urban Impervious	1.76	2.65	4.66	16%	40%	0.30	0.31	100%	0.75	0.79
	Regulated Urban Pervious	0.5	1.10	0.55	7.25%	40.00%	0.02		100.00%	0.04	
Sediment	Regulated Urban Impervious	676.94	2.65	1,793.89	20%	40%	143.51	147.40	100%	358.78	368.51
	Regulated Urban Pervious	101.08	1.10	111.19	8.75%	40.00%	3.89		100.00%	9.73	

Note: Shenandoah Hall transfer from real estate foundation to campus property.

5. Means and Methods to Meet the Required Reductions and Schedules

Best Management Practices

Best Management Practices (BMP) are used extensively by CNU to offset sources of pollutant loads. The University presently has a total of 2 BMPs to meet these offsets. The existing James River Residence Hall – Extended Detention Basin and Track Complex Stadium Seating – Extended Detention Basin are not included within the TMDL phosphorous loading as they were replaced by the Lake Maury BMP. It is a common CNU practice to construct BMPs as part of Capital Improvement Projects located on the University campus. These BMPs are intended to provide water quality treatment and to offset increases in pollutant loads that are associated with new developments. Additionally, these BMPs provide surplus treatment that can be used to offset permit cycle reduction requirements. The sum offset provided by existing condition BMPs provides enough pollutant removal credit to meet the 5% first permit cycle reduction requirements. In addition, existing BMPs provide surplus pollutant removal credits that can be applied to the second and third permit cycles. BMPs that are planned to be constructed with future CIPs and SIPs will provide additional credit towards the second and third permit cycle reduction requirements. Since phosphorus is considered a “keystone” pollutant, reduction calculations were performed to target solely phosphorus. Pollutant loading ratios found in *Table 4* of the MS4 General Permit regulations were used to calculate required TN and TSS reductions. Refer to *Appendix B* for a summary of the BMPs and associated pollutant offsets.

2019 Christopher Newport University Master Plan

The latest CNU Stormwater Master Plan (SWMP) is dated June 2019. One of the goals of the SWMP was provide a “menu” of Capital Improvement Projects, and Stormwater Improvement Projects that could be implemented to meet TMDL reduction goals through the use of a variety of BMPs. Of these projects, CNU is considering Stream Restoration of the Lake Maury Outfall Tributary and the installation of the Lot E1 Water Quality Structure. These projects provide the majority of the pollutant offset required to meet the University’s TMDL goals. The remaining requirement will be met by the purchasing of offsite nutrient credits. An agreement with City of Newport News (neighboring MS4 operator) would be required with the stream restoration as it would treat both City and State property.

Stream Restoration of the Lake Maury Tributary is located on the southeast boundary of the CNU campus. Restoring the stream will provide significant pollutant reduction while also reestablishing heavily eroded stream banks. The restored stream channel will improve sediment and biological processes within the stream as well as the receiving Lake Maury.

Table 3 of this report summarize the means and methods to meet the required reductions.

Table 3: Means and Methods to Offset Increased Loads

Permit Cycle	Removal	POC Removal		
		TP	TN	TSS
TMDL (40%)	Removal Required	9.84	39.63	4,452.06
2023	Total Removal Required	9.84	39.63	4,452.06
	2018 Removal Achieved	1.76	7.70	84.51
	2023 Removal Achieved by Projects	-1.63	-13.35	-2,232.85
	2023 Offsite SWIFT Credit Purchase	8.61	34.68	3,895.55
2023	Total Removal Achieved	8.74	29.03	1,747.21
2023	TMDL Excess Removal*	-1.10	-10.60	-2,704.85
TMDL (60%)	Removal Required	14.76	59.44	6678.08
2023 Prop Addition	Removal Required	0.79	2.70	368.51
	Subtotal Removal Required	15.55	62.14	7,046.59
Lake Maury (60%)	Removal Required	0.88	4.58	370.42
2028	Total Removal Required	16.43	66.72	7,417.01
Removal Achieved by SIP Projects	Lake Maury Outfall- Stream Restoration	24.55	33.31	110,133.58
	Lot E1- Water Quality Structure	3.32	19.00	1,633.97
2028	Total Removal Achieved	27.87	52.31	111,767.54
2028	TMDL Excess Removal*	11.44	-14.41	104,350.53
*Deficit to be supplemented by the purchase of offsite nutrient credits (from HRSD SWIFT)				
**2028 Total Removal Required includes 2028 Property Addition				
Note: Negative values indicate a deficit in the POC				

Table 3a: BMPs contributing to achieving campus TMDL goals

Completed Year	Name/Description	Reduction Means/Methods
2018	Parking Lot A	Bioretention Basin
2021	Fine Arts Center	Nutrient Credits
2022	Captains Turf Field Replacement	Bioretention Basin – Dry Swale
		Nutrient Credits
2021	C2 Parking	Stormkeeper Filtering Practice
		Nutrient Credits
2023	Offsite SWIFT Credit Purchase	Nutrient Credits

2028 Compliance Options

CNU is planning to purchase SWIFT nutrient credits to meet the campus wide 2028 goals from the above Table 3. CNU may also choose to implement a few stormwater improvement projects from the 2019 SWMP, such as the Stream Restoration at the Lake Maury outfall and the Lot E1 Water Quality Structure as described in the 2019 Christopher Newport University Master Plan section. These stormwater improvements projects will further the Campus's compliance and can be utilized towards future post-2028 TMDL goals.

Table 3b: Installation Schedule of BMPs

Fiscal Year to be installed	Name/Description	Reduction Means/Methods
2025	Integrated Science Center Phase III	Isolator Row (Filtering Practice)
		Isolator Row (Filtering Practice)

Offsite Nutrient Credit Purchases

In addition to using nutrient credits to aid CIPs in meeting their development goals the "General VPDES Permit for Discharges or Stormwater from Small Municipal Separate Storm Sewer Systems" effective November 1, 2018 allows the use of nutrient credits to meet TMDL requirements. Refer to the CNU MS4 permit (VAR040090) including nutrient credit requirements. A combination of Stormwater Improvement Projects and offsite nutrient credits will be required to meet the requirements of the 2028 permit cycle. CNU plans to purchase offsite nutrient credits for the 2028 cycle. These credits will be either HRSD SWIFT credits or water quality nutrient credits from an offsite nutrient credit bank. The approximate rate of nutrient trading for the James River watershed is \$15,000- \$18,000 per pound phosphorus. This is a one-time fee.

6. Means and Methods to Offset Increase Loads from New Sources Initiating Construction between July 1, 2009 and June 30, 2014

Between July 1, 2009 and June 30, 2018, a number of projects were constructed on the CNU campus. Projects constructed between July 1, 2009 and June 30, 2014 were subject to Technical Criteria IIC under the VSMP regulations and the technology-based criteria. Capital improvement projects typically offset increased pollutant loads on a project by project basis using BMPs. Projects during this time created a surplus of pollutant removal that was used for smaller projects and maintained to aid in campus requirements. To determine the deficit pollutant requirement for Lake Maury, the campus CBPA (technology-based criteria) was used to define the BMP credit and impervious area change from 36% to 16%. If project areas were not available an area was assumed based on the design plans.

7. Means and Methods to Offset Increased Loads from Grandfathered Projects Beginning Construction after July 1, 2014

CNU does not have any projects that qualify for grandfathering under 9VAC25-870-48. The Lake Maury BMP was designed based on the old CBPA technical criteria and constructed in 2009 and has been utilized for many of CNU's past development projects. However, according to CNU Athletics Expansion II- New Tennis Courts (Eyre Tennis Courts Phase II) the water quality capacity of the Lake Maury BMP has been met. Therefore, the Lake Maury BMP cannot be used for any future projects and does not provide treatment credit towards the TMDL Reductions goals.

8. List of Future Projects Qualifying as Grandfathered

CNU has not identified any projects that qualify to be grandfathered under 9VAC25-870-48.

9. Estimated Cost of Compliance

Since existing BMPs provided first permit cycle pollutant offsets, estimated costs include only operation and maintenance that are required to keep existing BMPs functioning. These costs are summarized in *Table 4* of this report.

Table 4: Costs of Compliance (Operations and Maintenance)

BMP Type	Typical Cycle (years)	Cycle Cost (\$)		Qty	Total Cost (\$/year)
Bioretention Basin	1	1,000	per basin	4	\$ 4,000
Detention Basins	1	750	per basin	1	\$ 750
Water Quality Structure	1	2,500	per structure	1	\$ 2,500
Stream Restoration	1	5	per LF	570	\$ 2,850
Underground Detention	1	2,000	per pond	1	\$ 2,000
Permeable Pavers	1	1,500	per acre	0.50	\$ 750
Lake Maury*	1	10,000		1	\$ 10,000
Total BMP's				10	
Yearly Cost					\$ 22,850

*Based on the Lake Maury Watershed Management Plan dated May 9, 2003

**Includes existing and proposed BMPs listed in Appendix B for the 2023 permit cycle

Projects including the construction of stream restoration and the Lot E1 water quality structure are expected to provide pollutant offsets in the third permit cycles. Estimated construction costs are summarized in *Table 5* of this report. Cost breakdowns of the Lake Maury Outfall Stream Restoration can be found in *Appendix C*.

Table 5: Costs of Compliance (New Projects)

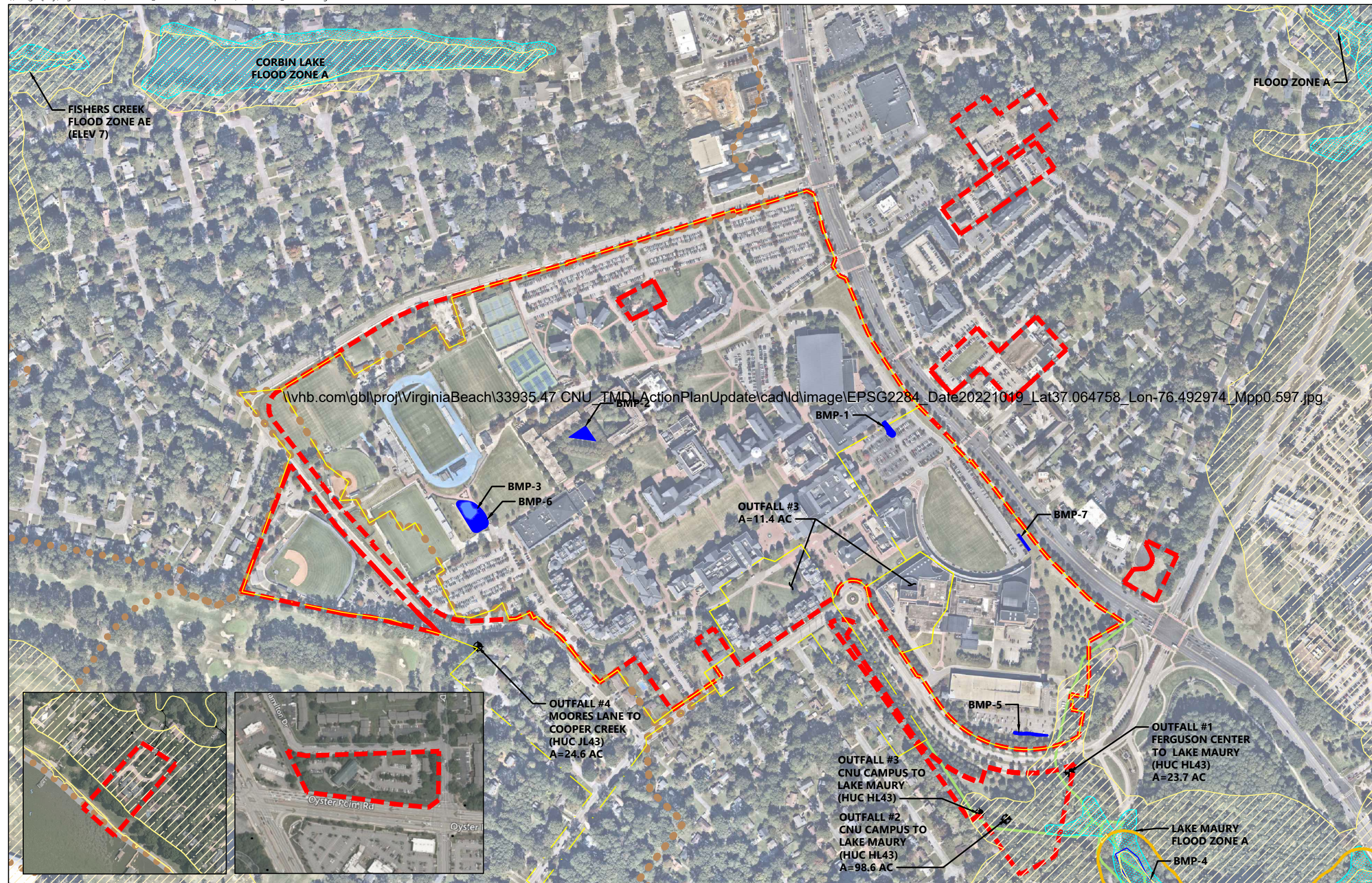
Name/Description	Reduction Means/Methods	Estimated Total Cost (\$)	Phosphorus Removed (lbs.)	Estimated Cost per Pound of Phosphorus Removed (\$/lb.)
Lake Maury Outfall	Stream Restoration	\$1,017,750	38.76*	\$26,258
Lot E1- Water Quality Structure	Water Quality Structure	\$565,800	3.32	\$170,422

*Note: Total Phosphorous Removed includes both City of Newport News and CNU credit. The anticipated CNU credit is 24.55 lbs./yr.

10. Public Comment

Part of the University's MS4 program includes Public Education and Outreach to students, faculty and staff. As part of this program, this TMDL Action Plan will be available on the University's Stormwater Management webpage. A 15-day public comment period will take place which will provide an opportunity the CNU community to provide feedback. Public comments and feedback will be considered and incorporated into this Action Plan before final completion.

Appendix A: Figures



Legend

- CAMPUS AREA
- HUC DIVIDES
- DRAINAGE AREA
- WETLAND
- RESOURCE PROTECTION AREA (RPA)
- RESOURCE MANAGEMENT AREA (RMA)
- FLOOD ZONE
- EXISTING BMP
- DRAINAGE OUTFALL

EXISTING BMP

- BMP-1 CONVOCATION, SPORTS & WELLNESS CENTER- WET POND (REMOVED)
- BMP-2 JAMES RIVER RESIDENCE HALL- EXTENDED DETENTION BASIN
- BMP-3 TRACK COMPLEX STADIUM SEATING- EXTENDED DETENTION BASIN (REMOVED)
- BMP-4 LAKE MAURY
- BMP-5 LOT A- BIORETENTION (LEVEL 1)
- BMP-6 CAPTAINS TURF FIELD REPLACEMENT - BIORETENTION (LEVEL 1)
- BMP-7 C2 PARKING - STORMKEEPER

OFFSITE CAMPUS AREA

- YODER BARN- 660 HAMILTON DR
- PRESIDENT'S HOUSE- 1205 RIVERSIDE DR

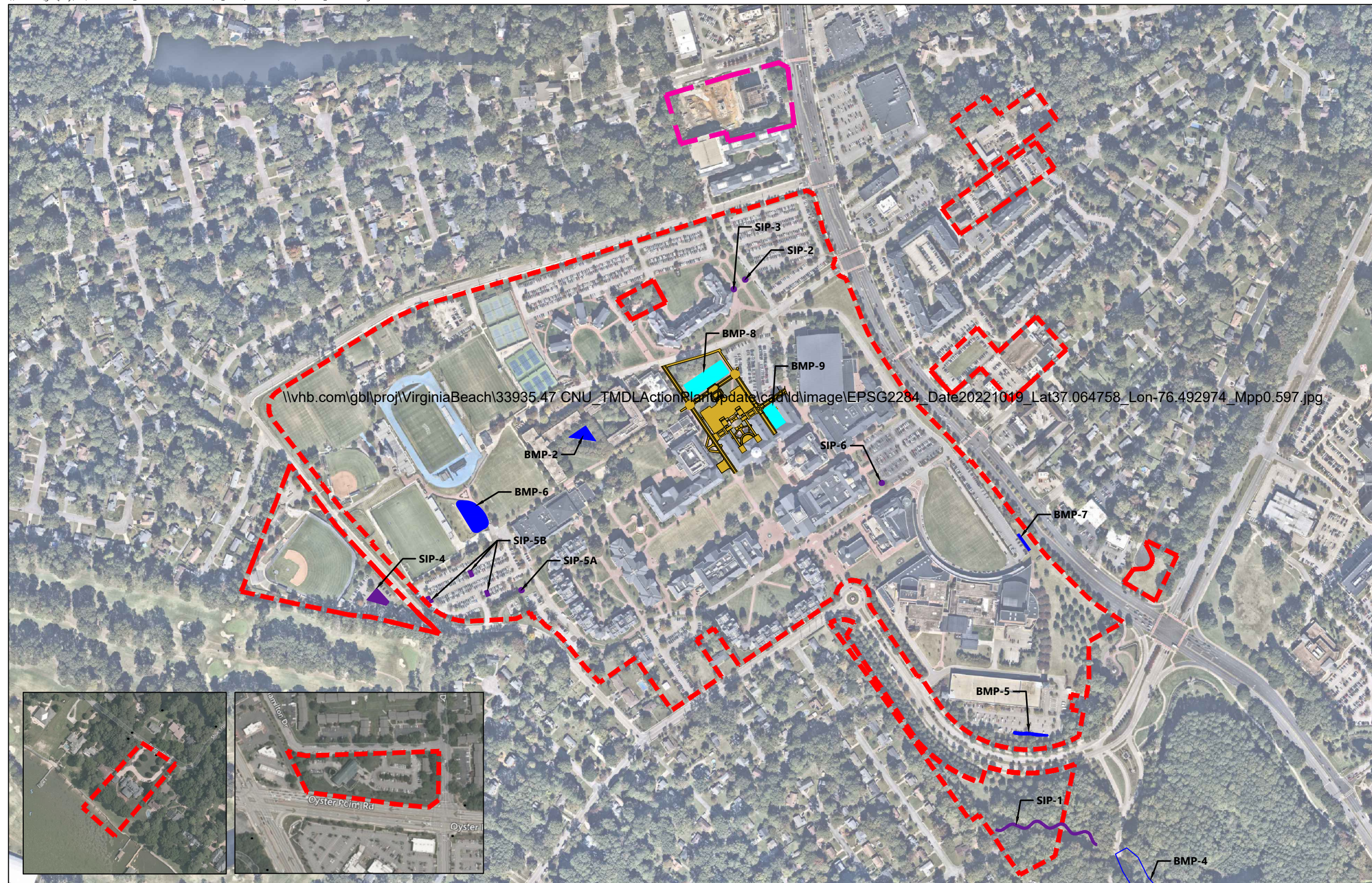
Figure 1: Existing Conditions

Stormwater Managment Master Plan

Christopher Newport University

Source:
Prepared for: **CNU**
Date: **January 2023**





Legend

- CAMPUS AREA
- NEW CAMPUS AREA
- CAPITAL IMPROVEMENT PROJECT
- EXISTING BMP
- CAPITAL IMPROVEMENT BMP
- STORMWATER IMPROVEMENT BMP

EXISTING BMP

- BMP-1 REMOVED
- BMP-2 JAMES RIVER RESIDENCE HALL- EXTENDED DETENTION
- BMP-3 REMOVED WITH BMP-6
- BMP-4 LAKE MAURY
- BMP-5 LOT A- BIORETENTION (LEVEL 1)
- BMP-6 CAPTAINS TURF FIELD REPLACEMENT- BIORETENTION (LEVEL 1)
- BMP-7 C2 PARKING- STORMKEEPER

CIP PROJECTS

2028 BMP

- BMP-8 ISCL - WATER QUALITY STRUCTURE
- BMP-9 ISCL - WATER QUALITY STRUCTURE

SIP PROJECTS

- SIP-1 LAKE MAURY OUTFALL- STREAM RESTORATION
- SIP-2 LOT E1- (A) HYDRODYNAMIC DEVICE/
(B) WATER QUALITY STRUCTURE
- SIP-3 LOT E2/E3- HYDRODYNAMIC DEVICE
- SIP-4 LOT H- BIORETENTION (LEVEL 1)
- SIP-5 LOT I- (A) WATER QUALITY STRUCTURE/
(B) LOT I- WATER QUALITY INLETS
- SIP-6 LOT C1- HYDRODYNAMIC DEVICE

Figure 2: Proposed Conditions
Stormwater Managment Master Plan
Christopher Newport University

Source:
Prepared for: **CNU**
Date: **April 2025**



Appendix B: Load Pollutant Offsets

Permit Cycle	YearProject		Site Area					BMP Information										TMDL								
			Area (Acres)	Pre Impervious Area (acres)	Post Impervious Area (acres)	TP Removal Req (1)	TN Removal Req (2)	TSS Removal Req (2)	BMP Name	BMP Type	Location	Drainage Area	Impervious Area	P Percent Removal (1)	P Removal Provided (1)	N Percent Removal (3)	N Removal Provided (4)	TSS Percent Removal (3)	TSS Removal Provided (4)	TP	Campus	TN	Campus	TSS	Campus	
2018	2018 Requirements - Permit 1					1.23	4.95	556.51													1.23		4.95		556.51	
	Lake Maury	Lake Maury- Includes Followiwnj Projects	147.24	59.00	72.22	39.43	205.04	16597.40	Lake Maury			153.73	78.73	0.29	39.45	-	-	-	-	-	-	-	-	-	-	
	2015	Student Success Center (Christopher Newport																								
	2013	New Hall Parking Lot Demo and Walkway																								
	2014	Design (Luter Hall Lawn- Phase 1)																								
		CNU Bell Tower/ Hoinkes Plaza																								
		CNU Tennis Center/ Eyre Tennis Courts Phase II																								
		Greek Housing Project - Phase 1																								
	Lake Maury Deficit (36-16%)- Permit 1					0.07	0.36	29.47												-0.07		-0.36		-29.47		
	David Student Union- Regattas								Nutrient Credits											0.00		0.00		0.00		
2012	Grounds Maintenance Facility				1.14	5.93	479.86						-	1.14	-	0.00	-	0.00	0.00		-5.93		-479.86			
2012	Demo Moores Lane	0.36	0.15	0.00	-0.20	-1.04	-84.19												0.20		1.04		84.19			
2016	Demo 72 Shoe Lane	0.76	0.16	0.00	-0.19	-0.99	-79.98												0.19		0.99		79.98			
2017-2018	Tribble Library Expansion																		0.00		0.00		0.00			
2018	BMP at Parking Lot A	1.69	1.06	1.06	0.00	0.00	0.00	BMP-5	Bioretention (Level 1)	Lot A	1.69	1.06	0.25	1.44	0.40	11.96	0.55	429.68	1.44		11.96		429.68			
																	SUM	1.76		7.70		84.51				
																	2018 Surplus		0.53		2.75		-472.00			
						8.61	34.68	3895.55												8.61		34.68		3895.55		
2023	2023 Requirements - Permit 2					8.61	34.68	3895.55																		
	Lake Maury Deficit (36-16%)- Permit 2					0.51	2.65	214.68												-0.51		-2.65		-214.68		
	2019	E4 Parking (gravel)	0.90	0.00	0.63	1.12	5.82	471.45											-1.12		-5.82		-471.45			
	2021	Fine Arts Center	4.00	2.06	2.44	1.74	9.05	732.42	-	Nutrient Credits				-	1.74	-	3.83	-	0.00	0.00		-5.22		-732.42		
	2019	Captains Turf Field Replacement	5.30	1.33	1.87	1.92	9.98	808.19	-	Nutrient Credits				-	0.54	-	1.19	-	0.00	-1.38		-8.80		-808.19		
		C2 Parking	2.13	0.48	1.54	2.14	11.13	900.80	BMP-6	Bioretention (Level 1)- Dry Swale		2.18	0.88	0.20	1.38	0.25	10.41	0.55	399.91	1.38		10.41		399.91		
									-	Nutrient Credits				-	1.29	-	2.84	-	0.00	-0.85		-8.29		-900.80		
									BMP-7	StormKeeper (Filtering Practice)		1.39	0.83	0.40	0.85	0.60	7.02	0.80	494.77	0.85		7.02		494.77		
	2023	Offsite SWIFT Credit Purchase							-	Nutrient Credits					8.61		34.68		3895.55	8.61		34.68		3895.55		
																			2023 Surplus/Deficit		-1.10		-10.60		-2704.85	
						14.76	59.44	6678.08												14.76		59.44		6678.08		
2028	2028 Requirements - Permit 3					14.76	59.44	6678.08																		
	Lake Maury Deficit (36-16%)- Permit 3					0.88	4.58	370.42												-0.88		-4.58		-370.42		
	Added Property for Shenandoah River Hall					0.79	2.70	368.51												-0.79		-2.70		-368.51		
	2024	Indoor Batting Cages	0.22	0.04	0.15				Less than 10,000 SF of disturbance, no VESMP requirements											0.00		0.00		0.00		
	2025 / under construction	Integrated Science Center Phase III	3.80	1.30	2.30	2.49	12.95	1048.12		Nutrient Credits				-	0.39	-	4.06	-	0.00	-2.10		-8.89		-1048.12		
									BMP-8	Isolator Row (Filtering Practice)		1.85	0.76	0.40	0.91	0.60	8.85	0.80	499.72	0.91		8.85		499.72		
BMP-9									Isolator Row (Filtering Practice)		1.55	1.31	0.40	1.19	0.60	8.39	0.80	728.84	1.19		8.39		728.84			

Notes

(1) From Runoff Reduction Spreadsheet

(2) TP * Ratio of Phosphorous Loading Rate to Nitrogen and Total Suspended Solids Loading Rates for Chesapeake Bay Basins

(3) From Guidance Memo 15-2005 Table V.C1- Chesapeake Bay Program BMPs, Established Efficiencies

(4) BMP: Based on Loading Rates from Table 2a: Calculation Sheet for Estimating Existing Source Loads for the James River Basin Provided

Removal= (Impervious * Loading Rate + Pervious * Loading Rate) * BMP Efficiency

(4) Nutrient Credit: Based on Bank ratio of Phosphors to Nitrogen Removal (Cranston Mill Pond LLC bank ratio N= 2.2 *P)

Table 2 a: Calculation Sheet for Estimating Existing Source Loads for the James River Basin (* Based on Chesapeake Bay Program Watershed Model Phase 5.3.2)

Subsource	Pollutant	Total Existing Acres Served by MS4 (06/30/09)	2009 EOS Loading Rate (lbs/acre/yr)	Estimated Total POC Load Based on 2009 Progress Run (lbs/yr)
Regulated Urban Impervious	Nitrogen		9.39	
Regulated Urban Pervious			6.99	
Regulated Urban Impervious	Phosphorus		1.76	
Regulated Urban Pervious			0.5	
Regulated Urban Impervious	Total Suspended Solids		676.94	
Regulated Urban Pervious			101.08	

Table 4: Ratio of Phosphorous Loading Rate to Nitrogen and Total Suspended Solids Loading Rates for Chesapeake Bay Basins

Ratio of Phosphorous to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphorous Loading Rate (lbs/acre)	Nitrogen Loading Rate (lbs/acre)	Total Suspended Solids Loading Rate (lbs/acre)
James River Basin	1.0	5.2	420.9
Potomac River Basin	1.0	6.9	469.2
Rappahannock River Basin	1.0	6.7	320.9
York River Basin	1.0	9.5	531.6

Table V.C.1 – Chesapeake Bay Program BMPs, Established Efficiencies			
BMP	Nitrogen Percent Effectiveness	Phosphorus Percent Effectiveness	Sediment Percent Effectiveness
Bioretention/raingardens	70	75	80
Bioswale	70	75	80
Dry Detention Ponds and Hydrodynamic Structures	5	10	10
Stormwater to the Maximum Extent Practicable (SW to the MEP)	50	60	90
Erosion and Sediment Control	25	40	40
Erosion and Sediment Control on non-regulated pervious urban	25	40	40
Erosion and Sediment Control on extraction land use	25	40	40
Dry Extended Detention Ponds	20	20	60
Urban Filtering Practices	40	60	80
*Urban Forest Buffers	*	*	*
Urban Infiltration Practices - no sand/veg no underdrain	80	85	95
Urban Infiltration Practices - with sand/veg no underdrain	85	85	95
Permeable Pavement - no sand/veg with underdrain with AB soils	45	50	70
Permeable Pavement - with sand/veg with underdrain with AB soils	50	50	70
MS4 Permit-Required Stormwater Retrofit	25	35	65
*Street sweeping 25 times a year	*	*	*
Urban Nutrient Management	17	22	0
Vegetated Open Channel – Urban	45	45	70
Wet Ponds and Wetlands	20	45	60

* See most recent expert panel reports

Performance Based Water Quality Calculations Appendix 5D - VSMH

WORKSHEET 1

Project CNU Lake Maury

PRJ #-

Date : 5-Nov-19

1 Determine the Applicable Area (A) and the post-developed Impervious Cover (I_{post}):

Applicable Area (A) = 147.24 acres

Post-Development Impervious Cover:

I_a of structures = _____ acres

I_a of parking lots = _____ acres

I_a of site = 72.22 acres

Total I_{post} = 72.22 acres

$I_{post} = (\text{total } I_{post} / A) \times 100$

$I_{post} =$ **49.05** %

2 Determine the average land cover condition ($I_{watershed}$) or the existing impervious cover:

$I_{watershed} =$ 16.00 % (Default $I_{watershed} = 10\%$)

Existing Impervious Cover($I_{existing}$):

Existing Served by a BMP? [n](#)

I_a of structures = _____ acres

I_a of parking lots = _____ acres

I_a of roadways = _____ acres

I_a of site = 59.00 acres

Total I_{exist} = 59.00 acres

$I_{exist} = (\text{total } I_{post} / A) \times 100$

$I_{exist} =$ **40.07** %

3 Determine the appropriate development situation:

Situation 1 -

Situation 2 -

Situation 3 - **X - Go to worksheet 3**

Situation 4 -

Performance Based Water Quality Calculations Appendix 5D - VSMH

Worksheet 3 : Situation 3

Sheet 1 of 2

Project CNU Lake Maury

PRJ #-

Date : 5-Nov-19

Summary of values from Worksheet #1:

$$\begin{aligned} \text{Applicable Area (A)} &= 147.24 \text{ acres} \\ I_{\text{post}} &= 49.05 \% \\ I_{\text{watershed}} &= 16.00 \% \\ I_{\text{existing}} &= 40.07 \% \end{aligned}$$

4 Determine the relative pre-development load(L_{pre}):

Based on existing Impervious cover:

$$L_{\text{pre(existing)}} = 137.85 \text{ lbs/year}$$

Based on average land cover condition:

$$L_{\text{pre(watershed)}} = 65.13 \text{ lbs/year}$$

5 Determine the relative post-development load(L_{post}):

$$L_{\text{post}} = 164.98 \text{ lbs/year}$$

6 Determine the relative pollutant removal requirement(RR):

$$\begin{aligned} \text{RR} &= L_{\text{post}} - L_{\text{pre(watershed)}} \\ \text{RR} &= 99.85 \text{ lbs/year} \\ \text{OR} \\ \text{RR} &= L_{\text{post}} - (0.9 * L_{\text{pre(existing)}}) \\ \text{RR} &= 40.91 \text{ lbs/year} \end{aligned}$$

Use the lesser of the two values:

$$\text{RR} = 40.91 \text{ lbs/year}$$

7 Identify best management practice(BMP) for the site:

A. Determine the required pollutant removal efficiency for the site:

$$\begin{aligned} \text{EFF} &= (\text{RR}/L_{\text{post}}) * 100 \\ \text{EFF} &= 24.80 \% \end{aligned}$$

B. Select BMP from Table 5-15 and give location on site:

BMP 1: Lake Maury	$A_{\text{bmp1}} = 153.73$	$\text{EFF}_{\text{bmp1}} = 0.2929$	$I_{\text{bmp1}} = 51.2$
BMP 2:	$A_{\text{bmp2}} =$	$\text{EFF}_{\text{bmp2}} =$	$I_{\text{bmp2}} =$
BMP 3:	$A_{\text{bmp3}} =$	$\text{EFF}_{\text{bmp3}} = 0$	$I_{\text{bmp3}} = 0.0$

$$\begin{aligned} A_{\text{bmp}} &= \text{Drainage area of proposed BMP(acres)} \\ \text{EFF}_{\text{bmp}} &= \text{Pollutant removal efficiency of BMP(decimal form)} \\ I_{\text{bmp}} &= \text{impervious percentage of } A_{\text{bmp}} \text{ (expressed as a whole number)} \end{aligned}$$

Performance Based Water Quality Calculations Appendix 5D - VSMH

Worksheet 3 : Situation 3

Sheet 1 of 2

Project CNU Lake Maury

PRJ #-

Date : 5-Nov-19

Sheet 2 of 2

C. Determine the pollutant load entering the proposed BMP(s), L_{bmp} :

$$L_{\text{bmp}} = (0.05 + (0.009 * I_{\text{bmp}})) * A_{\text{bmp}} * 2.28$$

$$L_{\text{bmp1}} = 179.07 \text{ lbs/year}$$

$$L_{\text{bmp2}} = 0.00 \text{ lbs/year}$$

$$L_{\text{bmp3}} = 0.00 \text{ lbs/year}$$

D. Calculate the pollutant load removed by the proposed BMP(s)

$$L_{\text{removed}} = \text{EFF}_{\text{bmp}} * L_{\text{bmp}}$$

$$L_{\text{removed/bmp1}} = 52.45 \text{ lbs/year}$$

$$L_{\text{removed/bmp2}} = 0.00 \text{ lbs/year}$$

$$L_{\text{removed/bmp3}} = 0.00 \text{ lbs/year}$$

E. Calculate the total pollutant load removed by the BMP(s)

$$L_{\text{removed/total}} = 52.45 \text{ lbs/year}$$

F. Verify Compliance

COMPLIANCE

$$L_{\text{removed/total}} \geq \text{RR}$$

$$52.45 \geq 40.91$$

13.00

53.91

1.46

0.07

0.51

0.88

VDOT REQUIREMENT

TOTAL REQUIREMENT

DEFECIT FROM 36% TO 16%

5% REQUIRED 1ST PERMIT CYCLE

35% REQUIRED 1ST PERMIT CYCLE

60% REQUIRED 1ST PERMIT CYCLE

Appendix C: References



CHRISTOPHER NEWPORT UNIVERSITY

CAMPUS MAP

BUILDINGS/AREAS

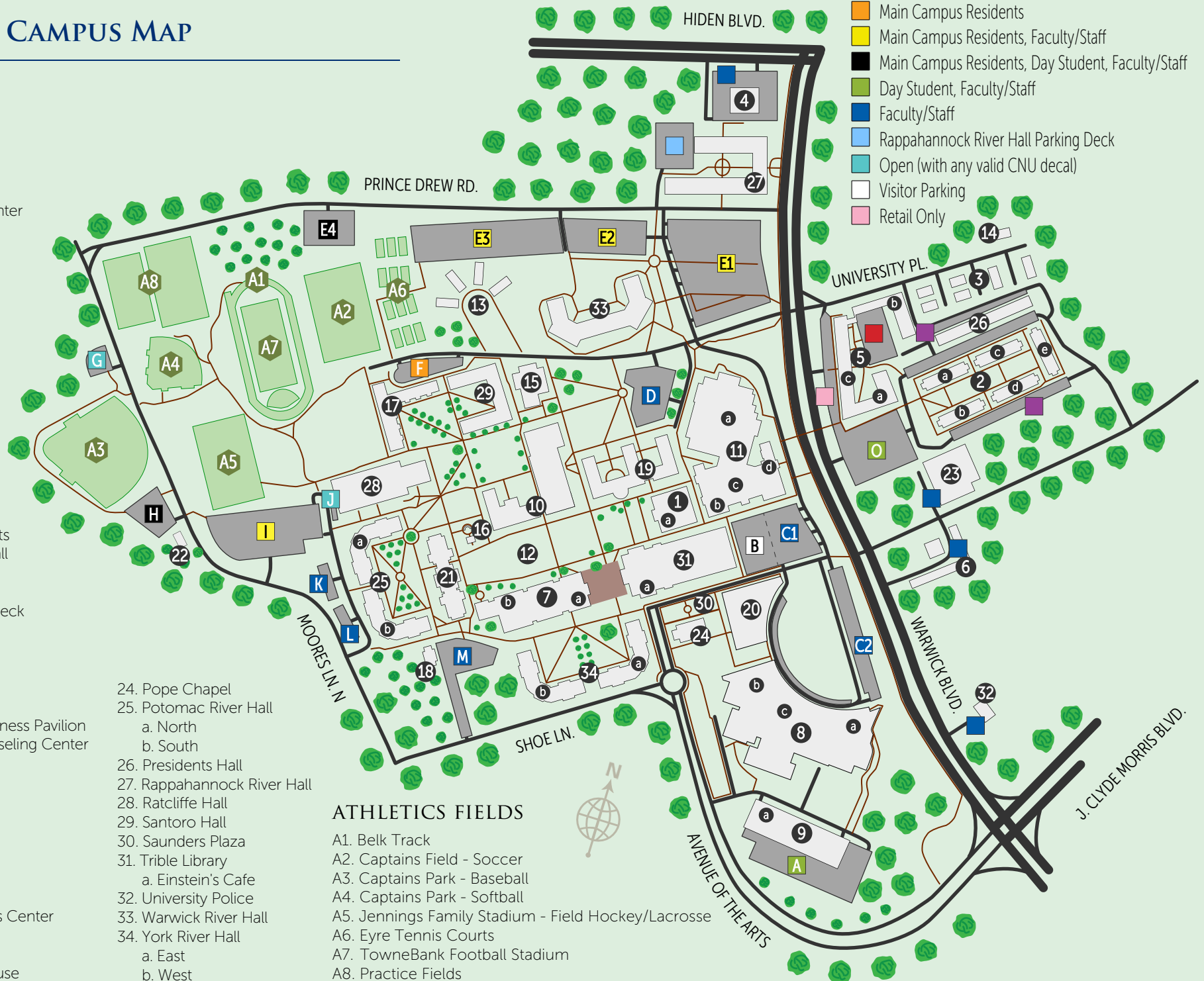
- Christopher Newport Hall
 - Admission Welcome Center
- CNU Apartments
 - Harrison
 - Monroe
 - Madison
 - Jefferson
 - Washington
- CNU Landing
- CNU North
- CNU Village
 - Taylor
 - Tyler
 - Wilson
- Commonwealth Hall
- David Student Union
 - Captains Locker
 - Regattas
- Ferguson Center for the Arts
 - Diamondstein Concert Hall
 - Peebles Theatre
 - Studio Theatre
- Ferguson Center Parking Deck
 - Parking Services
- Forbes Hall
- Freeman Center
 - Field House
 - Gaines Theatre
 - Triesmann Health & Fitness Pavilion
 - Windsor Health & Counseling Center
- Great Lawn
- Greek Village
- Grounds Department
- Hidden-Hussey Commons
- Hoinkes Plaza/Bell Tower
- James River Hall
- Klich Alumni House
- Luter Hall
- Mary M. Torggler Fine Arts Center
- McMurrin Hall
- Military Science Building
- Plant Operations Warehouse
- Pope Chapel
- Potomac River Hall
 - North
 - South
- Presidents Hall
- Rappahannock River Hall
- Ratcliffe Hall
- Santoro Hall
- Saunders Plaza
- Tribble Library
 - Einstein's Cafe
- University Police
- Warwick River Hall
- York River Hall
 - East
 - West

ATHLETICS FIELDS

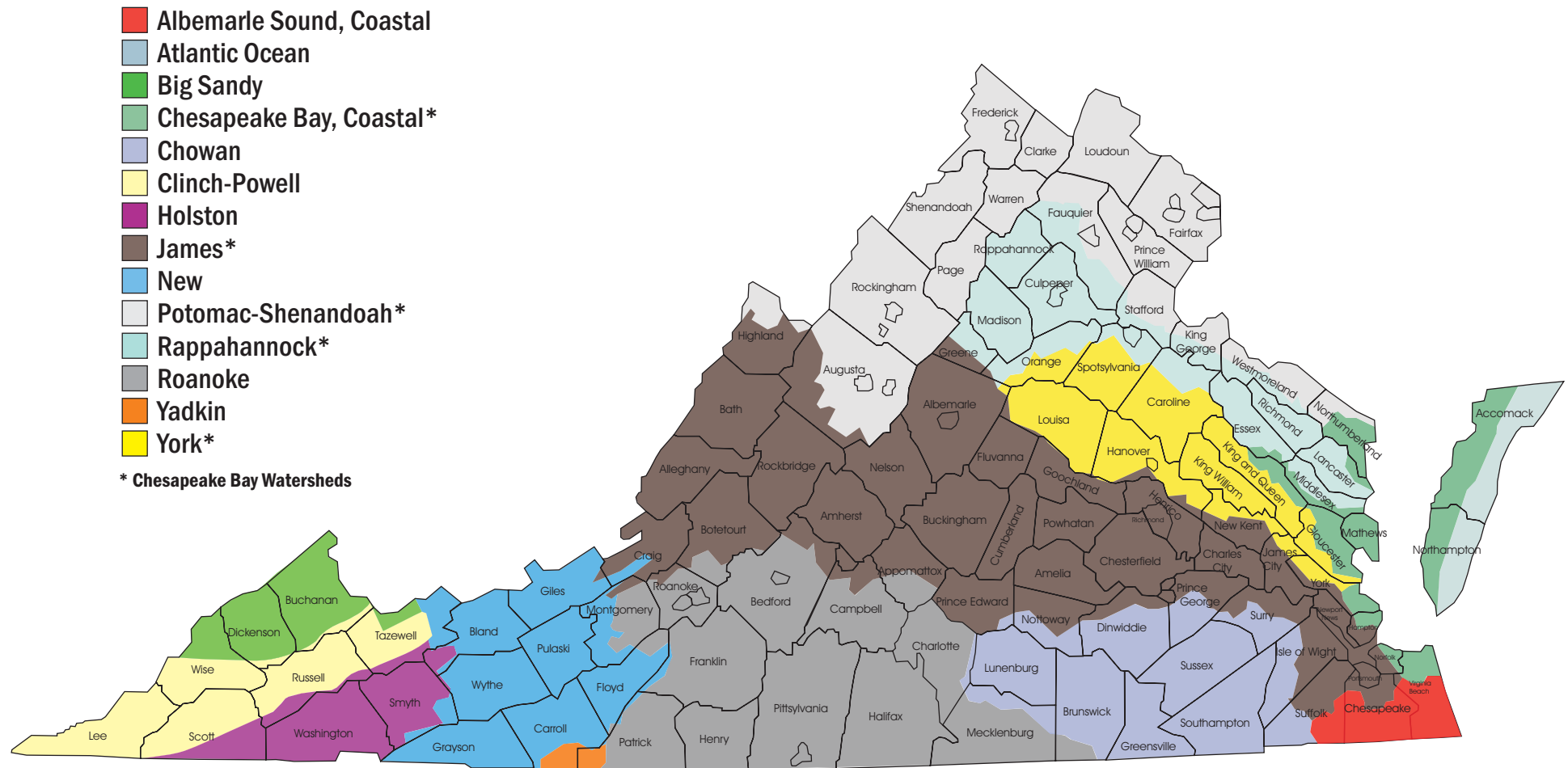
- Belk Track
- Captains Field - Soccer
- Captains Park - Baseball
- Captains Park - Softball
- Jennings Family Stadium - Field Hockey/Lacrosse
- Eyre Tennis Courts
- TowneBank Football Stadium
- Practice Fields

PARKING: (Lots are named by letter)

- CNU Apartments, CNU Landing, Presidents Hall
- CNU Village Parking Deck
- Main Campus Residents
- Main Campus Residents, Faculty/Staff
- Main Campus Residents, Day Student, Faculty/Staff
- Day Student, Faculty/Staff
- Faculty/Staff
- Rappahannock River Hall Parking Deck
- Open (with any valid CNU decal)
- Visitor Parking
- Retail Only



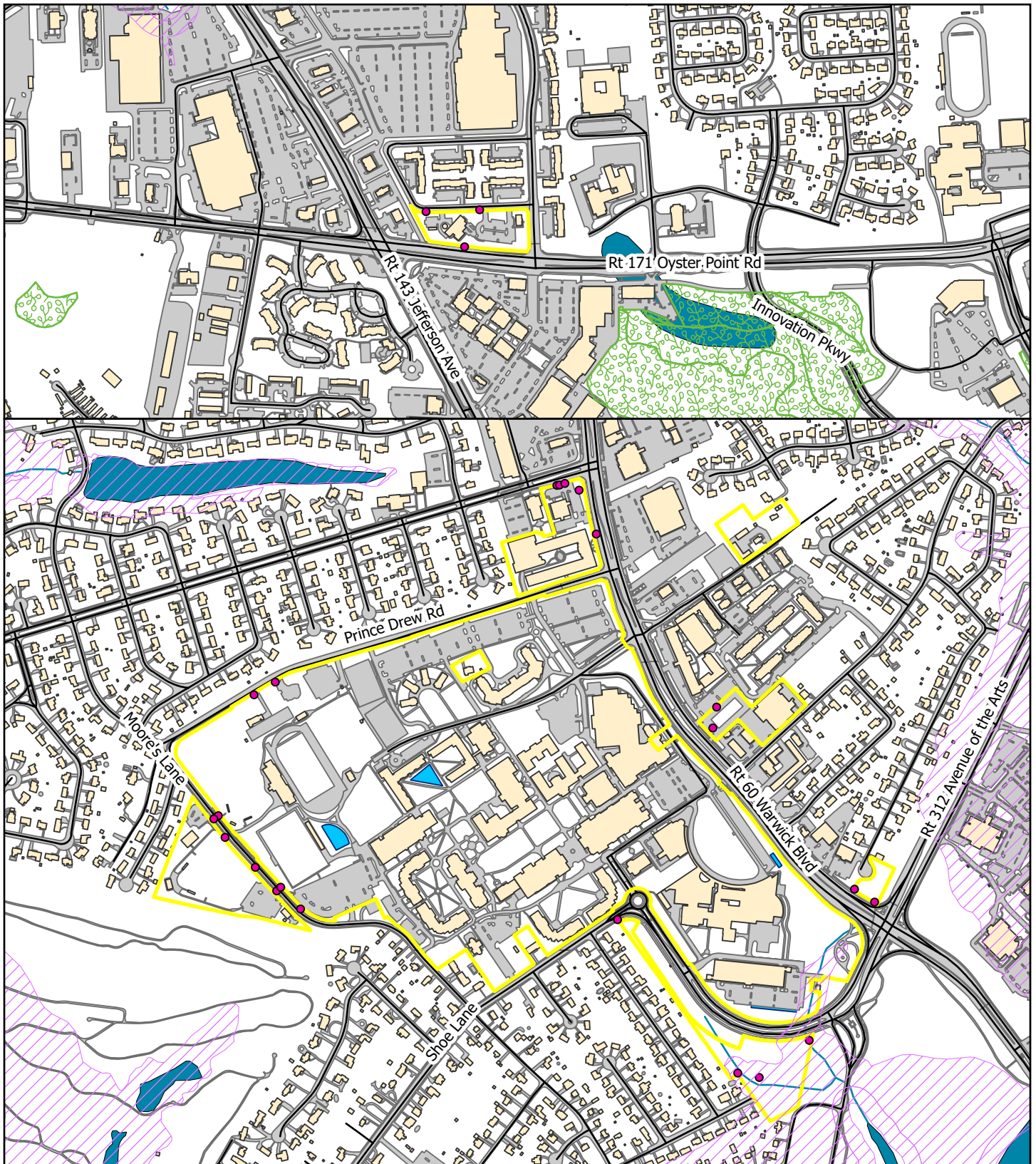
Virginia's Major Watersheds



Appendix D: Public Comments

APPENDIX C

MS4 MAPS AND INSPECTION FORMS



Legend

Wetlands	Building Footprints
CBPA	Paved Areas
CNU Outfalls	Stream / River
CNU Regulated Area	Waterbodies
Virginia Road Centerlines	BMPs

CHRISTOPHER NEWPORT UNIVERSITY

Figure 1:
MS4 GIS Data
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

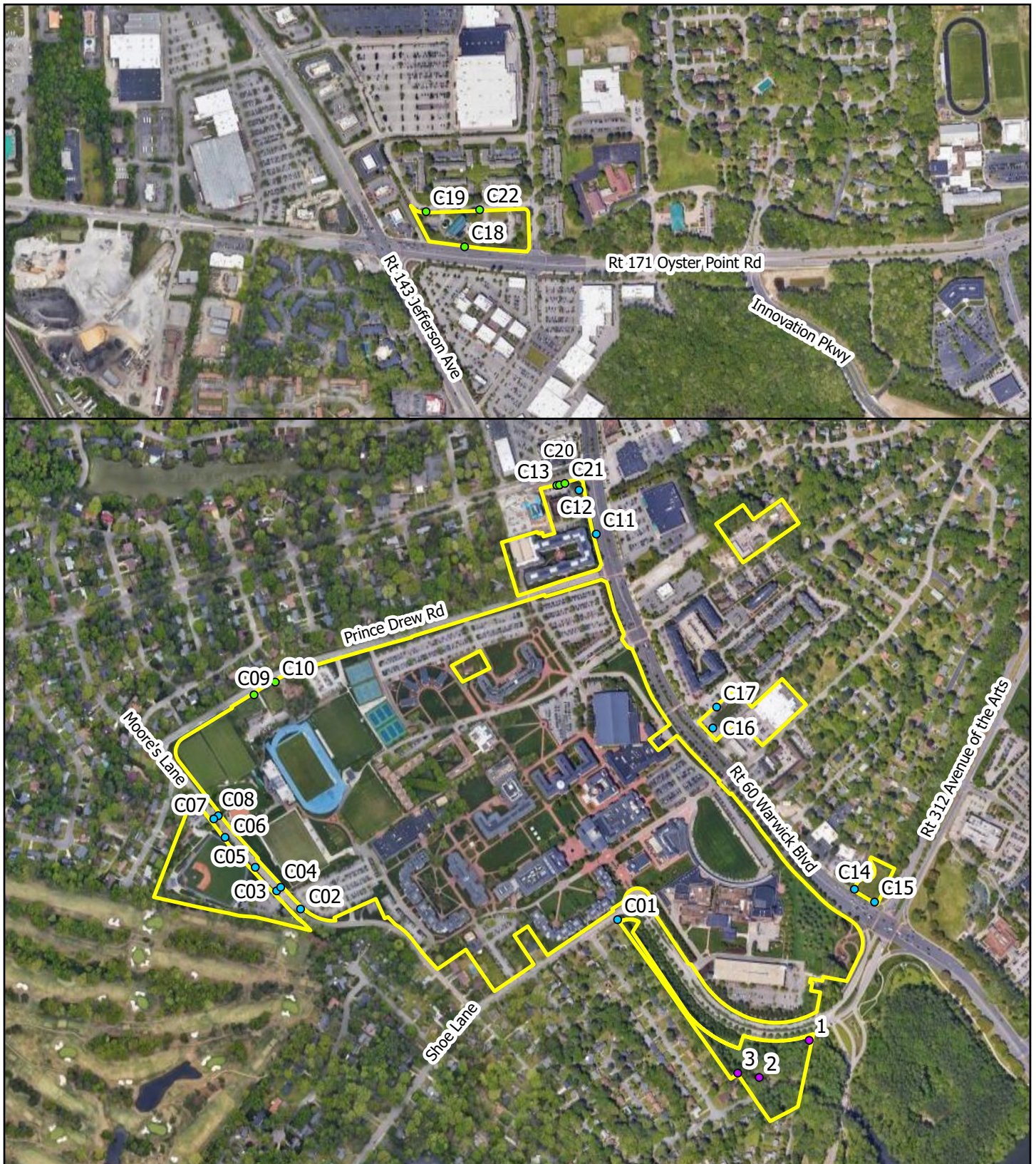
Basemap: Google Imagery

Last updated: 06/05/2026 by Timmons Group

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

0 400 800 Feet





Legend

CNU Outfalls

- James River-Cooper Creek,
- James River-Cooper Creek, Interconnected outfall to Newport News
- Warwick River, Interconnected outfall to Newport News
- CNU Regulated Area

Figure 3:
CNU Outfall Map
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

Last updated: 06/04/2026 by Timmons Group

Basemap: Google Imagery

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet



0 400 800 Feet



Legend

CBPA	Stream/River
Wetlands	CNU HUC 12 Basins
CNU Outfalls	Waterbodies
CNU Regulated Area	BMPs
Virginia Road Centerlines	

**Figure 4:
BMP Map**
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA
 Basemap: Google Imagery
 Last updated: 06/04/2026 by Timmons Group

0 400 800 Feet
 Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

9-C.10.0. BIORETENTION PRACTICES: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Facility Location:

- ☐ Surface
☐ Underground

Hydraulic Configuration:

- ☐ On-line facility
☐ Off-line facility

Filtration Media:

- ☐ No filtration (e.g., dry well, permeable pavement, infiltration facility, etc.)
☐ Sand
☐ Bioretention Soil
☐ Peat
☐ Other: _____

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
☐ Sedimentation chamber
☐ Plunge pool
☐ Stone diaphragm
☐ Grass filter strip
☐ Grass channel
☐ Other: _____

Ideally, Bioretention facilities should be inspected and cleaned up annually, preferably during the Spring. During the first 6 months following construction of a bioretention facility, the site should be inspected at least twice after storm events that exceed 1/2-inch of rainfall. Watering is needed once a week during the first 2 months following installation, and then as needed during the first growing season (April-October), depending upon rainfall. If vegetation needs to be replaced, one-time spot fertilization may be needed, preferably using an organic rather than a chemical fertilizer. Each facility should have a customized routine maintenance schedule addressing issues such as the following: grass mowing, weeding, trash removal, mulch raking and maintenance, erosion repair, reinforcement plantings, tree and shrub pruning, and sediment removal.

Element of BMP	Potential Problem	Problem? Y / N	Investigated? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as necessary	Owner or professional	
	There is excessive trash and debris				Remove immediately	Owner or professional	
	There is evidence of erosion and / or bare or exposed soil				Stabilize immediately	Owner or professional	
	There are excessive landscape waste or yard clippings				Remove immediately and recycle or compost	Owner or professional	
	Oil, grease or other unauthorized substances are entering the facility				Identify and control the source of this pollution. It may be necessary to erect fences, signs, etc	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	Excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
Pre-Treatment (continued)	There is evidence of clogging (standing water, noticeable odors, water stains, algae or floating aquatic vegetation, or oil/grease)				Identify and eliminate the source of the problem. If necessary, remove and clean or replace the clogged material.	Professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	There is dead vegetation or exposed soil in the grass filter				Restabilize and revegetate as necessary	Owner or professional	
Inlets	Check for sediment build-up at curb cuts, gravel diaphragms or pavement edges that prevent flow from getting into the bed, and check for bypassing.				Remove sediment and correct any other problems that block inflow.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion at or around the inlet				Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	Inflow is hindered by trees and/or shrubs.				Remove woody vegetation from points of inflow and directly above underdrains. (Trees and shrubs may be located closer to the perimeter.)	Owner or professional	
Side Slopes (Annually, after major storms)	There is evidence of rill or gully erosion or bare soil				Identify the source of erosion damage and prevent it from recurring. Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	There is excess sediment accumulation				Remove immediately	Owner or professional	
	Side slopes support nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.	Professional	
Vegetation (monthly)	Plant composition is consistent with the approved plans and any stakes or wires are in good condition.				Determine if existing plant materials are at least consistent with general Bioretention design criteria and replace inconsistent species.	Professional	
	There should be 75-90% cover (mulch plus vegetation), and the mulch cover				Supplement vegetation and mulch as needed.		

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
	should be 2-3 inches deep.						

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Remediate? Y / N	How to fix problem	Who Will Address Problem	Comments
Vegetation (monthly) (continued)	There is evidence of hydrocarbons or other deleterious materials, resulting in unsatisfactory plant growth or mortality,				Replace contaminated mulch. If problem persists, test soils for hydrocarbons and other toxic substances. If excess levels are found, the soils, plants and mulch may all need to be replaced in accordance with the approved construction plans.	Professional	
	Invasive species or weeds make up at least 10% of the facility's vegetation				Remove invasive species and excessive weeds immediately and replace vegetation as needed.	Owner or professional	
	The grass is too high				Mow within a week. Grass species should be selected that have dense cover, are relatively slow growing, and require the least mowing and chemical inputs. Grass should be from 6-10 inches high.	Owner or professional	
	Vegetation is diseased, dying or dead				Remove and replace. Increase watering, but avoid using chemical fertilizers, unless absolutely necessary.	Professional	
	Winter-killed or salt-killed vegetation is present.				Replace with hardier species.	Owner or professional	
Filter Media (Annually)	The filter media is too low, too compacted, or the composition is inconsistent with design specifications				Raise the level, loosen and amend or replace the media, as needed, to be consistent with the state design criteria for Bioretention (85-88% sand 8-12% soil fines 3-5% organic matter in form of leaf compost). Other remediation options are described in the maintenance section of the state design criteria for Bioretention	Professional	
	The mulch is older than 3 years or is otherwise in poor condition				The mulch must be replaced every 2-3 years	Professional	
	There is evidence that chemicals, fertilizers, and/or oil/grease are present				Remove undesirable chemicals from media and facility immediately, and replace mulch or media as needed	Professional	
	There is excessive trash, debris, or sediment.				Remove trash and debris immediately. Check plant health and, without damaging plants, manually remove the sediment, especially if the depth exceeds 20% of the facility's design depth.	Owner or professional	
	There is evidence of concentrated flows, erosion or exposed soil				Identify the source of erosion damage and prevent it from recurring. Repair the erosion damage and reseed or otherwise restabilize with vegetation.	Professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Remediate? Y / N	How to fix problem	Who Will Address Problem	Comments
Filter Media (Annually) (continued)	The filter bed is clogged and/or filled inappropriately				Redistribute the soil substrate and remove sediment within 2 weeks.	Professional	
	The topsoil is in poor condition (e.g., the pH level is not 6-7, the composition is inappropriate, etc.)				Ensure a 3-inch surface depth of topsoil consistent with the state design criteria for Bioretention (loamy sand or sandy loam texture, with less than 5% clay content, and organic matter content of at least 2%). If the pH is less than 6.5, spread limestone.	Professional	
Underdrain/ Proper Drainage	The perforated pipe is not conveying water as designed				Determine if the pipe is clogged with debris or if woody roots have pierced the pipe. Immediately clean out or replace the pipe, as necessary.	Professional	
	The underlying soil interface is clogged (there is evidence on the surface of soil crusting, standing water, the facility does not dewater between storms, or water ponds on the surface of basin for more than 48 hours after an event).				Measure the draw-down rate of the observation well for three days following a storm event in excess of 1/2 inches in depth. After three days, if there is standing water on top but not in the underdrain, this indicates a clogged soil layer. If standing water is both on the surface and in the underdrain, then the underdrain is probably clogged. This should be promptly investigated and remediated to restore proper filtration. Grading changes may be needed or underdrain repairs made. The filter media may need to be raked, excavated and cleaned or replaced to correct the problem. Holes that are not consistent with the design and allow water to flow directly through a planter to the ground must be plugged.	Professional	
Planters	The planter is unable to receive or detain stormwater prior to infiltration. Water does not drain from the reservoir within 3-4 hours of after a storm event.				Identify and correct sources of clogging. Topsoil and sand/peat layer may need to be amended with sand or replaced all together.	Owner or professional	
	The planter has structural deficiencies, including rot, cracks, and failure, or the planter is unable to contain the filter media or vegetation				Make needed repairs immediately.	Owner or professional	
Outlet/ Overflow Spillway	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Outlet/ Overflow Spillway (continued)	There is excessive trash, debris, or sediment at the outlet				Remove immediately, and keep the contributing area free of trash and debris.	Owner or professional	
	Any grates present are in good condition				Repair or replace as necessary	Owner or professional	
Observation Well	Is the observation well still capped?				Repair, as necessary.	Professional	
Overall	Access to the Infiltration facility or its components is adequate				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	There is evidence of standing water				Fill in low spots and stabilize; correct flow problems causing ponding.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools and establish vegetation; treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> .	Owner or professional	
	Complaints from local residents				Correct real problems	Owner or professional	
	Encroachment on the bioretention area or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	

9-C.16.0. EXTENDED DETENTION PONDS: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Pond characteristics and functions
(check all that apply)

- ☐ Water quality treatment
- ☐ Channel protection
- ☐ Ties into groundwater

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
- ☐ Vegetated buffer area
- ☐ Grass filter strip
- ☐ Grass channel
- ☐ Other: _____

Hydraulic Configuration:

- ☐ On-line facility
- ☐ Off-line facility

Ideally, Extended Detention Ponds should be inspected annually. ED Ponds are prone to a high clogging risk at the ED low-flow orifice. Ideally, the orifice should be inspected at least twice a year after initial construction. The constantly changing water levels in ED Ponds make it difficult to mow or manage vegetative growth. The bottom of ED Ponds often become soggy, and water-loving trees such as willows may invade and will need to be managed. Periodic mowing of the stormwater buffer is only required along maintenance rights-of-way and the embankment. The remaining buffer may be managed as a meadow (mowing every other year) or forest. Frequent removal of sediment from the forebay (every 5-7 years, or when 50% of the forebay capacity is filled) is essential to maintain the function and performance of the ED Pond. Sediments excavated from ED Ponds are usually not considered toxic or hazardous, so they can be safely disposed of either by land application or land filling.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as needed.	Owner	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or bare or exposed soil				Stabilize immediately.	Owner or professional	
	There is excessive landscape waste and yard clippings				Remove immediately.	Owner or professional	
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or exposed soil.				Immediately identify and correct the cause of the erosion and stabilize the eroded or bare area.	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Pre-Treatment (continued)	Sediment deposits are 50% or more of forebay capacity.				Dredge the sediment to restore the design capacity; sediment should be dredged from forebays at least every 5-7 years, and earlier, as needed.	Professional	
	The sediment marker is not vertical.				Adjust the sediment depth marker to a vertical alignment	Professional	
	There is evidence of clogging				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications	Professional	
	There is dead vegetation				Revegetate, as needed	Owner or professional	
Inlet	The inlet provides a stable conveyance into the pond				Stabilize immediately, as needed, and clear blockages.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion/undercutting at or around the inlet				Repair erosion damage and restabilize	Owner or professional	
	There is cracking, bulging, erosion or sloughing of the forebay dam.				Repair and restabilize immediately.	Professional	
	There is woody growth on the forebay dam.				Remove within 2 weeks of discovery.	Professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.	Professional	
	There is more than 1 inch of settlement.				Add fill material and compact the soil to the design grade	Owner or Professional	
	The inlet alignment is incorrect.				Correct immediately.	Owner or Professional	
Vegetation	Plant composition is consistent with the approved plans				Determine if existing plant materials are consistent with the general Wet Pond design criteria, and replace inconsistent species.	Professional	
	Invasive species are present.				Remove invasive species immediately and replace vegetation as needed.	Professional	
	Trees planted in the buffer and on wetland islands and peninsulas need watering during the first growing season				Consider watering every 3 days for first month, and then weekly during first year (April – October), depending on rainfall.	Owner or professional	
	Grass around the facility is overgrown				Mow (at least twice a year) to a height of 4"-9" high and remove grass clippings.	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Vegetation (continued)	Vegetation is dead or reinforcement planting is needed.				Remove and replace dead or dying vegetation.	Professional	
Permanent Pool and Side Slopes	There is excessive trash and/or debris.				Remove immediately	Owner or professional	
	There is evidence of sparse vegetative cover, erosion or slumping side slopes.				Repair and stabilize physical damage, and reseed or plant additional vegetation.	Owner or professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.	Owner or professional	
	There is significant sediment accumulation.				Conduct a bathymetric study to determine the impact to design volumes, and dredge if necessary.	Professional	
Riser/Principle Spillway and Low-Flow Orifice(s)	There is adequate access to the riser for maintenance.				Establish adequate access	Professional and, perhaps, the locality	
	Pieces of the riser are deteriorating, misaligned, broken or missing.				Repair immediately.	Professional	
	Adjustable control valves are accessible and operational.				Repair, as needed.	Professional	
	Reverse-slope pipes and flashboard risers are in good condition.				Repair, as needed.	Professional	
	Seepage into conduit				Seal conduit	Professional	
	There is evidence of clogging				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specs.	Professional	
	There is excessive trash, debris, or other obstructions in the trash rack.				Remove immediately.	Owner or professional	
Dam/ Embankment and Abutments	There is sparse veg. cover, settlement, cracking, bulging, misalignment, erosion rills deeper than 2 inches, or sloughing.				Repair and restabilize immediately, especially after major storms.	Professional	
	There are soft spots, seepage, boggy areas or sinkholes.				Reinforce, fill and stabilize immediately.		
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.		
	There is woody vegetation on the embankment.				Removal of woody species near or on the embankment and maintenance access areas should be done when discovered, but at least every 2 years.		

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overflow/Emergency Spillway	There is woody growth on the spillway.				Removal of woody species near or on the emergency spillway should be done when discovered, but at least every 2 years.	Owner or professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There is evidence of erosion/backcutting				Repair erosion damage and reseed	Owner or professional	
	There are soft spots, seepage or sinkholes.				Reinforce, fill and stabilize immediately.	Owner or professional	
	Only one layer of stone armoring exists above the native soil.				Reinforce rip-rap or other armoring materials.	Professional	
Outlet	The outlet provides a stable conveyance from the pond.				Stabilize immediately, as needed, and clear blockages.	Owner or professional	
	There is woody growth within 5 feet of the outlet pipe barrel.				Prune vegetation back to leave a clear discharge area.	Owner or Professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There are excessive sediment deposits at the outlet.				Remove sediment.	Professional	
	Discharge is causing undercutting, erosion or displaced rip-rap at or around the outlet.				Repair, reinforce or replace rip rap as needed, and restabilize.	Professional	
Overall	Access to the facility or its components is adequate.				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	Fences are inadequate				Collapsed fences must be restored to an upright position. Jagged edges and damaged fences must be repaired or replaced.	Professional	
	Water levels in one or more cells are abnormally high or low.				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications.	Professional	
	Complaints from local residents				Correct real problems.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools and stock the basin with mosquito fish to provide natural mosquito & midge control. Treat for mosquitoes as needed. If spraying, then use mosquito larvicide, (e.g., Bacillus thurendensis or Altoside formulations) <i>only if absolutely necessary</i> .	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overall (continued)	Encroachment on the pond or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	
	Safety signage is not adequate.				Provide sufficient, legible safety signage.	Owner or professional	

9-C.9.0. INFILTRATION PRACTICES: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Facility Location:

- ☐ Surface
☐ Underground

Hydraulic Configuration:

- ☐ On-line facility
☐ Off-line facility

Filtration Media:

- ☐ No filtration (e.g., dry well, permeable pavement, infiltration facility, etc.)
☐ Sand
☐ Bioretention Soil
☐ Peat
☐ Other: _____

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
☐ Sedimentation chamber
☐ Plunge pool
☐ Stone diaphragm
☐ Grass filter strip
☐ Grass channel
☐ Other: _____

Ideally, infiltration facilities should be inspected annually. Spill Prevention measures should be used around infiltration facilities when handling substances that contaminate stormwater. Releases of pollutants should be corrected as soon as identified.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	There is excessive trash and debris				Remove immediately	Owner or professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	Vegetative cover is adequate				Supplement as needed	Owner or professional	
	There are excessive landscape waste or yard clippings				Remove immediately and recycle or compost	Owner or professional	
Pre-Treatment Facility	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Pre-Treatment Facility (continued)	There is evidence of erosion and/or exposed soil				Stabilize immediately	Owner or professional	
	There is evidence of clogging (standing water, noticeable odors, water stains, algae or floating aquatic vegetation)				Identify and eliminate the source of the problem. If necessary, remove and clean or replace the clogged material.	Professional	
	There is dead vegetation or exposed soil in the grass filter				Restabilize and revegetate as necessary	Owner or professional	
Inlets	Inlets provide a stable conveyance into facility				Stabilize immediately, as needed.	Owner or professional	
	There is excessive trash/debris/sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion at or around the inlet				Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
Embankment, Flow Diversion Structures (e.g., Dikes, Berms, etc.) and Side Slopes	There is evidence of erosion or bare soil				Identify the source of erosion damage and prevent it from recurring. Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	There is excess sediment accumulation				Remove immediately	Owner or professional	
	Water is not detained in the infiltration basin				Check for a breach in the containment structure and repair immediately.	Professional	
	Side slopes support nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.	Professional	
Maintaining Facility Capacity and Proper Drainage	Look for weedy growth on the stone surface indicating sediment accumulation and potential clogging				Identify and control sources of sediment and debris. Remove sediment and debris in excess of 4" in depth every 2-5 years (or sooner if performance is affected).	Professional	
	Measure the draw-down rate of the observation well for three days following a storm event in excess of 1/2 inches in depth. If standing water is still observed after three days, this is a clear sign that clogging is a problem.				Immediately clear debris from the underdrain. Replace the underdrain if necessary. If needed, regrade and till to restore infiltration capacity (the need for this can be prevented by preventing upstream erosion and subsequent sediment transport to the facility).	Professional	
	There is excessive trash/debris				Remove immediately	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Vegetation	Grass within the practice is overgrown				Grass must be mowed to a height of 4"-9" and grass clippings removed (ideally recycled or composted).	Owner or professional	
	Pioneer trees are sprouting in the base of the facility				Remove trees to prevent roots from puncturing the filter fabric, allowing sediment to enter		
	Vegetation forms an overhead canopy that may drop leaf litter, fruit and other vegetative materials that may cause clogging.				Prune or remove vegetation as necessary	Owner or professional	
Observation Well	Is each observation well still capped?				Repair, as necessary.	Professional	
Outlet	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	
	Evidence of flow bypassing facility				Repair immediately	Professional	
	There is excessive trash, debris, or sediment at the outlet				Remove immediately	Owner or professional	
Overflow or Emergency Spillway	The pipe or spillway is not effectively conveying excess water to an adequate receiving system				Clear sediment and debris whenever 25% or more of the conveyance capacity is blocked. When damaged pipe is discovered, it must be repaired or replaced immediately. Identify and control sources of erosion damage. Replace or reinforce stone armament whenever only one layer of stone remains.	Professional	
Structural Components	Evidence of structural deterioration				Repair as necessary	Professional	
	Evidence of spalling or cracking of structural components				Repair or replace, as necessary	Professional	
	Grates are in good condition				Repair or replace, as necessary	Owner or professional	
Overall	Access to the Infiltration facility or its components is adequate				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that manholes, valves and/or locks can be opened and operated.	Professional and, perhaps, the locality	
	There is evidence of standing water				Fill in low spots and stabilize; correct flow problems causing ponding	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overall (continued)	Mosquito proliferation				Eliminate standing water and establish vegetation; treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> .	Owner or professional	
	Complaints from local residents				Correct real problems	Owner or professional	
	Encroachment on the infiltration area or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	

Stormwater Outfalls

Watershed/Subshed:	Assessed by:
Outfall ID:	Date of Last Rainfall:
Date: Time:	Rainfall Quantity:

TYPE	MATERIAL	SHAPE	SUBMERGED	GENERAL OBSERVATIONS
☐ Closed Pipe	☐ Concrete ☐ PVC/Plastic ☐ Metal ☐ Brick ☐ Other:	☐ Circular ☐ Other:	☐ Single ☐ Double <u>In Water:</u> ☐ No ☐ Partially ☐ Fully <u>With Sediment:</u> ☐ No ☐ Partially ☐ Fully	
☐ Open Channel	☐ Concrete ☐ Earthen ☐ Other:	☐ Trapezoid: ☐ Parabolic: ☐ Other:		
Flow	☐ None ☐ Trickle ☐ Moderate ☐ Substantial ☐ Estimate flow rate _____			

FOR BOTH FLOWING and NON-FLOWING OUTFALLS:

INDICATOR	DESCRIPTION	COMMENTS
☐ Pipe Condition	☐ Chip/Cracked ☐ Corrosion ☐ Peeling Paint ☐ Other: _____	
☐ Odor	☐ Gas ☐ Sewage ☐ Sulfide ☐ Other: _____	
☐ Deposits/Stains	☐ Oily ☐ Flow Line ☐ Paint ☐ Iron	
☐ Vegetation	☐ Normal ☐ Inhibited ☐ Excessive	
☐ Pipe Benthic Growth	☐ Brown ☐ Orange ☐ Green ☐ Other: _____	
☐ Pool Quality	☐ Good ☐ Odors ☐ Algae ☐ Colors ☐ Oils ☐ Suds	

FOR FLOWING OUTFALLS:

INDICATOR	DESCRIPTION	RELATIVE SEVERITY INDEX		
☐ Odor	☐ Sewage ☐ Petroleum/gas ☐ Sulfide ☐ Rancid/sour ☐ Other: _____	☐ 1 - Faint	☐ 2 - Easily detected	☐ 3 - Noticeable from a distance
☐ Color	☐ Clear ☐ Brown ☐ Orange ☐ Grey ☐ Other: _____	☐ 1 – Trace colors	☐ 2 – Faint Colors	☐ 3 – Clearly visible
☐ Turbidity	See Severity	☐ 1- Slight Cloudiness	☐ 2 – Cloudy	☐ 3 - Opaque
☐ Floatables (not including trash)	☐ Sewage ☐ Suds ☐ Iron ☐ Petroleum (oil sheen)	☐ 1 – Few/slight	☐ 2 - Some; indication of origin	☐ 3 – Many

ROUTINE VISUAL INSPECTION LOG

Date of Inspection: _____ Time of Inspection: _____

Name of Inspector (s): _____

Signature of Inspector (s): _____

Inspection Period (Check One)

☐ 1st Quarter (January through March)

☐ 2nd Quarter (April through June)

☐ 3rd Quarter (July through September)

☐ 4th Quarter (October through December)

Weather conditions during inspection: _____

Any discharges occurring at time of inspection: ☐ Yes ☐ No

If Yes explain: _____

Any previously unidentified discharges of pollutants from the site: ☐ Yes ☐ No

If Yes explain: _____

Any control measures needing maintenance or repairs: ☐ Yes ☐ No

If Yes explain: _____

Any failed control measures that need replacement: ☐ Yes ☐ No

If Yes explain: _____

Any incidents of Noncompliance observed: ☐ Yes ☐ No

If Yes explain: _____

Any additional control measures needed to comply with the permit requirements: ☐ Yes ☐ No

If Yes explain: _____

In and around catch basin and outfalls

Catch basin / Outfalls free of debris

☐ Yes

☐ No

Any discharges

☐ Yes

☐ No

Any sheen or chemical odors evident on effluent

☐ Yes

☐ No

General Cleanliness of area

☐ Good

☐ Bad

Comments (Note specific outfall comment is for):

Additional Comments:

Support Facilities Inspection Report

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form with the SWPPP for at least 3 years.

INSPECTOR NAME:	INSPECTION TIME:	INSPECTION DATE:
WEATHER INFORMATION: Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection? (Yes X No) Comments:		

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION	
SWPPP and Site Map: Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection. • Is the Site Map current and accurate? • Is the SWPPP inventory of activities, materials and products current?	Findings and Remedial Action Documentation: Describe any findings below and the schedule for remedial action completion including the date initiated and date completed or expected to be completed.

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION

Vehicle/Equipment Areas

Equipment cleaning:

Is equipment washed and/or cleaned only in designated areas?

- Observe washing: Is all wash water captured and properly disposed of?

Equipment fueling:

- Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills?
- Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater?
- Are structures in place to prevent precipitation from accumulating in containment areas?
 - If not, is there any water or other fluids accumulated within the containment area?
 - Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of.

Equipment maintenance:

- Are maintenance tools, equipment and materials stored under shelter, elevated and covered?
- Are all drums and containers of fluids stored with proper cover and containment?
- Are exteriors of containers kept outside free of deposits?
- Are any vehicles and/or equipment leaking fluids? Identify leaking equipment.
- Is there evidence of leaks or spills since last inspection? Identify and address.
- Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)?

Add any additional site-specific BMPs:

Findings and Remedial Action Documentation:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION

Good Housekeeping BMPs

Are paved surfaces free of accumulated dust/sediment and debris?

- Date of last quarterly vacuum/sweep
- Are there areas of erosion or sediment/dust sources that discharge to storm drains?

Are all waste receptacles located outdoors:

- In good condition?
- Not leaking contaminants?
- Closed when is not being accessed?
- External surfaces and area free of excessive contaminant buildup?

Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?

- External dock areas
- Pallet, bin, and drum storage areas
- Maintenance shop(s)
- Equipment staging areas (loaders, tractors, trailers, forklifts, etc)
- Around bag-house(s)
- Around bone yards

Other areas of industrial activity:

Findings and Remedial Action Documentation:

Spill Response and Equipment

Are spill kits available, in the following locations?

- Fueling stations
- Transfer and mobile fueling units
- Vehicle and equipment maintenance areas

Do the spill kits contain all the permit required items?

- Oil absorbents capable of absorbing 15 gallons of fuel.
- A storm drain plug or cover kit.
- A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.
- A non-metallic shovel.
- Two five-gallon buckets with lids.

Are contaminated absorbent materials properly disposed of?

Findings and Remedial Action Documentation:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION

General Material Storage Areas

- Are damaged materials stored inside a building or another type of storm resistance shelter?
- Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater?
- Are scrap metal bins covered?
- Are outdoor containers covered?

Findings and Remedial Action Documentation:

Stormwater BMPs and Treatment Structures

Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map.

- Are BMPs and treatment structures in good repair and operational?
- Are BMPs and treatment structures free from debris buildup that may impair function?
- The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned?
- Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?

Findings and Remedial Action Documentation:

Observation of Stormwater Discharges • Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? • Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comeingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). • Were any illicit discharges observed during the inspection?	Findings and Remedial Action Documentation:
---	---

II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS:	
Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.	
Since the initial site inspection, the following hot spot issues of concern have been addressed:	

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Inspector – Certification

This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority or a duly authorized representative of that person.

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit.
- ☐ *The facility is out of compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.*

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

--	--	--	--

Inspector's Name – Printed

Inspector's Signature

Inspector's Title

Date

Permittee – Certification

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit.
- ☐ *The facility is out of compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.*

"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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering 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."

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PRINTED NAME of person with **Signature Authority** or a **Duly Authorized Representative**¹

SIGNATURE of person with **Signature Authority** or a **Duly Authorized Representative**¹

DATE

¹A person is duly authorized representative only if the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

VISUAL ASSESSMENT LOG

Date Sample Taken: _____ Time Sample Taken: _____

Name of Sampler (s): _____

Signature of Sampler (s): _____

Date of Visual Assessment: _____ Time of Visual Assessment: _____

Name of Assessor (s): _____

Signature of Assessor (s): _____

Visual Assessment Period (Check One):

☐ 1st Quarter (January through March)

☐ 2nd Quarter (April through June)

☐ 3rd Quarter (July through September)

☐ 4th Quarter (October through December)

Sample location(s): _____ Outfall #: _____ Other

If other explain: _____

Weather conditions during sampling: _____

Nature of discharge: _____ Runoff; _____ Snowmelt; _____ Other

If other explain: _____

Sample taken within first 30 minutes of Discharge: _____ Yes; _____ No

If no explain why: _____

Quality of sample:

- Color _____
- Odor _____
- Clarity _____
- Floating Solids _____
- Settled Solids _____
- Suspended Solids _____
- Foam _____
- Oil Sheen _____
- Other _____

Probable sources of any observed stormwater contamination: _____

Any corrective action required as a result of quarterly visual assessment: _____ Yes; _____ No

If yes explain: _____

AS&S HOLDER GENERAL PERMIT SITE INSPECTION CHECKLIST

(All section references below are to the Construction GP 9VAC25-870-70 effective 7/1/19)

Project Name: _____ Permit Number: _____
 Project Address: _____ County/City: _____
 Project Operator: _____ Operator Telephone: _____
 Operator Address: _____ County/City: _____ ZIP: _____
 Inspector Name: _____ Inspection Date: _____ Time: _____
 Date of Last Measurable Storm Event: _____ Amount (inches) _____ Storm Duration (hours) _____

		Yes	No	N/A
1	Copy of notice of coverage letter posted near main entrance: Part II(C)			
2	Information for public access to electronic format or had copy of SWPPP posted near main entrance:			
3	Copy of complete SWPPP available onsite: Part II(A)			
3a	Signed copy of registration statement: Part II(A)1.a			
3b	Copy of permit: Part II(A)1.b			
3c	Copy of notice of coverage letter: Part II(A)1.c			
3d	Narrative description of the nature of construction activity: Part II(A)1.d			
3e	Legible site plan: Part II(A)1.e			
3f	Approved ESC plan or ESC plan developed in accordance with department approved annual standards and specifications: Part II(A)3			
3g	Approved SWM plan or SWM plan developed in accordance with department approved annual standards and specifications: Part II(A)4			
3h	Pollution prevention plan: Part II(A)4			
3i	Requirements for discharges to impaired waters, surface waters with an applicable TMDL, exceptional waters: Part II(A)5			
3j	Contact information for qualified personnel conducting inspections: Part II(A)6			
3k	SWPPP signed in accordance with Part III K: Part II(A)8			
4	SWPPP is being amended, modified and updated: Part (B)			
4a	SWPPP clearly identifies the contractor(s) that will implement and maintain each control measure identified in SWPPP: Part II(B)3			
4b	Record dates when major grading activities occurred: Part II(B)4.a(1)			
4c	SWPPP amendments, modifications, or updates signed in accordance with Part III K: Part II(B)5			
5	SWPPP inspections carried out: Part II(F)			
5a	Inspections conducted at required frequency: Part II(F)2			
5b	Inspection reports summarize findings of inspections including corrective actions: Part II(F)4.a-i			
5c	Inspection reports have date and signature of qualified personnel conducting inspections and the operator or authorized representative: Part II(F)4.j			
5d	Inspection reports retained as part of SWPPP: Part II(F)4			
6	Erosion and sediment controls implemented: Part II(A)2.c			
6a	Volume and velocity of stormwater runoff controlled within site to minimize erosion: Part II(A)2.c(1)			
6b	Stormwater discharges, including peak flow rates and total stormwater volume controlled to minimize erosion at outlets and to minimize downstream channel and stream bank erosion: Part II(A)2.c(2)			
6c	Soil exposed during construction activity minimized: Part II(A)2.c(3)			
6d	Disturbance of steep slopes minimized: Part II(A)2.c(4)			
6e	Natural buffers around surface waters provided and maintained, stormwater directed to vegetated areas to increase sediment removal, and maximizes stormwater infiltration: Part II(A)2.c(6)			
6f	Soil compaction minimized and topsoil preserved: Part II(A)2.c(7)			
6g	Stabilization of disturbed areas initiated immediately whenever any clearing, grading, or excavating, or other land-disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for more than 14 days: Part II(A)2.c(8)			

6h	Outlet structures utilized that withdraw stormwater from the surface when discharging from sediment basins or sediment traps: Part II(A)2.c(9)			
7	Pollution prevention plan implemented: Part II(A)4			
7a	Prevent and respond to leaks, spills and other releases including (i) procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases; and (ii) procedures for reporting leaks, spills, and other releases: Part II(A)4.e(1)			
7b	Prevent discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities (e.g. providing secondary containment such as spill berms, decks, spill containment pallets, providing cover where appropriate, and having spill kits readily available: Part II(A)4.e(2)			
7c	Prevent discharge of soaps, solvents, detergents, and wash water from construction materials, including clean-up of stucco, paint, form release oils, and curing compounds: Part II(A)4.e(3)			
7d	Minimize discharge of pollutants from vehicle and equipment washing, wheel wash water and other types of washing: Part II(A)4.e(4)			
7e	Direct concrete wash water into a leak proof container or leak proof settling basin: Part II(A)4.e(5)			
7f	Minimize discharge of pollutants from storage, handling, and disposal of construction products, materials and wastes: Part II(A)4.e(6)			
7g	Prevent discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, and sanitary wastes: Part II(A)4.e(7)			
7h	Address any other discharge from the potential pollutant-generating activities not addressed above: Part II(A)4.e(8)			
8	Appears to be impact(s) to receiving waters: Part I(B)6, Part I(D), or Part II(A)2c(2) or (5)			

VSMP CONSTRUCTION GP SITE INSPECTION CHECKLIST

Project Name: _____ Permit Number: _____
 Project Address: _____ County/City: _____
 Inspector Name: _____ Inspection Date: _____ Time: _____

STAGE OF CONSTRUCTION

<i>Pre-Construction Conference</i>	☐	<i>Building Construction</i>	☐	<i>Construction of SWM Facilities</i>	☐
<i>Clearing & Grading</i>	☐	<i>Finish Grading</i>	☐	<i>Maintenance of SWM Facilities</i>	☐
<i>Rough Grading</i>	☐	<i>Final Stabilization</i>	☐	<i>Other:</i>	☐

#	State Regulation ¹			Description and Location of Condition Observed ² , Recommended Corrective Actions, and Other Comments
		Initial	Repeat	

1 - Refers to applicable regulation found in the most recent publication of the Virginia Erosion and Sediment Control Regulations (9VAC25-840), the General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880), or the Virginia Stormwater Management Program Regulations (9VAC25-870).

2 – Note whether or not off-site impacts resulting from the condition observed was evident during the inspection.

Recommended Corrective Action Deadline: _____

Targeted Reinspection Date: ±2 weeks _____

The recommended corrective action deadline date applies to all conditions noted on this report unless otherwise noted. If listed condition(s) currently constitute non-compliance and/or corrective actions are not completed by the deadline, other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Certified Inspector Name/Number: _____

Signature: _____ Date: _____

APPENDIX D

CONSTRUCTION SITE SOTRMWATER RUNOFF AND EROSION AND SEDIMENT CONTROL

CHRISTOPHER NEWPORT UNIVERSITY STANDARDS AND SPECIFICATIONS



Contents:

Standards and Specifications Entity
Standards and Specifications Entity Type
Standards and Specifications Document Information
Certification
Administration
Regulated Land-Disturbing Activities
Certified Personnel
Review and Approval of Plans
Erosion and Sediment Control Plan – Contents of Plans
Erosion and Sediment Control Variances and Exceptions
Stormwater Pollution Prevention Plan Contents
Stormwater Management Plan Contents
Pollution Prevention Plan Contents
Technical Criteria for Regulated Land-Disturbing Activities
Long-Term Maintenance of Permanent Stormwater Facilities
Project Tracking and Reporting
Monitoring, Inspections, and Enforcement

Virginia Department of Environmental Quality

Standards and Specifications # _____ (Note: to be entered by the Department)

Standards and Specifications Agreement

For

CHRISTOPHER NEWPORT UNIVERSITY

Standards and Specifications Entity

Entity Name: Christopher Newport University
Entity Address: 437 University Place
City, State, and Zip Code: Newport News, VA 23606
Contact Name: Director of Grounds c/o Dean Whitehead
Contact Phone: 757-594-8416
Contact Email: Dean.whitehead@cnu.edu
Alt. Contact Name:
Alt. Contact Phone:
Alt. Contact Email:

Standards and Specifications Entity Type

- ☒ State
☐ Federal
☐ Linear Utility
☐ Public Service Authority
☐ Wetland/Stream

Standards and Specifications Agreement Information

Agreement Date: 9/30/24
Date of previously approved agreement: 2023

Have there been any updates to your previously approved agreement? ☒ Yes ☐ No

Certification

"I certify under penalty of law that this agreement 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."

Printed Name: Dean Whitehead
Title: Director of Grounds
Signature: Dean Whitehead
Date: 9/30/24

Standards and Specifications Agreement

Administration

Per § 62.1-44.15:31 of the Code of Virginia, the Virginia Department of Transportation shall; any other state agency or federal entity may; and electric, natural gas, and telephone utility companies; interstate and intrastate natural gas pipeline companies; railroad companies; and authorities created pursuant to § 15.2-5102 of the Code of Virginia may submit standards and specifications, for approval by the Virginia Department of Environmental Quality (Department), who serves as the Virginia Erosion and Stormwater Management Program (VESMP) authority for all land-disturbing activities subject to approved standards and specifications. The Standards and Specifications Program is designed to provide a single set of standards and specifications, the Virginia Stormwater Management Handbook, Version 1.0, that describes how entities with approved standards and specifications conduct land-disturbing activities in a manner that will be consistent with the requirements of the Virginia Erosion and Stormwater Management Act (VESMA), Virginia Erosion and Stormwater Management Regulation, and the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities (Construction General Permit).

Christopher Newport University, hereinafter the “S&S Entity,” is responsible for administering, implementing, and complying with the standards and specifications for Erosion and Sediment Control (ESC) and Stormwater Management (SWM) set out in this agreement by following the design criteria in the Virginia Stormwater Management Handbook, Version 1.0, for land disturbing activities.

Regulated Land-Disturbing Activities

- A. Land-disturbing activities that meet one of the criteria below are regulated as follows:
 - 1. Land-disturbing activity that disturbs 10,000 square feet or more, is less than one acre, not in an area of a locality designated as a Chesapeake Bay Preservation Area, and not part of a common plan of development or sale, is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) of Part V of the Virginia Erosion and Stormwater Management Regulation (Regulation).
 - 2. Land-disturbing activity that disturbs 2,500 square feet or more, is less than one acre, and in an area of a locality designated as a Chesapeake Bay Preservation Area is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) and Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation unless Article 4 (9VAC25-875-670 et seq) of Part V is applicable, as determined in accordance with 9VAC25-875-480 and 9VAC25-875-490.
 - 3. Land-disturbing activity that disturbs less than one acre, but is part of a larger common plan of development or sale that disturbs one acre or more, is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) and Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation unless Article 4 (9VAC25-875-670 et seq) of Part V is applicable, as determined in accordance with 9VAC25-875-480 and 9VAC25-875-490.
 - 4. Land-disturbing activity that disturbs one acre or more is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) and Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation unless Article 4 (9VAC25-875-670 et seq.) of Part V is applicable, as determined in accordance with 9VAC25-875-480 and 9VAC25-875-490.
- B. Land-disturbing activities exempt per 9VAC25-875-90 are not required to comply with the requirements of the VESMA unless otherwise required by federal law.

Certified Personnel

- A. The S&S Entity's administrator shall be responsible for the management and coordination of this standards and specifications agreement and shall be certified as a Dual Combined Administrator as outlined in 9VAC25-875-400.
- B. Plan Reviewers shall review all ESC and SWM plans for compliance with this standards and specifications agreement and all applicable laws and regulations. Plan reviewers shall be certified as a Plan Reviewer for ESC and a Plan Reviewer for SWM or as a Dual Plan Reviewer, as outlined in 9VAC25-875-400.
- C. Compliance inspectors shall be responsible for the inspection and compliance of ESC, SWM, and stormwater pollution prevention plan practices. They shall be certified as an Inspector for ESC and an Inspector for SWM or as a Dual Inspector, as outlined in 9VAC25-875-400.

Review and Approval of Plans

- A. The S&S Entity has the authority to approve soil erosion control and stormwater management (ESM) plans, except for activities not required to comply with the requirements of the Virginia Erosion and Stormwater Management Act (VESMA), under § 62.1-44.15:34 of the Code of Virginia. The ESM plan is a document describing methods for controlling soil erosion and managing stormwater in accordance with the requirements adopted pursuant to the VESMA. The ESM plan may consist of aspects of the erosion and sediment control plan and the stormwater management plan as each is described in the Virginia Erosion and Stormwater Management Regulation. (9VAC25-875-20)
- B. ESM plans must be approved in writing. If a third party is used to fulfill the certification of the plan reviewer, the third-party reviewer may recommend approval to the S&S Entity; however, the S&S Entity formally approves the plan in writing. The date of the approvable plan should be noted in the approval letter signed by the S&S Entity's certified plan reviewer.

- C. Plans must be reviewed and approved by Department-certified personnel, as outlined in 9VAC25-875-400, to ensure compliance with these Standards and Specifications for ESC and SWM and reviewed by the S&S Entity for consistency with the Virginia Stormwater Management Handbook, Version 1.0, and applicable permit and regulatory requirements.
- D. The Department may require changes to an approved ESM plan in the following cases:
 - 1. Where inspection has revealed that the plan is inadequate to satisfy applicable regulations or ordinances; or
 - 2. Where the S&S Entity finds that because of changed circumstances, or for other reasons, the plan cannot be effectively carried out and proposed amendments to the plan, consistent with the requirements of the VESMA, are agreed to by the department, as the VESMP authority, and the S&S Entity.

Erosion and Sediment Control Plan – Contents of Plans

- A. The S&S Entity shall prepare an erosion and sediment control plan for its land-disturbing activities. The erosion and sediment control plan shall contain all major conservation decisions to ensure that the entire unit or units of land will be treated to achieve the conservation objectives in 9VAC25-875-560. The erosion and sediment control plan shall be prepared in accordance with 9 VAC25-875-550 and be consistent with design criteria in the Virginia Stormwater Management Handbook, Version 1.0.
- B. The person responsible for carrying out the plan shall provide the name of an individual holding a certificate who will be in charge of and responsible for carrying out the land-disturbing activity to the Department.

Erosion and Sediment Control Variances and Exceptions

- A. The Department may waive or modify any of the standards that are deemed to be inappropriate or too restrictive for site conditions, by granting a variance. A variance may be granted under these conditions:
 - 1. Prior to construction, the S&S Entity may request a variance to become part of the approved erosion and sediment control plan. The S&S Entity shall explain the reasons for requesting variances in writing. Specific variances which are allowed by the department shall be documented in the plan.
 - 2. During construction, the person responsible for implementing the approved plan may request a variance in writing from the Department. The Department shall respond in writing either approving or disapproving such a request. If the department does not approve a variance within 10 days of receipt of the request, the request shall be considered disapproved. Following disapproval, the applicant may resubmit a variance request with additional documentation.

Stormwater Pollution Prevention Plan Contents

- A. A stormwater pollution prevention plan shall include, but not be limited to, an approved erosion and sediment control plan, an approved stormwater management plan, a pollution prevention plan for regulated land-disturbing activities, and a description of any additional control measures necessary to address a total maximum daily load (TMDL) pursuant to 9VAC25-875-500 E.
- B. An erosion and sediment control plan consistent with the requirements of 9VAC25-875-550 must be designed and implemented during construction activities. Prior to land disturbance, this plan must be approved by a Plan Reviewer for ESC or a Dual Plan Reviewer.
- C. A stormwater management plan consistent with the requirements of 9VAC25-875-510 and the design criteria in the Virginia Stormwater Management Handbook, Version 1.0, must be designed and implemented during construction activities. Prior to land disturbance, this plan must be approved by a Plan Reviewer for SWM or a Dual Plan Reviewer.

- D. A pollution prevention plan that complies with 9VAC25-875-520 and identifies potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the construction site and describes control measures that will be used to minimize pollutants in stormwater discharges from the construction site must be developed before land disturbance commences.
- E. In addition to the requirements of subsections A through D of this section, if a specific wasteload allocation for a pollutant has been established in an approved TMDL and is assigned to stormwater discharges from a construction activity, additional control measures that are consistent with the Virginia Stormwater Management Handbook, Version 1.0, must be identified and implemented by the operator so that discharges are consistent with the assumptions and requirements of the wasteload allocation.
- F. The stormwater pollution prevention plan must address the requirements specified in 40 CFR 450.21, to the extent otherwise required by state law or regulations and any applicable provisions of a state permit:
 - 1. Control stormwater volume and velocity within the site to minimize soil erosion;
 - 2. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
 - 3. Minimize the amount of soil exposed during construction activity;
 - 4. Minimize the disturbance of steep slopes;
 - 5. Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity, and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - 6. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible;
 - 7. Minimize soil compaction and, unless infeasible, preserve topsoil;
 - 8. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth-disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a reasonable period of time or as otherwise determined by the department. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the Department; and
 - 9. Utilize outlet structures that withdraw water from the surface, unless infeasible, when discharging from basins and impoundments.
- G. The stormwater pollution prevention plan shall be amended whenever there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to state waters and that has not been previously addressed in the plan. The stormwater pollution prevention plan must be maintained at a central onsite location. If an onsite location is unavailable, notice of the stormwater pollution prevention plan's location must be posted near the main entrance at the construction site.

Stormwater Management Plan Contents

- A. A stormwater management plan shall be developed and implemented as approved or modified by the Department-certified plan reviewer and shall be developed in accordance with the following:
 - 1. A stormwater management plan for a land-disturbing activity shall apply the stormwater management technical criteria outlined in Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation to the entire land-disturbing activity.

2. A stormwater management plan shall consider all sources of surface runoff and all sources of subsurface and groundwater flows converted to surface runoff; and
 3. Best management practices in the stormwater management plan are consistent with design criteria in the Virginia Stormwater Management Handbook, Version 1.0.
- B. A complete stormwater management plan shall address all requirements of 9VAC25-875-510.
 - C. All final plan elements, specifications, or calculations of the stormwater management plans whose preparation requires a license under Chapter 4 (§ 54.1-400 et seq.) or 22 (§ 54.1-2200 et seq.) of Title 54.1 of the Code of Virginia shall be appropriately signed and sealed by a professional who is licensed to engage in practice in the Commonwealth of Virginia. Nothing in this subsection shall authorize any person to engage in practice outside his area of professional competence.

Pollution Prevention Plan Contents

- A. A plan for implementing pollution prevention measures during construction activities shall be developed, implemented, and updated as necessary. The pollution prevention plan shall detail the design, installation, implementation, and maintenance of effective pollution prevention measures as specified in 40 CFR 450.21(d) to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:
 1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
 2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater; and
 3. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- B. The pollution prevention plan shall include effective best management practices to prohibit the following discharges in accordance with 40 CFR 450.21(e):
 1. Wastewater from washout of concrete, unless managed by an appropriate control;
 2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
 3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
 4. Soaps or solvents used in vehicle and equipment washing.
- C. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls in accordance with 40 CFR 450.21(c).

Technical Criteria for Regulated Land-Disturbing Activities

- A. To protect the quality and quantity of state water from the potential harm of unmanaged stormwater runoff resulting from land-disturbing activities, the S&S Entity shall adhere to the technical criteria for regulated land-disturbing activities set forth in Part V of the Regulation expressly to include 9VAC25-875-580 [water quality design criteria requirements]; 9VAC25-875-590 [water quality compliance]; 9VAC25-875-600 [water quantity]; 9VAC25-875-610 [offsite compliance options]; 9VAC25-875-620 [design storms and hydrologic methods]; 9VAC25-875-630 [stormwater harvesting]; 9VAC25-875-640 [linear development project]; and, 9VAC25-875-650 [stormwater management impoundment structures or facilities], which shall apply to all land-disturbing activities, except as expressly set forth in 9VAC25-875-490.

- B. The S&S Entity shall submit documentation that offsite options, approved by the Department or applicable state board, that are required to achieve the necessary phosphorous water quality reductions have been obtained prior to the commencement of the land-disturbing activity (i.e., prior to issuance of the permit). In the case of a phased project, the land disturber may acquire or achieve the offsite nutrient reductions prior to the commencement of each phase of the land-disturbing activity in an amount sufficient for each such phase.

Long-Term Maintenance of Permanent Stormwater Facilities

- A. The S&S Entity shall submit a construction record drawing for permanent stormwater management facilities to the VESMP authority based on the locality where the land-disturbing activity will occur. The record drawing shall contain a statement signed by a professional registered in the Commonwealth of Virginia pursuant to Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia, stating that to the best of the professional's knowledge, the construction record drawing shows all adjustments and revisions to the stormwater management plan made during construction and serve as a permanent record of the actual location of all constructed elements.
- B. The provision of long-term responsibility for and maintenance of stormwater management facilities and other techniques specified to manage the quality or quantity of runoff is required. Such requirements shall be set forth in a maintenance agreement which is recorded in the local land records prior to permit termination or earlier and shall at a minimum:
1. Be submitted to the VESMP authority for review and approval prior to the approval of the stormwater management plan;
 2. Be stated to run with the land;
 3. Provide for all necessary access to the property for purposes of maintenance and regulatory inspections;
 4. Provide for inspections and maintenance and the submission of inspection and maintenance reports to the VESCP, or VESMP authority; and
 5. Be enforceable by all appropriate governmental parties.

(Note: the Department has approved a model stormwater management facility maintenance agreement for use on projects where it is the permitting authority. The model agreement is in Section 10.2.1.1 of the Handbook.)

Project Tracking and Reporting

- A. The S&S Entity is responsible for providing project tracking and electronic notifications to the Department of all regulated land-disturbing activities subject to this standards and specifications agreement to comply with the applicable ESC and SWM requirements pursuant to 9VAC25-875-830 D 6.
- B. The S&S Entity must electronically notify the Department of any land-disturbing activities subject to approved standards and specifications that the S&S Entity intends to construct in Virginia prior to initiating land disturbance. The following information is required to be included in the electronic notification two weeks prior to initiating the regulated land-disturbing activity:
1. Project name and any associated Construction General Permit number;
 2. Project location (including nearest intersection, latitude and longitude, or access point);
 3. On-site project manager name and contact information;
 4. Responsible Land Disturber (RLD) name and contact information;

5. Project description;
 6. Acreage of disturbance for the project;
 7. Anticipated project start and finish date; and
 8. Any deviations/variances/exemptions/waivers associated with the project.
- C. In addition to the prior land disturbance notification described above, the S&S Entity shall submit to the Department bi-annual linear project tracking of all active projects covered under this standards and specifications agreement from the last six months (including those previously reported). This bi-annual linear project tracking must include the acreage for all listed projects and shall be submitted by January 15th and July 15th of each year to the Department.

Monitoring, Inspections, and Enforcement

- A. The S&S Entity or its designated inspector shall perform periodic inspections of the land-disturbing activity during construction for:
1. Compliance with the approved erosion and sediment control plan;
 2. Compliance with the approved stormwater management plan;
 3. Development, updating, and implementation of a pollution prevention plan;
 4. Compliance with these Standards and Specifications.;
 5. Compliance with the permit, if applicable; and
 6. Development and implementation of additional control measures necessary to address a TMDL.
- B. Periodic inspections are the responsibility of the S&S Entity and shall be conducted by an Inspector for ESC and Inspector for SWM or a Dual Inspector, as outlined in 9VAC25-875-400.
- C. The Department will conduct periodic inspections on all projects during construction, including random inspections and inspections in response to complaints. Where inspections by Department personnel reveal deficiencies in carrying out an approved plan, the Department may take enforcement actions in accordance with the VESMA and related regulations.



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director

November 26, 2024

Mr. Dean Whitehead
Director of Grounds
Christopher Newport University
437 University Place
Newport News, VA 23606

Re: Standards and Specifications (S&S) Agreement for Christopher Newport University (CNU)
S&S Agreement No. SS005

Transmitted electronically: dean.whitehead@cnu.edu

Dear Mr. Whitehead,

The Virginia Department of Environmental Quality (DEQ) has reviewed the Standards and Specifications (S&S) Agreement for Erosion and Sediment Control (ESC) and Stormwater Management (SWM) for CNU received by the DEQ Office of Stormwater Management on October 1, 2024. The S&S Agreement is deemed approved for ESC and SWM pursuant to the Virginia Erosion and Stormwater Management Act (§ 62.1-44.15:24 et seq.) and associated regulations (9VAC25-875-10 et seq).

Approval of Standards and Specifications by DEQ does not relieve the owner or operator of the duty to comply with other applicable local, state or federal ordinances or regulations. Additionally, approval of this S&S is set to expire five (5) years from the date of this document on November 26, 2029 unless otherwise specified by DEQ or where there are changes requiring DEQ review and approval.

Please note that the approved S&S for ESC and SWM are subject to the following requirements:

1. Variance, waiver, and exception requests must be submitted to DEQ separately from the October 1, 2024 S&S submission. DEQ may require project-specific plans associated with requests to be submitted for review and approval.
2. Electronic notification must be sent to DEQ at least two weeks prior to the initiation of any land-disturbing activities subject to approved S&S. Notifications shall be submitted via email to: standardsandspecs@deq.virginia.gov.
 - 1) Project name and any associated Construction General Permit number;
 - 2) Project location (including nearest intersection, latitude and longitude, or access point);
 - 3) On-site project manager name and contact information;
 - 4) Responsible Land Disturber (RLD) name and contact information;
 - 5) Project description;
 - 6) Acreage of disturbance for the project;
 - 7) Anticipated project start and finish dates; and
 - 8) Any deviations/variances/exceptions/waivers associated with the project.

3. In addition to the two weeks prior land disturbance notification described above, a semiannual linear project tracking report of all active projects, including acreage, initiated under this S&S agreement shall be submitted via email to standardsandspecs@deq.virginia.gov by January 15th and July 15th of each year through the duration of this approval, including ongoing, previously reported projects.
4. ESC and SWM plans must be reviewed by DEQ-Certified Plan Reviewers. CNU, as the S&S holder, retains the authority to approve plans and must do so in writing. Should CNU, as an S&S holder, contract with a third-party to fulfill the plan review function, the certified third-party Plan Reviewer may recommend approval of the plan, but final approval must come from CNU, as the S&S holder.

To ensure compliance with approved S&S for ESC and SWM, and the Virginia Erosion and Stormwater Management Act and attendant regulation, DEQ staff will conduct random site inspections, respond to complaints, and provide on-site technical assistance with specific ESC and SWM measures and plan implementation.

As provided by Rule 2A:2 of the Rules of the Supreme Court of Virginia, you have thirty (30) days from the date of receipt 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, Virginia Department of Environmental Quality.

To ensure an efficient exchange and response to inquiries, DEQ Central Office is your primary point of contact. Central Office staff will coordinate with our Regional Office staff as appropriate. Please contact Tony Angueira at (804)-584-6265 or antony.angueira@virginia.deq.gov if you have any questions about this letter.

Sincerely,



April Rhodes
Program Manager, Office of Stormwater Management
Virginia Department of Environmental Quality
1111 East Main Street, Suite 1400
Richmond, Virginia 23219
(804) 698-4000

Cc: DEQ OSWM

APPENDIX E

POLLUTION PREVENTION AND GOOD HOUSE KEEPING

Travis A. Voyles
Secretary of Natural and Historic Resources

Matthew S. Wells
Director

Andrew W. Smith
Chief Deputy Director



Frank N. Stovall
*Deputy Director
for Operations*

Darryl Glover
*Deputy Director for
Dam Safety,
Floodplain Management and
Soil and Water Conservation*

Laura Ellis
*Deputy Director for
Administration and Finance*

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

May 6, 2024

Date Received by DCR 5/2/2024

Chris Webb
Christopher Newport University Athletics
1 Avenue of the Arts
Newport News VA 23606

Your nutrient management plan (NMP) dated 5/6/2024 located in the City of Newport News has been approved by the Virginia Department of Conservation and Recreation (DCR). The approved plan is for 17 acres. Only nutrient recommendations for applications to be made after the date of this letter are approved by this letter. Your NMP was written by Chris Webb, a nutrient management planner certified by DCR.

This site has not been inspected by DCR and this approval is contingent upon site conditions being as stated in the NMP. Any revisions to this plan must be approved by DCR. Any change in personnel resulting in a change to the plan manager should be reported to the Certified Nutrient Management Planner who will then make DCR aware. Please note that this letter should be kept with the NMP and supporting documentation including nutrient application records. This plan expires on 5/6/2027. Please feel free to contact me with any questions or concerns regarding this approval.

Best regards,

A handwritten signature in cursive script, reading "Anita Tuttle".

Anita Tuttle
Urban Nutrient Management Coordinator
Division of Soil and Water Conservation
600 East Main Street, 24th Floor
Richmond VA 23219
(804) 513-5958

Travis A. Voyles
Secretary of Natural and Historic Resources

Matthew S. Wells
Director

Andrew W. Smith
Chief Deputy Director



Frank N. Stovall
*Deputy Director
for Operations*

Darryl Glover
*Deputy Director for
Dam Safety,
Floodplain Management and
Soil and Water Conservation*

Laura Ellis
*Deputy Director for
Administration and Finance*

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

July 23, 2024

Date Received by DCR 07/05/2024

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

Your nutrient management plan (NMP) dated 07/05/2024 located in the City of Newport News has been approved by the Virginia Department of Conservation and Recreation (DCR). The approved plan is for 48.0 acres. Only nutrient recommendations for applications to be made after the date of this letter are approved by this letter. Your NMP was written by Dean Whitehead, a nutrient management planner certified by DCR.

This site has not been inspected by DCR and this approval is contingent upon site conditions being as stated in the NMP. Any revisions to this plan must be approved by DCR. Any change in personnel resulting in a change to the plan manager should be reported to the Certified Nutrient Management Planner who will then make DCR aware. Please note that this letter should be kept with the NMP and supporting documentation including nutrient application records. This plan expires on 07/05/2027. Please feel free to contact me with any questions or concerns regarding this approval.

Best regards,

Gonzalo Ortiz

Gonzalo Ortiz
Urban Nutrient Management Specialist
Division of Soil and Water Conservation
600 East Main Street, 24th Floor
Richmond VA 23219
(804) 217-2010

CNU Stormwater Training plan: Permit Years 2023-2028

1. *Field Personnel in the Departments of Grounds, Facilities, and Operations receive IDDE training every 24 months.*

Objective: To be able to recognize and report illicit discharges

Number of Employees: All current employees in this department

Time Frame: June 2025, June 2027

Documentation of each training event will be kept on file for three (3) years. This training includes viewing two videos of the IDDE process created by the local Hampton Roads Planning District Commission and the completion of a quiz. The videos address what a suspected illicit discharge might look like and how to address it. The quiz will be administered via Survey Monkey.

Please watch the following videos created by the local Hampton Roads Planning District Commission prior to completing the survey questions below:

IDDE Video – Identifying Illicit Discharges in the Coastal Plain (~16 min)
(<https://www.youtube.com/watch?v=N8Ng90PL7Tk>)

IDDE Video – Tracking & Eliminating Illicit Discharges in the Coastal Plain (~12 min)
(<https://www.youtube.com/watch?v=jTTNWNM8LWc>)

1. Name:
2. Department:
3. Date:
4. What does IDDE stand for?
 - a. Illicit Discharge Deterrent Entity
 - b. Illicit Discharge Detection and Elimination
 - c. Incorrect Discharge Detainment and Extraction
 - d. Illicit Discharge and Dumping Eradication
5. Which of the following is **NOT** considered a pollutant?
 - a. Trash and Dumping
 - b. Sewage
 - c. Detergents and Washwater
 - d. Groundwater
6. How can you tell if something that looks like a petroleum sheen is naturally occurring or not?
 - a. If you stir it with a stick and the sheen breaks into patches it is natural
 - b. If you stir it with a stick and the sheen comes back together it is natural
7. What are indicators show that too much fertilizer has made it into stormwater?
 - a. Chemical odor
 - b. Orange/red algae
 - c. Excessive, brightly colored, slimy or foamy, unusual algae growth

- d. Muddy water
- 8. If you come across something you believe is an illicit discharge, that is not an emergency, how should you document it?
 - a. Send an email stating something looks weird
 - b. Take a picture of the discharge and site just in case someone asks if you saw something
 - c. Take a picture of the discharge and site, record the date, time and specific location of the potential illicit discharge on an IDDE field form
 - d. Fill out the date and time on an IDDE field form but leave all other information blank
- 9. How do you isolate where a potential illicit discharge is coming from?
 - a. Start at the top of the pipe network, walk toward the outfall and open manholes until you find flow
 - b. Walk around the area surrounding the outfall until you find a potential source
 - c. Dump clean water at the start of the pipe network to see if it washes the potential source away
 - d. Start at the outfall and walk up the pipe network until you are able to isolate flow between 2 manholes
- 10. How long does the responsible party have to address a confirmed illicit discharge?
 - a. 30 days
 - b. 7 days
 - c. 3 days
 - d. 14 days

Answer Key:

- 4. B
- 5. D
- 6. A
- 7. C
- 8. C
- 9. D
- 10. B

- 2. *Employees performing road, street, and parking lot maintenance as well as employees working in and around maintenance, public works, or recreational facilities shall receive training in pollution prevention and good housekeeping associated with those activities/facilities every 24 months*

Objective: To be able to identify and implement pollution prevention and good housekeeping methods.

Number of Employees: All current employees performing road, street, and parking lot maintenance or working in and around maintenance, public works, or recreational facilities

Time Frame: June 2025, June 2027

Documentation of each training event will be kept on file for three (3) years. This training includes viewing a video on Good Housekeeping and Pollution Prevention for Contractors Training created by the Virginia Department of Transportation and the completion of a quiz. The video will explain best management practices that prevent, reduce, or eliminate pollutants from stormwater. The quiz will be administered via Survey Monkey.

Please watch the following video created by Virginia Department of Transportation prior to completing the survey questions below:

Good Housekeeping and Pollution Prevention Video - VDOT Good Housekeeping and Pollution Prevention Training (~8 min)

(<https://www.youtube.com/watch?v=UMjwckifRz8>)

1. Name:
2. Department:
3. Date:
4. Where should open containers or buckets be stored while not actively in use?
 - a. Open containers or buckets do not require specific storage
 - b. Near a storm drain in case leaking starts
 - c. Under cover on impervious surfaces or in a non-leaking container
 - d. Under cover on a pervious surface
5. If a piece of equipment is found to have a small leak what should be done?
 - a. Place a spill pad or absorbent beneath the equipment and inspect/replace this material regularly until the leak is repaired
 - b. The equipment should continue to be used as normal
 - c. Abandon the equipment
 - d. Park the equipment on a pervious surface prior to starting repairs
6. True or False: Salt should never be left in the open in piles exposed to stormwater.
 - a. True
 - b. False
7. Which of the following is NOT considered a proper control to minimize erodible piles from entering stormwater?
 - a. Silt Fence
 - b. Concrete Blocks
 - c. Storing materials away from drainage paths

- d. Leaving erodible piles uncovered for extended periods of time
- 8. True or False: Leaves, wood chips, grass or other landscape debris can be blown into or otherwise disposed of in stormwater inlets.
 - a. True
 - b. False
- 9. True or False: Dumpsters should be covered by a lid or tarp unless you are actively loading waste materials.
 - a. True
 - b. False
- 10. Which of the following can be washed down the storm drain?
 - a. Sawcut slurry
 - b. Concrete/Concrete washout
 - c. Asphalt/Asphalt equipment cleaning washout
 - d. None of the above

Answer Key:

- 4. C
- 5. A
- 6. A
- 7. D
- 8. B
- 9. A
- 10. D

- 3. *Employees of CNU who apply pesticides and herbicides shall maintain their Certifications by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator programs.*

Objective: To keep certifications current and to prevent over-applying and/or inappropriately applying chemicals.

Number of Employees: Employees of CNU who apply pesticides and herbicides

Time Frame: As needed

Additional training for proper nutrient management and pesticide application occurs on an as-needed basis. This training involves an in-class session to include a PowerPoint presentation given by a certified applicator. *Documentation of each training event will be kept on file for three (3) years.*

4. Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators will obtain and maintain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations.

Objective: To keep certifications current and to prevent stormwater pollution

Number of Employees: All employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators

Time Frame: As needed

Additional training for erosion and sediment control at active construction sites occurs on an as-needed basis. This training involves an in-class session to include a PowerPoint presentation given by a DEQ -certified Combined Administrator. Documentation of each training event will be kept on file for three (3) years.

5. Employees and contractors implementing the stormwater program will obtain and maintain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations.

Objective: To keep certifications current and to prevent stormwater pollution

Number of Employees: Employees and contractors implementing the stormwater program

Time Frame: As needed

Additional training for erosion and sediment control at active construction sites occurs on an as-needed basis. This training involves an in-class session to include a PowerPoint presentation given by a DEQ -certified Combined Administrator. Documentation of each training event will be kept on file for three (3) years.

6. *Employees whose duties include emergency response will be trained in spill response. Training of emergency responders such as firefighters and law-enforcement officials on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.*

Objective: To prevent stormwater pollution through emergency response

Number of Employees: All personnel from the local fire department

Time Frame: As needed

Christopher Newport University relies on the Newport News Fire Department for any spill response issues, due to their regular training and expertise in handling emergency situations and spill releases.

The University works in partnership with local emergency responders and the Department of Environmental Quality (DEQ) as needed.

7. *Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less often than once per 24 months.*

Objective: To be able to follow the appropriate stormwater pollution prevention plan developed for the site.

Number of Employees: All current employees

Time Frame: Once every 24 months

Documentation of each training event will be kept on file for three (3) years. This training involves an in-class session to include a PowerPoint presentation given by a DEQ - certified Combined Administrator. This training may include modules and quizzes from a stormwater pollution prevention training program developed by a third party.



Standard Operating Procedures (SOPS) to Prevent Stormwater Pollution

Grounds Department
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SOP:	Equipment Maintenance and Washing
Purpose of SOP:	Procedures for the proper management of equipment maintenance and washing.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities, Housing, Dining, Catering

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. Equipment Maintenance and Repair
 - a. Move leaking equipment indoors or onto impervious surface and under cover.
 - b. Use drip pans or absorbent pads under equipment if needed.
 - Empty drip pans or replace absorbent pads before they become full.
 - c. If equipment is inoperable tag equipment, **“DO NOT USE”**.
 - d. Perform all maintenance activities (except for emergencies) indoors.
 - e. Transfer fluids from drip pans to appropriate waste containers.
 - f. Routinely check equipment for signs of leaks.
 - Notify supervisor if a leak is discovered or suspected.
 - g. Sweep and pick up trash in maintenance and repair areas daily.

III. Equipment Washing

1. Small equipment should only be washed inside at designated washing areas.
 - a. Mop buckets and mop water may only be dumped inside at designated areas.
2. Large equipment in good condition, with no signs of leaks, may be washed at the wash pad located at the Grounds Department.
3. 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.
4. Only use approved water-based or detergent cleaners.

SOP:	Outdoor Events
Purpose of SOP:	Procedures for outdoor events to prevent wastes or wastewater from entering storm drains and waterways.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management, Events, Catering

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. 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.
2. 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.
3. 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.
4. Spills
 - a. Refer to SOP: Spill Prevention, Control, Clean Up and Reporting on page 20.
 - b. Small spills (<5 gallons) that pose no immediate danger to human life or property notify MS4 Program Manager (4-8700).
 - c. Small Spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).
 - d. Large Spills (>5 gallons) of any substance report to CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

*** Things to Know: What spilled; Where it is located; Estimate of amount of product***

SOP:	Kitchen Waste: Fats, Oils, and Greases (FOG) Transfer, Storage, and Disposal
Purpose of SOP:	Procedures for the management, handling, and storage of kitchen grease to prevent the discharge of pollutants to stormwater.
SOP Administrator:	Grounds Department
Responsible Department:	Dining Services, Catering

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. 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.
2. Transfer of FOG from Kitchen to Exterior FOG Container
 - a. Prepare your route from the kitchen to the exterior FOG container.
 - Eliminate and obstacles that might lead to a slip, trip, fall and potential spill.
 - Ensure that a spill kit is easily accessible in the event of spill.
 - 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.
 - It is safer to make multiple transfers of smaller volumes than to attempt to handle larger quantities at once.
 - 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.
 - 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.

3. 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 during transfer.
- 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.
- g. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
- h. The University representative shall inspect the loading point and the tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned up and disposed of properly (SOP - Spill Prevention, Control, Clean Up and Reporting and SOP - Pressure Washing and Exterior Surface Cleaning).

SOP:	Equipment Fueling Activities
Purpose of SOP:	Procedures for the proper management of the transfer and dispensing of fuel.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management, Housing, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Drip pans

II. Standard Operating Procedures

1. Dispensing of Fuel from Above Ground Storage Tanks (ASTs)
 - a. Turn off all equipment prior to dispensing fuel.
 - Do not use any mobile electronic devices when dispensing fuel.
 - b. Ensure that the fuel type is the proper type of fuel.
 - c. Inspect the fueling hose and dispenser for any signs of cracking or leaking prior to dispensing any fuel.
 - Report leaks in hoses or tanks to your supervisor immediately.
 - d. Stay with the equipment while dispensing fuel, do not “top off” fuel tanks.
 - In the event of spill use dry methods (absorbents) to clean up the spill (refer to SOP: Spill Prevention, Control, Clean Up and Reporting).
 - Notify your supervisor immediately.
2. Dispensing of Fuel from Flammable Containers
 - a. Mobile/field fueling shall be minimized. Whenever, practical equipment should be transported to a designated fueling area at Grounds.
 - b. When performing mobile/field fueling select an area on concrete at least 25 feet up gradient from a storm drain.
 - c. Turn off all equipment
 - Do not use any mobile electronic devices when transferring fuel.
 - If possible, transfer fuel over a drip pan or absorbent pad.
 - In the event of a spill use dry methods to clean up the spill.
 - Notify your supervisor immediately.
3. Maintenance & Inspection
 - a. Fueling areas, storage tanks, and transfer equipment should be inspected monthly.
 - b. Spill Kits should be inspected and inventoried on a regular basis.
 - c. Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must be repaired or replaced immediately.

SOP:	Grounds Maintenance
Purpose of SOP:	Procedures for grounds keeping maintenance activities.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. General Landscaping Maintenance

- a. Remove litter, debris, and trash from the landscape 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 or pruning activities, all debris should be disposed of at designated area.
- d. Five-day weather forecast should be 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.

2. 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.
 - When storing stockpiles of sand, salt, dirt, mulch, gravel cover piles with a tarp.
 - 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.

3. Storage and Disposal of Pesticides, Herbicides, and Fertilizers

- a. Do not store pesticides, herbicides, and fertilizers near storm drains or water bodies.
- b. Do not dispose of pesticides, herbicides, and fertilizers near or in storm drains or water bodies.
- c. Store pesticides, herbicides, and fertilizers in a covered container, off the floor, in a dry location according to the manufacturer's specifications.

- d. Where possible, store pesticides, herbicides, and fertilizers in an enclosed, controlled area. (i.e. locked storage shed or cabinet)
 - e. Use proper containers for storing chemicals and clearly label.
 - f. Use and clearly label secondary containers.
 - g. Store Safety Data Sheets (SDS) near chemical storage areas.
 - h. Order only the amount needed to prevent surplus or expired chemicals.
 - i. Order chemicals just prior to usage to reduce storage time.
 - j. Use entire order of chemicals to minimize disposal.
 - k. Properly dispose of fertilizers and pesticides according to manufactures specifications and applicable regulations.
 - l. Follow all applicable federal and state regulations for storing pesticides, herbicides, and fertilizers.
4. Handling and Application of Pesticides, Herbicides, and Fertilizers
- a. Do not apply pesticides, herbicides, and fertilizers before a heavy rainfall.
 - b. Do not dispose of pesticides, herbicides, and fertilizers in storm drains or water bodies.
 - c. Only a Certified Pesticide Applicator may apply pesticides, herbicides, and fertilizers.
 - d. Use proper Personal Protection Equipment (PPE) when handling and applying chemicals.
 - e. All employees handling, mixing, and applying pesticides, herbicides, and fertilizers should be trained on the use of MSDS.
 - f. Mix only enough chemical for immediate use.
 - g. Follow manufacturer's recommendations for handling, mixing, and applying chemicals.
 - h. Follow all federal and state regulations when handling, mixing, and applying pesticides, herbicides, and fertilizers.
 - i. Mix pesticides, herbicides, and fertilizers in designated areas and away from storm drains or water bodies.
 - j. Employees applying pesticides, herbicides, and fertilizers should read the MSDS for each product they use.
 - k. Calibrate application equipment to ensure proper amount of product is applied.
 - l. Use caution when broadcasting product near a waterway or storm drain structure.
 - m. If fertilizer is broadcast or spilled on a sidewalk, street or driveway, sweep up the excess and dispose of properly.
 - n. Promptly cleanup any spills or leakage. Use dry absorbent for liquids and sweep up solid product. Properly dispose of waste. Do not rinse with water.
 - o. Use fertilizers with no phosphorous content.
 - p. Pesticide application equipment should have an emergency shut-off switch.
 - q. Use the least toxic product or method available to do the job.
 - r. Use biodegradable products when available.
 - s. Spot treat problem areas with pesticides rather than treating larger areas.
 - t. Avoid broadcast spraying of pesticides or herbicides.
 - u. Use the granular form of fertilizers, herbicides, and pesticides to minimize application losses. If using liquids, be aware of wind direction to avoid wind drift of chemicals.
 - v. Apply products when ground is not frozen; fertilizer during the fall or spring as needed, pesticides and herbicides only as needed.
5. 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.

SOP:	Liquid Materials Loading, Unloading, and Storage
Purpose of SOP:	Procedures for the proper management of the loading, unloading, and storage of liquid materials.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management, Warehouse

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. 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 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.
 - If transfers must take place near a storm drain inlet, place a cover or mat over the inlet to protect it during transfer operations.
 - d. 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.
 - e. At least one qualified University representative must attend any transfer operation for the entire duration of the loading or unloading operation.
 - f. 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.
 - g. Keep loading and unloading areas neat and tidy. Sweep outdoor areas as needed.
2. 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.

SOP:	Trash & Recycling Handling, Storage, Transfer, and Disposal
Purpose of SOP:	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
Responsible Department:	Grounds, Facilities Management, Housing, Dining, Catering, Events, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the university.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. Trash & Recycling Handling, Storage, Transfer, and Disposal
 - a. All waste and recycle receptacles must be leak-tight with tight-fitting lids or covers.
 - b. Place waste or recycle receptacles indoors or under a roof or overhang whenever possible.
 - c. Prior to transporting waste, trash, or recycling ensure that containers are not leaking (double bag if needed) and properly secure to the vehicle.
 - d. Clean and sweep up around outdoor waste containers regularly.
 - e. Clean up any liquid leaks or spills with dry clean-up methods. (See SOP: Spill Prevention, Clean Up and Reporting).
 - f. Arrange for wastes or recyclables to be picked up regularly and disposed at approved disposal facilities.
 - g. Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster, recycle or trash receptacle.
 - Please contact the Environmental Health Safety Department for information on proper disposal
 - h. 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.
 - i. Do not wash out waste containers (trash cans) or recycling containers outdoors or in a parking lot.
 - j. Containers, compactors and dumpsters must be returned to the waste disposal contractor for cleaning at the contractor's facility.
 - k. 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.
2. Dumpster Areas
 - a. Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
 - b. Keep lids on dumpsters closed at all times unless adding or removing material.
 - c. In the event that a dumpster lid is missing or damaged report it to Facilities Management.
 - d. If using an open top roll off dumpster, cover and tie down with a tarp unless adding materials.
 - e. Inspect regularly for leaks and correct if there is a problem.
 - f. Regularly sweep the area and pick up trash/debris.

3. Compactors

- a. Regularly check the hydraulic fluid hoses and reservoir to ensure there are no cracks or leaks.
 - In the event of leak report it immediately to the compactor service contractor and refer to SOP: Spill Prevention, Clean Up and Reporting.
 - Inspect regularly for leaks and correct if there is a problem.
 - Regularly sweep the area and pick up trash/debris.

SOP:	Parking Lot, Streets, and Roads Maintenance
Purpose of SOP:	Procedures for general maintenance of parking lots, parking garages, elevated parking structures, streets, or roads.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. General Maintenance

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

2. 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. A concrete wash-out area shall be designated at each capital construction site and managed by the project superintendent for the duration of the project. For all university projects, the washout site shall be next to the Ground Department off University Place. It shall include, at a minimum:
 - A concrete wash-out bag or other leak-proof container/settling basin.
 - A pool or containment system that holds the bag to prevent any seepage into the ground or overflows due to inadequate sizing or precipitation.
 - The bag can be disposed of properly after the material has dried in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall not be discharged to surface waters.

3. 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.

4. 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.

SOP:	Pressure Washing and Exterior Surface Cleaning
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
Responsible Department:	Facilities Management, Housing, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. 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)

II. Standard Operating Procedures

1. General Surface Cleaning and Pressure Washing

- 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.
- Pressure wash with minimal water.
- 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.
- 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.
- All other wash water must be captured for proper disposal.
- 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.
- A visible sheen must not be evident in the discharge. Use an absorbent pad or boom to eliminate any oil from the discharge.
- Do not pressure wash an entire building. Spot clean, steam clean, or scrape dirty areas rather than pressure washing the entire structure.

2. Heat Transfer Equipment and HVAC Equipment Cleaning

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

3. Storm Drain Protection

- 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.
- Block or cover all storm drains with booms and weighted storm drain covers before pressure washing.
- Determine where water will pool for collection. Use a wet vacuum up the wastewater or allow water to evaporate.

4. Disposal of Wash Water

- Use a wet vacuum to collect water for disposal to the sanitary sewer.
- 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.

5. 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.

SOP:	Dewatering Utility Construction and Maintenance Activities
Purpose of SOP:	Procedure for disposal of water pumped during maintenance or construction operations.
SOP Administrator:	Grounds Department
Responsible Department:	Facilities Management, Capital Outlay

I. Stormwater Protection Equipment and Materials

- Drum (55 gallon)
- Sediment bag
- Storm drain inlet protection devices (drain covers, booms, berms)
- Vegetated Swale
- Silt Fence
- Straw bales

II. Standard Operating Procedures

1. Tunnels, Vaults, Electrical Manholes, and other Structures

- a. Visually inspect the water to be removed. Determine if there are visible pollutants in the water to be pumped and the potential sources of those pollutants on site.
- b. Water collected in vaults or tunnels often results from rainwater or groundwater infiltration. If there is no reason to suspect the water has become contaminated as determined by the visual inspection and lack of potential pollutant sources, clear water can be pumped into a nearby vegetated area and allowed to infiltrate. The dewatering procedure should be monitored to ensure the pumped water does not travel from the vegetated area or cause localized erosion. If a suitable vegetated area is not available, the pumped water can be discharged to the sanitary sewer or hauled off from site for disposal at an appropriate treatment facility.
- c. Water that is suspected of having chemical or biological contamination or to contain anything other than pure rain or groundwater should be evaluated for proper disposal options by Environmental Health and Safety (EHS) or MS4 Program Coordinator. Proper disposal options could include discharging the water to the sanitary sewer, hauling it to an off-site permitted disposal facility, or if it is deemed appropriate, to the surface.

2. Excavations

- a. CNU staff and/or the contractor are encouraged to take appropriate measures to restrict the flow of water from the surface into an excavation if possible.
- b. Visually inspect the water to be removed. Water in excavations usually results from groundwater infiltration or rainfall. Determine if the water is laden with sediment or shows visible signs of any other contaminants.
- c. Sediment laden water may be allowed to settle to remove suspended solids prior to dewatering. Once the water is clear, the water can be pumped into a nearby vegetated area to promote infiltration and filtration.
- d. Sediment laden water that needs to be removed immediately must be pumped through an appropriately sized sediment bag following manufacturer's specifications. Discharge water from the sediment bag should be directed into a vegetated area, wherever possible, but is allowed to discharge into stormwater conveyances after passing through the sediment bag. The sediment bag must be routinely inspected during the pumping operation to make sure that it is functioning properly and has not become clogged. If muddy water is being released from the sediment bag, additional measures may be needed to minimize impacts from the discharge. This could include surrounding the bag with silt fence and straw bales or placing the bag on a gravel pad.

SOP:	Spill Prevention, Control, Clean Up and Reporting
Purpose of SOP:	Procedures for spill prevention, control, clean up and reporting.
SOP Administrator:	Grounds Department
Responsible Department:	All

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Storm drain inlet protection (drain covers, booms, berms)

II. Standard Operating Procedures

1. Spill Prevention

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

2. Spill Kit Maintenance

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

3. Spill Clean Up and Storm Drain Protection

- Clean up minor spills (< 5 gallons) immediately.
- Block any down gradient storm drains with berms, covers, absorbent socks or “pigs”.
- Never hose down spills or leaks.
- Always use “Dry Clean-up Methods” for clean-up of liquid spills (gasoline, diesel, paint, kitchen grease).
- Absorbents (loose absorbents, sheets, pillows, pigs, or socks) on the spill.
- Spread Sweep up or pick up the absorbed materials.
- Dispose of wastes properly and in accordance with all regulations.
- 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.
- After clean up, be sure to sweep up the contaminated absorbent and remove the berm or dike at storm drain.
- 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.

4. Internal Reporting of Spills

a. For Employees (Non-supervisors)

- Notify your direct supervisor immediately
- What spilled, Where it is located, Estimated amount of product

b. For Supervisors

- Small spills (<5 gallons) that pose no immediate danger to human life or property notify MS4 Program Manager (4-8700).
- Small spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

- Large Spills (>5 gallons) of any substance report to CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).
5. 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 PD.**
 - Notify the **Virginia Department of Environmental Quality.**
 - If spill occurs during *nights, weekends, or holidays* notify the **Virginia Department of Emergency Management's 24-hour hotline.**
 - **Notify the National Response Center.**
 - 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.
 - b. 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.**
 - **National Response Center.**

SOP:	Anti-icing and Deicing Agent Application, Transport, and Storage
Purpose of SOP:	Procedures for anti-icing and deicing agent application, transport and storage.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds Department

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- All anti-icing and deicing agents applied must be free of urea or other forms of nitrogen and phosphorus
- Tarps with tie downs

II. Standard Operating Procedures

1. Application

- a. If anti-icing or deicing agents are spilled or overapplied during application, excess material should be swept and disposed of immediately.
- b. Bulk products are to be applied to roads and parking lots by means of truck spreader.
- c. Bagged products are to be applied to sidewalks by means of push spreader or mechanized spreader attached to the back of utility carts.
- d. Product should be applied at rate specified by manufacturer.

2. Transport

- a. Whenever possible, anti-icing and deicing agents should be transported under cover.

3. Storage

- a. Whenever possible, bagged anti-icing and deicing agents should be stored, indoors or under cover.
- b. Whenever possible, bulk anti-icing and deicing agents should be stored in concrete containment with tarp cover.
 - Excess bulk material left after a storm event should be bagged and stored indoors. This material should be used prior to new bulk material.

SOP:	Exterior Renovation and Maintenance Activities
Purpose of SOP:	Stormwater pollution prevention procedures for the renovation and maintenance of exterior surfaces not covered under a separate VSMP construction general permit.
SOP Administrator:	Grounds Department
Responsible Department:	Facilities Management, Housing, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

III. Stormwater Protection Equipment and Materials

- Mulch, grass seed appropriate for temporary seeding purposes, matting, or other appropriate erosion control measures.
- Silt fence or other sediment filtering measures

IV. Standard Operating Procedures

1. Storm Drain Protection
 - a. Prior to renovation or maintenance work, identify where all downstream storm drains are located; water contaminated by sediment, chemicals, or building materials must not be allowed to flow down gutters or enter storm drains.
 - b. Block or cover storm drains with booms and weighted storm drain covers before renovation.
 - c. Determine where water will pool for collection. Use a wet vacuum to collect the wastewater or allow water to evaporate.
2. Renovation Activities
 - a. Renovation which disturbs land must utilize appropriate erosion and sediment control measures to prevent sediment-laden water from entering storm drains.
 - b. If sections of the site which have been disturbed will not be disturbed again for 14 days, temporary seeding, matting, mulching, or other appropriate erosion control measures should be applied to prevent rainfall from causing erosion.
 - c. Keep renovation sites clean and free of debris to prevent debris from entering storm drains.
 - d. Materials required for renovation work, such as concrete, fertilizer, grout, etc should be protected from rain by being stored under cover and promptly returned to their appropriate storage location on campus once they are no longer necessary for renovation in order to prevent contaminants from entering storm drains.
 - e. Renovation or maintenance which would remove or disturb hazardous materials that could enter waterways (e.g. old paints containing heavy metals) should dispose of contaminated materials properly and prevent contamination of stormwater with hazardous waste. If contamination occurs, water should be completely contained on site and disposed of according to hazardous waste regulations.
3. Disposal of Contaminated Water
 - a. Use a wet vacuum to collect water for disposal.
 - 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.
4. 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.



Stormwater Pollution Prevention Plan (SWPPP)

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Appendix B – IDDE Policy

Appendix C – Maps

Appendix D – MS4 General Permit

Appendix E – Standard Operating Procedures (SOPs)

Appendix F – Log of unauthorized discharge, release, or spill incident reported

Revision History

Number	Description of Change	Pages	Date	Name
1	Review and updated information	N/A	12/1/20	Dean Whitehead
2	Review and updated information	N/A	1/26/21	Timmons Group
3	Review and updated information per DEQ audit	N/A	8/09/22	Timmons Group
4	Review and updated information per new General Permit Phase III	N/A	8/28/2024	Timmons Group
5	Review and updated information	N/A	7/24/2025	Timmons Group
6	Review and updated information	N/A	02/25/2026	Timmons Group
7	Review and updated information	N/A	05/19/2026	Timmons Group
8	Review and updated information	N/A	08/12/2026	Timmons Group

Section 1: Introduction

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 (VAR04), originally effective on July 9, 2008. CNU registered for continuation of coverage on January 10, 2008, and was approved by the Virginia Department of Conservation and Recreation (DCR) on July 15, 2008 (MS4 General Permit VAR040090). The program was transferred from the DCR to the Virginia Department of Environmental Quality (DEQ) in 2013. CNU re-registered for continuation of coverage and was approved by the DEQ on October 30, 2023 (MS4 General Permit VAR040090). A copy of the permit is available in Appendix D.

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 (CWA) and its attendant regulations.

The objectives of the SWPPP are to prevent illicit discharges, ensure permittee staff or contractors properly dispose of waste materials, prevent unauthorized discharge or non-stormwater into the MS4, and minimize pollutants in stormwater runoff. This SWPPP does not cover any new construction associated with capital improvement project activities. New construction activities must have a stormwater management plan approved by the VESMP authority as authorized under the Virginia Erosion and Stormwater Management Program (VESMP) Regulation (9VAC25-875).

1.1 Area of Coverage

CNU is a regulated small MS4 contained within the boundaries as shown on Appendix C: Figure 1. The University's MS4 area primarily encompasses what is known as "main campus." Main campus is generally bounded to the north by Prince Drew Rd., to the east by Warwick Blvd., to the west by N. Moore's Ln., to the south by Shoe Ln. and to the southeast by Avenue of the Arts. Several sites are included in the University's MS4 area outside of main campus; these sites are a parcel adjacent to the University Police Department, the CNU Facilities Management site, the Grounds Department site, the Rappahannock River Hall property, and the Yoder Barn Theatre.

The University's MS4 discharges both to interconnected outfalls, which enter the City of Newport News' MS4, and to three independent outfalls. The interconnected outfalls discharge either to Warwick River (VA Hydrologic Unit 6 JL38) or to Cooper Creek, a tributary of the James River (VA Hydrologic Unit 6 JL43), while the independent outfalls drain to Cooper Creek, a tributary of the James River. For a complete view of outfalls on CNU campus, please see Appendix C: Figure 3.

1.2 Allowable Non-Stormwater Discharges

The following are the only non-stormwater discharges authorized under the MS4 (9VAC25-890-20), provided that all discharges comply with the effluent limitations set forth in the MS4:

- Water line flushing, managed in a manner to avoid an instream impact;
- Landscape irrigation;
- Diverted stream flows;
- Rising groundwaters;
- Uncontaminated ground water infiltration, as defined at 40CFR 35.2005(20);
- Uncontaminated pumped groundwater;
- Discharges from potable water sources managed in a manner to avoid instream impact;
- 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 freshwater swimming pool discharges managed in a manner to avoid instream impact;
- Street and pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact;
- Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled or similarly treated prior to discharge;
- Discharges or flows from emergency firefighting activities;
- Discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with §9.1-207.1 of the Code of Virginia; or
- Other activities generating discharges identified by the department as not requiring VPDES authorization

All other non-stormwater discharges requiring VPDES permit coverage are not authorized by CNU's MS4 General Permit.

1.3 Permit Compliance

As per the General Permit, the operator shall comply with all conditions of this state permit. Any state permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act, except that noncompliance with certain provisions of this state permit may constitute a violation of the Virginia Stormwater Management Act but not the Clean Water Act. State permit noncompliance is grounds for enforcement action; for state permit termination, revocation and reissuance, or modification; or denial of a state permit renewal application. The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this state permit has not yet been modified to incorporate the requirement.

1.4 SWPPP Availability

A complete copy of the current SWPPP is maintained by CNU electronically. The SWPPP is immediately available online to University employees; local, state, and federal officials; and the operator(s) of an MS4 receiving discharges from the site.

1.5 Additional Documentation Requirements

CNU keeps the following inspection and monitoring records with the SWPPP to demonstrate compliance with the conditions of the MS4 General permit:

- Documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for extended maintenance/repair schedules
- Inspection reports
- Description of deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations
- Description of corrective action triggering event/condition
- Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if the University discharges directly to impaired waters, and that such pollutants were not detected in the discharge or were solely attributable to natural background

1.6 Record Keeping Requirements

CNU retains copies of this SWPPP (including modifications made during the term of this permit), additional documentation requirements, all reports and certifications required by MS4 General Permit, monitoring data, and records of all data for a period of at least three years from the date that coverage under the current MS4 General Permit expires or is terminated.

Section 2: Stormwater Pollution Prevention Team

The stormwater pollution prevention team is responsible for overseeing development of the SWPPP, later modifications to it, and for compliance with the requirements in this permit. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit, the most updated copy of the SWPPP, other relevant documents, or information that must be kept with the SWPPP. For the purposes of this Plan, the members of the Pollution Prevention Team Roster are summarized in Table 2 below:

Table 2: Pollution Prevention Team Roster and Responsibilities

Member Name or Title	Member Responsibility
Vice President for Facilities and Campus Operations	Team Member – Certifying official and provides any upper management advice or directives.
Director of Grounds	SWPPP Coordinator/Team Leader – Coordinates plan development, plan implementation, employee training, inspections, and best management practices.
Director of Facilities Management	Team Member – Supports plan development, plan implementation, employee training, inspections, and best management practices.
Associate Director of Grounds	Team Member – Oversees preventative maintenance procedures, and monthly inspections to ensure that control measures (such as covers for outside dumpsters) are in place and are in proper working condition
Director of Environmental Health & Safety	Team Member - Supports plan development, plan implementation employee training, inspections, and best management practices.
Sustainability Specialist	Team Member - Supports plan development, plan implementation employee training, inspections, and best management practices.
Director of Building Operations	Team Member - Supports plan development, plan implementation employee training, inspections, and best management practices.
Director of Housing	Team Member - Supports plan development, plan implementation employee training, inspections, and best management practices.
Compliance Coordinator	Team Member - Supports plan development, plan implementation employee training, inspections, and best management practices.
Consultant	Assist in plan development and provide technical advice on plan implementation.

Section 3: Site Descriptions

3.1 University Activities

CNU is a four-year public university in Newport News, Virginia. CNU enrolls approximately 5,000 students each year and has approximately 1,000 employees. The University's campus is sited on 260 acres featuring approximately 40 buildings. The University's MS4 discharges both to interconnected outfalls, which enter the City of Newport News' MS4, and to three independent outfalls. The interconnected outfalls discharge either to Warwick River or to Cooper Creek, a tributary of the James River, while the three independent outfalls drain to Cooper Creek, a tributary of the James River. Both Warwick River and Cooper Creek are tributaries of the Chesapeake Bay. The campus is located in the Lower James River watershed with the Hydrologic Unit Codes (HUC0 JL38 and JL43). Please see Appendix C for a complete site map. The following University Departments have operational control (i.e. authority over daily operations) over on-site activities with the potential to contribute to stormwater pollution:

- Grounds Department
- Facilities Management
- Auxiliary Services
- Athletics

3.2 Areas with High Potential to Discharge Pollutants

Many of the University's operations occur within structures and/or under cover. However, there are 7 Facilities and 10 solid waste locations at the University with on-site activities that have potential to contribute to stormwater pollution (Appendix C: Figure 5). Annually, CNU will conduct a comprehensive site compliance evaluation and investigation for each High Priority Area using the inspection forms and maps in Appendices A and C, respectively. Any updates will be made to the documents and unauthorized discharge, release, or spill incidents will be documented and reported as appropriate. Any issues with compliance will be documented and reported to CNU to resolve. Unauthorized discharges will be documented in Appendix F. The IDDE policy (see Appendix B) will be followed for any potential illicit discharges that are identified during dry weather screening activities

3.2.1 Waste Management Areas

The University has 1 centralized Municipal Solid Waste (MSW) dumpster storage yard at the Athletics Department Operations (Appendix C: Figure 5.1). Additionally, there are 16 other locations on campus which feature dumpster and/or compactor corrals. All the waste management areas are serviced by a licensed and contracted waste hauler. The locations are outlined in Table 3:

Table 3 Waste Management Areas

Location	Operational Control	Front End Load MSW Dumpsters	Front End Load Recycling Dumpsters	Roll-Off MSW Dumpsters	Compactor	FOG Container
Athletics Department Operations	Facilities Management	9	3	1 + 1 [†]	-	-
CNU Apartments*	Auxiliary Services (H)	2	2	1 [†]	-	-
CNU Landing*	Auxiliary Services (H)	2	-	1 [†]	-	-
CNU Village*	Auxiliary Services (H)	2	-	1 [†]	1	1
CNU Police Department*	Operations	1	-	-	-	-
David Student Union	Auxiliary Services (D)	-	-	-	1	1
Facilities Management*	Facilities Management	-	1	1 + 1 [†]	-	-
Ferguson Center	Auxiliary Services	2	2	-	-	-
Freeman Center	Auxiliary Services	1	1	-	-	-
Greek Village	Auxiliary Services (H)	1	1	1 [†]	-	-
Grounds Department Compound*	Grounds Department	-	-	1	-	-
Hidden-Hussey Commons	Auxiliary Services (D)	-	-	-	1	1
James River Hall	Auxiliary Services (H)	2	-	1 [†]	-	-
Rappahannock Hall*	Auxiliary Services	1	-	-	-	-
Santoro Hall	Auxiliary Services (H)	2	-	1 [†]	-	-
Yoder Barn Theatre*	Auxiliary Services	1	-	-	-	-
York River Hall*	Auxiliary Services (H)	1	-	1 [†]	-	-

Areas marked with an asterisk "*" discharge stormwater to the City of Newport News' MS4 permitted storm drains, while the unmarked areas discharge into CNU's MS4 permitted drains. "†" indicates a recurring, but short-term container. Auxiliary Services (H) = Housing, Auxiliary Services (D) = Dining.

3.2.2 Athletics Department Operations

The Athletics Department Operations is located at 220 Prince Drew Road in Newport News and is under the operational control of the Facilities Management Department with support from the Athletics Department. This area houses game day event and athletic equipment. The area consists of one building. To the northern portion of the area is a grassed area, to the west is a grass athletics practice field, to the south of the property is the University's track and football stadium, to the east of the property is a private residence (Appendix C: Figure 5.1). The area discharges stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Exterior stockpiling of materials
 - e.g. dirt, sand, mulch, fuel etc.
- Materials storage
 - Plants, equipment and tools, plastics and metals, paints, etc.
- Landscaping material storage
 - e.g. Fertilizers, pesticides, fungicides, herbicides
- Vehicle maintenance and storage
 - e.g. motor oils, fluids, and gasoline
- Solid waste management dumpster storage

3.2.3 CNU Apartments

The CNU Apartments are located at 12368 Warwick Boulevard in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of five buildings. The buildings are circled by a paved parking lot and access road, with semi-permeable brick paths connecting the buildings to each other (Appendix C: Figure 5.2 and Figure 5.5). The housing area, alongside CNU Landing and CNU Village, is bounded by University Place to the north, Warwick Boulevard to the west, and private residential lots to the south. The buildings and lawn discharge stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.4 CNU Landing

CNU Landing is located on University Place in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of six buildings. The buildings are connected to University Place by paved parking lots (Appendix C: Figure 5.2). The housing area, alongside the CNU Apartments and CNU Village, is bounded by University Place to the north, Warwick Boulevard to the west, and private residential lots to the south. The buildings discharge stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.5 CNU Village

The CNU Village is located at 12368 Warwick Boulevard in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of one building. The building is circled by a paved parking lot and access road, with semi-permeable brick paths around the perimeter of the building (Appendix C: Figure 5.2). The housing area, alongside CNU Landing and the CNU Apartments, is bounded by University Place to the north, Warwick Boulevard to the west, and private residential lots to the south. The buildings discharge stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage
- Grease trap(s)

3.2.6 CNU Police Department

CNU Police Department parcel is located at 12254 Warwick Boulevard in Newport News and is under the operational control of Operations. The area consists of an open, grassed area and a cul-de-sac connected to the CNU Police Department parking lot (Appendix C: Figure 5.3). The grassed area and cul-de-sac discharge stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.7 David Student Union

The David Student Union is located on the Avenue of the Arts in Newport News and is under the operational control of Auxiliary Services Dining. This area houses one of two of the University's dining halls. The area consists of one building. To the north of the area is a grassed area, the western side contains a loading dock, to the south is a paved road (University Place), and to the east is semi-permeable brick plaza (Appendix C: Figure 5.4). The majority of the loading dock drains to a trench drain that is connected to sanitary sewer, the remainder of the area discharges stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Materials handling
 - e.g. transfer food stuffs and cooking oils
- Shipping and receiving areas
- Solid waste management dumpster storage
- Grease trap(s)

3.2.8 Facilities Management Building

The Facilities Management Building is located at 11 Sweetbriar Drive in Newport News and is under the operational control of Facilities Management. This area houses the facilities management personnel including: Mechanical, Electrical, Plumbing, Housekeeping, and Warehouse staff. On-site operational activities primarily occur indoors. The area consists of one building. To the north is a paved staging area, to the west is a paved employee parking lot, to the south is a paved road (Sweetbriar Dr), and to the east are private residential lots (Appendix C: Figure 5.5). The area discharges stormwater via sheet flow into the City of Newport News' underground drainage infrastructure. The following activities at this area have the potential to contribute to stormwater pollution:

- Exterior stockpiling of materials
 - e.g. scrap metal, stone, wood, etc.
- Materials storage
 - e.g. paint, chemicals, etc.
- Shipping and receiving areas
- Solid waste management dumpster storage

3.2.9 Ferguson Center

The Ferguson Center is located on the Avenue of the Arts in Newport News and is under the operational control of Auxiliary Services. The area consists of one building. The southern side of the building contains two loading docks and a paved parking lot. To the north of the area is a parking loop and grassed area, to the west is a paved road (Avenue of the Arts), and to the east is lawn and landscaped trees (Appendix C: Figure 5.6). The area discharges stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Vehicle maintenance and storage
 - e.g. motor oils, fluids, and gasoline.
- Shipping and receiving areas
- Solid waste management dumpster storage

3.2.10 Freeman Center

The Freeman Center is located on University Place in Newport News and is under the operational control of Auxiliary Services. The area consists of one building. To the north of the area is a parking lot and grassed area, to the west is a paved parking lot, to the south is semi-permeable brick pathways and other University buildings, and to the east is semi-permeable brick plaza and a paved road (University Place) (Appendix C: Figure 5.7). The area discharges stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.11 Greek Village

The Greek Village is located on University Place in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of four buildings. To the north of the area is a paved parking lot, to the west is a paved road (Merritt Road) and the CNU Courts, to the south is semi-permeable brick paths and grassed area, and to the east is semi-permeable brick path and paved access road to Guynn Industries (Appendix C: Figure 5.8).

The buildings discharge stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.12 Grounds Department Compound

The Grounds Department compound is located at 437 University Place in Newport News and is under the operational control of the Grounds Department. This area houses landscaping management personnel and equipment. The area consists of three buildings, two storage structures, and equipment wash pad. The wash pad drains to the sanitary sewer and is not connected to the stormwater system. This area also has two double walled Above Ground Storage Tanks (AGST) on location for gasoline and diesel fuel. To the northern portion of the area is a wooded lot, to the west is an unpaved temporary vehicle parking area, to the south is a paved road (University Place), and to the east is a private residential lot (Appendix C: Figure 5.9). The area discharges stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Exterior stockpiling of materials
 - e.g. dirt, sand, mulch, fuel etc.
- Materials storage
 - Plants, equipment and tools, plastics and metals, paints, etc.
- Landscaping material storage
 - e.g. Fertilizers, pesticides, fungicides, herbicides
- Vehicle maintenance and storage
 - e.g. motor oils, fluids, and gasoline.
- Solid waste management dumpster storage
- Wash station

3.2.13 Hiden-Hussey Commons

The Hiden-Hussey Commons is located on the Avenue of the Arts in Newport News and is under the operational control of Auxiliary Services Dining. This area houses one of two of the University's dining halls. The area consists of one building. To the north of the area is a paved road (University Place), to the west is a residence hall, to the south is semi-permeable brick cart path, and to the east is semi-permeable brick cart path (Appendix C: Figure 5.8). The buildings discharge stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Materials handling
 - e.g. transfer food stuffs and cooking oils
- Solid waste management dumpster storage
- Grease trap(s)

3.2.14 James River Hall

James River Hall is located on University Place in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of one building. To the north of the area is a paved road (University Place) and parking lot, to the west is a grassed area, to the south is semi-permeable brick path, and to the east is semi-permeable brick path and grassed area (Appendix C: Figure 5.8). The area to the east of the building drains via sheet flow to BMP #2. The remaining areas around the building discharge stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.15 Rappahannock River Hall

Rappahannock River Hall is located on Prince Drew Road in Newport News and is under the operational control of Auxiliary Services. The area consists of two buildings – Rappahannock River Hall and the North Administration Building – and one parking deck. To the north of the area is a paved road (Hidden Boulevard), to the west are private residential lots, to the south is a paved road (Prince Drew Road), and to the east is a paved road (Warwick Boulevard) (Appendix C: Figure 5.10). The building discharges stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.16 Santoro Hall

Santoro Hall is located on University Place in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of one building. To the north of the area is a paved road (University Place), to the west is James River Hall, to the south is semi-permeable brick path, and to the east is semi-permeable brick cart path (Appendix C: Figure 5.8). The building discharges stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.17 Yoder Theatre

The Yoder Barn Theatre is located at 660 Hamilton Drive in Newport News and is under the operational control of Auxiliary Services. The area consists of one building. To the north of the area is a paved road (Hamilton Drive), to the west is a paved parking lot, to the south is a paved road (Oyster Point Road), and to the east is a paved parking lot (Appendix C: Figure 5.11). The building discharges stormwater via underground drainage infrastructure to the University's interconnected outfalls to Newport News. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.2.18 York River Hall

York River Hall is located on Shoe Lane in Newport News and is under the operational control of Auxiliary Services Housing. The area consists of two buildings – York River West and York River East. To the north of the area is a grassed area and paved road (University Place), to the west is a parking lot and grassed area, to the south is a paved road (Shoe Lane), and to the east is a brick road (University Place) (Appendix C: Figure 5.12). The building discharges stormwater via underground drainage infrastructure to the University's outfalls. The following activities at this area have the potential to contribute to stormwater pollution:

- Solid waste management dumpster storage

3.3 General Location Map

This SWPPP provides a general location (e.g., U.S. Geological Survey (USGS)) quadrangle map with enough detail to identify the location of the University and all receiving waters for the stormwater discharges (Appendix C).

3.4 Site Maps

In addition to the general location map, the SWPPP must include a map that shows the following:

- Locations of stormwater outfalls, with a unique identification code for each outfall (e.g., Outfall 1, Outfall 2, etc.)
- Direction of stormwater flow (using directional arrows)
- Locations of all existing structural control measures
- Locations of all receiving waters, including wetlands, in the immediate vicinity of the facility. Indicating if of the waters are listed as impaired and which are identified as Federal, state or tribal Tier 2 or Tier 2.5 waters

For informational purposes, maps included in SWPPP documentation provide the following:

- Boundaries of the campus
- The location and extent of significant structures
- Municipal separate storm sewers systems (MS4) and where the facility discharges to them
- Locations of potential pollutant sources, such as:
 - Vehicle and equipment maintenance and/or cleaning areas
 - Loading/unloading areas
 - Locations used for the treatment, storage, or disposal of wastes
 - Processing and storage areas
 - Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility

In order to meet these requirements described above, CNU has developed the enclosed Stormwater Site Plans for each High Priority Area as identified in Section 3.2. A copy of all maps is available in Appendix C.

Section 4: Potential Pollutant Sources

4.1 Summary of Potential Pollutant Sources

The SWPPP documents the areas at the University where materials or activities are exposed to stormwater or from which non-stormwater discharges may be released. Materials or activities include, but are not limited to the following:

- Material handling equipment or activities
- Raw Materials
- Municipal Solid Waste
- Machinery

Material handling activities include, but are not limited to the following: storage, loading, and unloading, transportation, disposal, or conveyance of materials. Table 4 provides a summary of University activities exposed to stormwater:

4.1.1 Site Activities & Potential Pollutants

The list must include the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity with the potential to be exposed to stormwater, and could be discharged from the University. Table 5 in this section summarizes the pollutants for each identified activity.

Table 4: Potential Pollutants Associated with University Activities

University Operations	Activities	Sediment	Nutrients	Trash	Metals	Bacteria	Oil &	Organics	Pesticides	Oxygen Demanding Substances
Roads, Streets, and Parking Lot Operation and Maintenance	Sweeping and Cleaning	X		X	X		X			X
	Street Repair, Maintenance, and Striping/Painting	X		X	X		X	X		
Plaza, Sidewalk, and Parking Lot Maintenance and Cleaning	Surface Cleaning	X	X			X	X			X
	Graffiti Cleaning	X	X		X			X		
	Sidewalk/Paver Repair	X		X						
	Controlling Litter	X		X		X	X			X
	Mowing/Trimming/Planting	X	X	X		X			X	X
	Fertilizer & Pesticide Management	X	X						X	
Landscape Maintenance	Managing Landscape Wastes			X					X	X
	Erosion Control	X	X							
	Inspection and Cleaning of Stormwater Conveyance Structures	X	X	X		X		X		X
Drainage System Operation and Maintenance	Controlling Illicit Connections and Discharges	X	X	X	X	X	X	X	X	X
	Controlling Illegal Dumping	X	X	X	X	X	X	X	X	X
	Maintenance of Inlet and Outlet Structures	X		X	X		X			X
	Solid Waste Collection		X	X	X	X	X	X		X
	Waste Reduction and Recycling			X	X					X
Waste Handling and Disposal	Collection of MSW			X	X		X	X	X	
	Controlling Litter			X	X	X		X		X
	Controlling Illegal Dumping	X		X		X	X		X	X

4.1.2 Spills and Leaks

This plan identifies locations where potential spills and leaks could occur that might contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. The University shall document all significant spills and leaks of oil or toxic or hazardous pollutants that occurred at exposed areas, or that have drained to a stormwater conveyance in the three years prior to the date in which the SWPPP was prepared or amended.

The EPA has defined “significant spills” to include, but not be limited to, releases of oil or hazardous substances in excess of quantities that are reportable under the CWA or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The MS4 does not relieve the University of any reporting requirements

relating to spills or other releases of oils or hazardous substances. Any operator who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR.

A spill, leak, or discharge is any flow that occurs during a 24-hour period into or upon state surface waters or that may reasonably be expected to enter state surface waters. In such an event, the University shall notify the Department of Environmental Quality (DEQ) of the discharge immediately upon discovery of the discharge, but in no case later than within 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to DEQ and the CNU MS4 Program Coordinator within five days of discovery of the discharge. The written report shall contain:

- a. A description of the nature and location of the discharge;
- b. The cause of the discharge;
- c. The date on which the discharge occurred;
- d. The length of time that the discharge continued;
- e. The volume of the discharge;
- f. If the discharge is continuing, how long it is expected to continue;
- g. If the discharge is continuing, what the expected total volume of the discharge will be; and
- h. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this general permit.

Please refer to site maps in Appendix C for identified areas locations where potential spills and leaks could occur that might contribute pollutants to stormwater discharges, and the corresponding outfall(s) that would be affected by such spills and leaks.

4.1.3 Non-stormwater Discharges

CNU regularly performs evaluations, in accordance with the IDDE Policy (Appendix B), to identify the presence of non-stormwater discharges and to confirm that all unauthorized discharges have been eliminated in compliance with all regulations. The details of each IDDE incident recorded electronically by the Grounds Department and are available upon request.

Section 5: Control Measures

The selection, design, installation, and implementation of control measures (including best management practices) must be accordance with good engineering practices and manufacturer's specifications and done to address the selection and design considerations as per Part I Section E of the MS4 General Permit.

In the event the University finds that the control measures are not achieving their intended effect of minimizing pollutant discharges, the University shall modify these control measures. Regulated stormwater discharges from the University include stormwater run-on that commingles with stormwater discharges associated with University operations.

3.3 Standard Operating Procedures (SOPs)

The University implements SOPs to prevent pollutant discharge during daily operational activities. See Appendix E for all SOPs, which include:

- Equipment maintenance & washing
- Outdoor events
- Kitchen Waste: Fats, Oils, & Greases
- Equipment Fueling Activities
- Grounds Maintenance
- Liquid Materials Loading, Unloading, & Storage
- Trash & Recycling Handling, Storage, Transfer, & Disposal
- Parking Lot, Streets, & Roads Maintenance
- Pressure Washing & Exterior Surface Cleaning
- Dewatering Utility Construction & Maintenance Activities
- Spill Prevention, Control, Clean Up, & Reporting
- Anti-Icing and De-icing Application, Transport, & Storage
- Exterior Renovation & Maintenance Activities

3.4 Structural Control Measure Descriptions

The University incorporates best management practices into its daily operations that contribute to preventing pollutants from entering storm water inlets, and adversely affecting the natural environment. Potential sources of storm water pollution include spills and leaks from oil, grease, fuel, and chemicals onto paved surfaces, chemical product in wash water, lawn and garden products on pavement, exposed bulk storage piles and common floatable trash. Specific SOPs area available in Appendix E.

5.2.1 Lane Proprietary Underground Practices: Stormkeeper Stormwater Chamber

The information in the following system refers to Lane Enterprises, Inc. Proprietary Underground Practices. Descriptions for these practices have referenced practice descriptions available on the Lane website (<https://lane-enterprises.com/>) as of January 2026.

The Lane Stormkeeper Stormwater Chamber is a customizable detention system made of polypropylene arch chambers designed for use beneath paved areas, green space, residential areas, or multi-use areas to provide underground storage of storm water runoff and maximize the usage of real estate. The burial depth of the chambers are flexible between 18-24" (depending on chamber size) and 8' deep. Chambers range from ~34" wide to ~101" wide and from ~16" tall to 59.5" tall.

5.2.2 Extended Detention Pond

An extended detention pond is designed to hold back water for 24 to 36 hours after each rain event. This detention enables particulate pollutants to settle out and reduces the peak discharge on the downstream channel, reducing erosive forces on receiving streams. Extended detention ponds are typically designed to achieve a minimum drawdown time, but can also be designed for channel protection using the “energy balance” method described in VESMP regulations, which may result in extended drawdown time. Note that because the primary pollutant removal mechanism of extended detention ponds rely on gravitational settling, they provide poor removal for soluble pollutants, such as nitrate and soluble phosphorus.

Information on Extended Detention Ponds sourced from the Virginia Stormwater Management Handbook Version 1.1, accessed through the Encode Handbook (<https://online.encodeplus.com/regs/deq-vi/doc-viewer.aspx#secid-1039>)

5.2.3 Bioretention

A bioretention practice holds water for 48 to 72 hours, allowing the settling of suspended particulate pollutants. As water infiltrates, these pollutants are filtered through biofiltration media which enhances removal of these pollutants before water is discharged to surface or groundwater through an underdrain or gravel layer. Bioretention facilities are typically small and can slot into many urban settings, with the goal of maximizing runoff volume reduction and nutrient removal. Bioretention practices are planted with grass, herbaceous vegetation, shrubs, and sometimes trees.

Information on Bioretention practices sourced from the Virginia Stormwater Management Handbook Version 1.1, accessed through the Encode Handbook (<https://online.encodeplus.com/regs/deq-vi/doc-viewer.aspx#secid-1130>)

3.5 Pollutant Source Control Descriptions

Pollutant source control measures to be used at CNU include but are not limited to the following measures. This list will be updated annually.

5.3.1 Gutterbuddy

Gutterbuddies are lightweight curb inlet filters, installed around or across the inlet to filter sediment and debris while still allowing water to enter the inlet. Built in overflows drain water quickly during large storm events to prevent ponding. Gutterbuddies are long lasting and made from recycled synthetic fibers.

The information on the Gutterbuddy filter above referenced the practice description on the Ferguson Waterworks website (<https://www.fergusongss.com/product/gutterbuddy>) and is current as of June 2026.

5.3.2 Spill Kit

Spill kits are present on the campus in areas where spills are a concern, such as the fuel tank. These include materials used to absorb spills, equipment to clean up and dispose of contaminated materials once spill has been contained, and personal protective equipment (PPE) to protect workers cleaning up the spill from adverse impacts.

5.3.3 Used Transmission and Hydraulic Oil Containment Drum

The transmission and hydraulic oil containment drum on campus houses used oils to prevent spills and allow for contained removal of used oils from campus. The containment drum is located outdoors but is covered with a cap that can be opened to pour oil into the drum.

5.3.4 Discharges to Quality Impaired Waters

Discharges from the University will be considered to discharge to an impaired waterway if the first waterway to which the facility discharge is identified by a state, tribe, or the EPA as not meeting an applicable water quality standard (included on the Section 303(d) of the CWA list), or is included in an EPA-approved or established TMDL. For discharges that enter a storm sewer system prior to discharge, the first waterway to which the facility discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

As of the 2024 Integrated List of Waters Report CNU does not discharge to any impaired waterways.

Section 6: Schedules and Procedures

6.1 Inspections

6.1.1 Routine Inspections

During normal operating hours the University shall conduct inspections of areas of the campus covered by the MS4 General Permit, including the following:

- Areas where materials or activities are exposed to stormwater
- Areas identified in the SWPPP and those that are potential pollutant sources
- Areas where spills and leaks have occurred in the past 3 years
- Discharge points
- Control measures used to comply the permit

Inspections shall be conducted at least once per year and can be more often if found to be needed. Increased frequency may be appropriate for some types of equipment, processes and stormwater control measures, or areas of the facility with significant activities and materials exposed to stormwater.

Inspections must be performed by qualified personnel. Inspectors must consider the results of visual and analytical monitoring (if any) for the past year when planning and conducting inspections.

During the inspection the staff must examine or look for the following:

- Materials, residue or trash that may have or could come into contact with stormwater
- Leaks or spills from industrial equipment, drums, tanks and other containers
- Offsite tracking of waste materials, or sediment where vehicles enter or exit the site
- Control measures needing replacement, maintenance or repair

When conducting an inspection during a stormwater discharge, control measures implemented to comply with effluent limits must be observed to ensure they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations must be inspected.

6.1.1.1 Routine Inspection Documentation

The findings of the routine inspections must be documented and maintained with this SWPPP. The inspection documentation must include, but not necessarily be limited to the following:

- The inspection date and time
- The name(s) and signature(s) of the inspector(s)
- Weather conditions at the time of the inspection
- All observations relating to the implementation of control measures at the University, including:
 - A description of discharges occurring at the time of the inspection
 - Previously unidentified discharges and/or pollutants from the site
 - Evidence of, or the potential for, pollutants entering the drainage system
 - Observations regarding the physical condition of and around all outfalls including flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water
 - Control measures needing maintenance, repairs, or replacement

- Additional control measures needed to comply with the permit requirements
- Incidents of noncompliance observed

If the University performed a discharge visual assessment during the inspection, the University may include the results of the assessment with the report, as long as all components of both types of inspections are included in the report. A Routine Inspection form is located in Appendix A of this SWPPP.

6.1.2 Visual Assessment of Stormwater Discharges

If needed, the University may collect a stormwater sample from each outfall (monitoring point) and conduct a visual assessment the samples. The samples should be collected in such a manner that they are representative of the stormwater discharge from the University. The following visual assessments must be made:

- Collect the grab sample in a clean, clear glass, or plastic container. and examine in a well-lit area
- Collect the grab sample within the first 30 minutes of an actual discharge from a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and the facility must document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge from the site
- Collect the grab sample from a measurable storm event or discharge that occurred at least 72 hours (3 days) from the previous discharge. The 72-hour storm interval does not apply if the facility document that less than a 72-hour interval is representative for local storm events during the sampling period

Sampling personnel must visually inspect or observe the sample for the following water quality characteristics:

- Color
- Odor
- Clarity (diminished)
- Floating solids
- Settled solids
- Suspended solids
- Foam
- Oil sheen
- Other obvious indicators of stormwater pollution

Whenever the visual assessment shows obvious signs of stormwater pollution, the University must initiate the corrective action procedures identified in the IDDE Policy.

6.1.2.1 Visual Assessment Documentation

The results of the visual assessments must be documented and maintained with this SWPPP. A Visual Assessment form is located in Appendix A of this SWPPP. The visual assessment documentation must include, but not be limited to:

- Sample location(s)
- Sample collection date and time, and visual assessment date and time for each sample
- The name(s) and signature(s) of the inspector(s)
- Nature of the discharge (i.e. - runoff or snowmelt)
- Results of observations of the stormwater discharge
- Probable sources of observed stormwater contamination
- If applicable, why it was not possible to take samples within the first 30 minutes

6.2 Maintenance Schedules

Maintenance will be performed on an as-needed basis to address inspection findings.

6.3 Training Schedules

Training will be performed on the schedule identified in the Program Plan.

Section 7: Signature Requirements

The SWPPP, including changes to the SWPPP to document corrective actions taken, and all reports submitted to DEQ, must be signed by a responsible University official or by a duly authorized representative of that person. A responsible University official means:

- A president or vice-president of the University in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the University; or
- A Director of University Grounds or Facilities, provided, the Director is authorized to make management decisions which govern the operation of the University including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures

All other changes to the SWPPP, and other compliance documentation required must be signed and dated by the person preparing the change or documentation.

7.1 Plan Certification

I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated 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.

University Official: _____ Title: _____

Signature: _____ Date: _____

Appendix A – Inspection Forms

9-C.10.0. BIORETENTION PRACTICES: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Facility Location:

- ☐ Surface
☐ Underground

Hydraulic Configuration:

- ☐ On-line facility
☐ Off-line facility

Filtration Media:

- ☐ No filtration (e.g., dry well, permeable pavement, infiltration facility, etc.)
☐ Sand
☐ Bioretention Soil
☐ Peat
☐ Other: _____

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
☐ Sedimentation chamber
☐ Plunge pool
☐ Stone diaphragm
☐ Grass filter strip
☐ Grass channel
☐ Other: _____

Ideally, Bioretention facilities should be inspected and cleaned up annually, preferably during the Spring. During the first 6 months following construction of a bioretention facility, the site should be inspected at least twice after storm events that exceed 1/2-inch of rainfall. Watering is needed once a week during the first 2 months following installation, and then as needed during the first growing season (April-October), depending upon rainfall. If vegetation needs to be replaced, one-time spot fertilization may be needed, preferably using an organic rather than a chemical fertilizer. Each facility should have a customized routine maintenance schedule addressing issues such as the following: grass mowing, weeding, trash removal, mulch raking and maintenance, erosion repair, reinforcement plantings, tree and shrub pruning, and sediment removal.

Element of BMP	Potential Problem	Problem? Y / N	Investigated? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as necessary	Owner or professional	
	There is excessive trash and debris				Remove immediately	Owner or professional	
	There is evidence of erosion and / or bare or exposed soil				Stabilize immediately	Owner or professional	
	There are excessive landscape waste or yard clippings				Remove immediately and recycle or compost	Owner or professional	
	Oil, grease or other unauthorized substances are entering the facility				Identify and control the source of this pollution. It may be necessary to erect fences, signs, etc	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	Excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
Pre-Treatment (continued)	There is evidence of clogging (standing water, noticeable odors, water stains, algae or floating aquatic vegetation, or oil/grease)				Identify and eliminate the source of the problem. If necessary, remove and clean or replace the clogged material.	Professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	There is dead vegetation or exposed soil in the grass filter				Restabilize and revegetate as necessary	Owner or professional	
Inlets	Check for sediment build-up at curb cuts, gravel diaphragms or pavement edges that prevent flow from getting into the bed, and check for bypassing.				Remove sediment and correct any other problems that block inflow.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion at or around the inlet				Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	Inflow is hindered by trees and/or shrubs.				Remove woody vegetation from points of inflow and directly above underdrains. (Trees and shrubs may be located closer to the perimeter.)	Owner or professional	
Side Slopes (Annually, after major storms)	There is evidence of rill or gully erosion or bare soil				Identify the source of erosion damage and prevent it from recurring. Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	There is excess sediment accumulation				Remove immediately	Owner or professional	
	Side slopes support nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.	Professional	
Vegetation (monthly)	Plant composition is consistent with the approved plans and any stakes or wires are in good condition.				Determine if existing plant materials are at least consistent with general Bioretention design criteria and replace inconsistent species.	Professional	
	There should be 75-90% cover (mulch plus vegetation), and the mulch cover				Supplement vegetation and mulch as needed.		

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to fix problem	Who Will Address Problem	Comments
	should be 2-3 inches deep.						

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Remediate? Y / N	How to fix problem	Who Will Address Problem	Comments
Vegetation (monthly) (continued)	There is evidence of hydrocarbons or other deleterious materials, resulting in unsatisfactory plant growth or mortality,				Replace contaminated mulch. If problem persists, test soils for hydrocarbons and other toxic substances. If excess levels are found, the soils, plants and mulch may all need to be replaced in accordance with the approved construction plans.	Professional	
	Invasive species or weeds make up at least 10% of the facility's vegetation				Remove invasive species and excessive weeds immediately and replace vegetation as needed.	Owner or professional	
	The grass is too high				Mow within a week. Grass species should be selected that have dense cover, are relatively slow growing, and require the least mowing and chemical inputs. Grass should be from 6-10 inches high.	Owner or professional	
	Vegetation is diseased, dying or dead				Remove and replace. Increase watering, but avoid using chemical fertilizers, unless absolutely necessary.	Professional	
	Winter-killed or salt-killed vegetation is present.				Replace with hardier species.	Owner or professional	
Filter Media (Annually)	The filter media is too low, too compacted, or the composition is inconsistent with design specifications				Raise the level, loosen and amend or replace the media, as needed, to be consistent with the state design criteria for Bioretention (85-88% sand 8-12% soil fines 3-5% organic matter in form of leaf compost). Other remediation options are described in the maintenance section of the state design criteria for Bioretention	Professional	
	The mulch is older than 3 years or is otherwise in poor condition				The mulch must be replaced every 2-3 years	Professional	
	There is evidence that chemicals, fertilizers, and/or oil/grease are present				Remove undesirable chemicals from media and facility immediately, and replace mulch or media as needed	Professional	
	There is excessive trash, debris, or sediment.				Remove trash and debris immediately. Check plant health and, without damaging plants, manually remove the sediment, especially if the depth exceeds 20% of the facility's design depth.	Owner or professional	
	There is evidence of concentrated flows, erosion or exposed soil				Identify the source of erosion damage and prevent it from recurring. Repair the erosion damage and reseed or otherwise restabilize with vegetation.	Professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Remediate? Y / N	How to fix problem	Who Will Address Problem	Comments
Filter Media (Annually) (continued)	The filter bed is clogged and/or filled inappropriately				Redistribute the soil substrate and remove sediment within 2 weeks.	Professional	
	The topsoil is in poor condition (e.g., the pH level is not 6-7, the composition is inappropriate, etc.)				Ensure a 3-inch surface depth of topsoil consistent with the state design criteria for Bioretention (loamy sand or sandy loam texture, with less than 5% clay content, and organic matter content of at least 2%). If the pH is less than 6.5, spread limestone.	Professional	
Underdrain/ Proper Drainage	The perforated pipe is not conveying water as designed				Determine if the pipe is clogged with debris or if woody roots have pierced the pipe. Immediately clean out or replace the pipe, as necessary.	Professional	
	The underlying soil interface is clogged (there is evidence on the surface of soil crusting, standing water, the facility does not dewater between storms, or water ponds on the surface of basin for more than 48 hours after an event).				Measure the draw-down rate of the observation well for three days following a storm event in excess of 1/2 inches in depth. After three days, if there is standing water on top but not in the underdrain, this indicates a clogged soil layer. If standing water is both on the surface and in the underdrain, then the underdrain is probably clogged. This should be promptly investigated and remediated to restore proper filtration. Grading changes may be needed or underdrain repairs made. The filter media may need to be raked, excavated and cleaned or replaced to correct the problem. Holes that are not consistent with the design and allow water to flow directly through a planter to the ground must be plugged.	Professional	
Planters	The planter is unable to receive or detain stormwater prior to infiltration. Water does not drain from the reservoir within 3-4 hours of after a storm event.				Identify and correct sources of clogging. Topsoil and sand/peat layer may need to be amended with sand or replaced all together.	Owner or professional	
	The planter has structural deficiencies, including rot, cracks, and failure, or the planter is unable to contain the filter media or vegetation				Make needed repairs immediately.	Owner or professional	
Outlet/ Overflow Spillway	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repair? Y / N	How to fix problem	Who Will Address Problem	Comments
Outlet/ Overflow Spillway (continued)	There is excessive trash, debris, or sediment at the outlet				Remove immediately, and keep the contributing area free of trash and debris.	Owner or professional	
	Any grates present are in good condition				Repair or replace as necessary	Owner or professional	
Observation Well	Is the observation well still capped?				Repair, as necessary.	Professional	
Overall	Access to the Infiltration facility or its components is adequate				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	There is evidence of standing water				Fill in low spots and stabilize; correct flow problems causing ponding.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools and establish vegetation; treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> .	Owner or professional	
	Complaints from local residents				Correct real problems	Owner or professional	
	Encroachment on the bioretention area or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	

9-C.16.0. EXTENDED DETENTION PONDS: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Pond characteristics and functions
(check all that apply)

- ☐ Water quality treatment
- ☐ Channel protection
- ☐ Ties into groundwater

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
- ☐ Vegetated buffer area
- ☐ Grass filter strip
- ☐ Grass channel
- ☐ Other: _____

Hydraulic Configuration:

- ☐ On-line facility
- ☐ Off-line facility

Ideally, Extended Detention Ponds should be inspected annually. ED Ponds are prone to a high clogging risk at the ED low-flow orifice. Ideally, the orifice should be inspected at least twice a year after initial construction. The constantly changing water levels in ED Ponds make it difficult to mow or manage vegetative growth. The bottom of ED Ponds often become soggy, and water-loving trees such as willows may invade and will need to be managed. Periodic mowing of the stormwater buffer is only required along maintenance rights-of-way and the embankment. The remaining buffer may be managed as a meadow (mowing every other year) or forest. Frequent removal of sediment from the forebay (every 5-7 years, or when 50% of the forebay capacity is filled) is essential to maintain the function and performance of the ED Pond. Sediments excavated from ED Ponds are usually not considered toxic or hazardous, so they can be safely disposed of either by land application or land filling.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	Adequate vegetation				Supplement as needed.	Owner	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or bare or exposed soil				Stabilize immediately.	Owner or professional	
	There is excessive landscape waste and yard clippings				Remove immediately.	Owner or professional	
Pre-Treatment	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash and debris				Remove immediately.	Owner or professional	
	There is evidence of erosion and/or exposed soil.				Immediately identify and correct the cause of the erosion and stabilize the eroded or bare area.	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Pre-Treatment (continued)	Sediment deposits are 50% or more of forebay capacity.				Dredge the sediment to restore the design capacity; sediment should be dredged from forebays at least every 5-7 years, and earlier, as needed.	Professional	
	The sediment marker is not vertical.				Adjust the sediment depth marker to a vertical alignment	Professional	
	There is evidence of clogging				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications	Professional	
	There is dead vegetation				Revegetate, as needed	Owner or professional	
Inlet	The inlet provides a stable conveyance into the pond				Stabilize immediately, as needed, and clear blockages.	Owner or professional	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion/undercutting at or around the inlet				Repair erosion damage and restabilize	Owner or professional	
	There is cracking, bulging, erosion or sloughing of the forebay dam.				Repair and restabilize immediately.	Professional	
	There is woody growth on the forebay dam.				Remove within 2 weeks of discovery.	Professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.	Professional	
	There is more than 1 inch of settlement.				Add fill material and compact the soil to the design grade	Owner or Professional	
	The inlet alignment is incorrect.				Correct immediately.	Owner or Professional	
Vegetation	Plant composition is consistent with the approved plans				Determine if existing plant materials are consistent with the general Wet Pond design criteria, and replace inconsistent species.	Professional	
	Invasive species are present.				Remove invasive species immediately and replace vegetation as needed.	Professional	
	Trees planted in the buffer and on wetland islands and peninsulas need watering during the first growing season				Consider watering every 3 days for first month, and then weekly during first year (April – October), depending on rainfall.	Owner or professional	
	Grass around the facility is overgrown				Mow (at least twice a year) to a height of 4"-9" high and remove grass clippings.	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Vegetation (continued)	Vegetation is dead or reinforcement planting is needed.				Remove and replace dead or dying vegetation.	Professional	
Permanent Pool and Side Slopes	There is excessive trash and/or debris.				Remove immediately	Owner or professional	
	There is evidence of sparse vegetative cover, erosion or slumping side slopes.				Repair and stabilize physical damage, and reseed or plant additional vegetation.	Owner or professional	
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.	Owner or professional	
	There is significant sediment accumulation.				Conduct a bathymetric study to determine the impact to design volumes, and dredge if necessary.	Professional	
Riser/Principle Spillway and Low-Flow Orifice(s)	There is adequate access to the riser for maintenance.				Establish adequate access	Professional and, perhaps, the locality	
	Pieces of the riser are deteriorating, misaligned, broken or missing.				Repair immediately.	Professional	
	Adjustable control valves are accessible and operational.				Repair, as needed.	Professional	
	Reverse-slope pipes and flashboard risers are in good condition.				Repair, as needed.	Professional	
	Seepage into conduit				Seal conduit	Professional	
	There is evidence of clogging				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specs.	Professional	
	There is excessive trash, debris, or other obstructions in the trash rack.				Remove immediately.	Owner or professional	
Dam/ Embankment and Abutments	There is sparse veg. cover, settlement, cracking, bulging, misalignment, erosion rills deeper than 2 inches, or sloughing.				Repair and restabilize immediately, especially after major storms.	Professional	
	There are soft spots, seepage, boggy areas or sinkholes.				Reinforce, fill and stabilize immediately.		
	There is evidence of nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from the area.		
	There is woody vegetation on the embankment.				Removal of woody species near or on the embankment and maintenance access areas should be done when discovered, but at least every 2 years.		

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overflow/Emergency Spillway	There is woody growth on the spillway.				Removal of woody species near or on the emergency spillway should be done when discovered, but at least every 2 years.	Owner or professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There is evidence of erosion/backcutting				Repair erosion damage and reseed	Owner or professional	
	There are soft spots, seepage or sinkholes.				Reinforce, fill and stabilize immediately.	Owner or professional	
	Only one layer of stone armoring exists above the native soil.				Reinforce rip-rap or other armoring materials.	Professional	
Outlet	The outlet provides a stable conveyance from the pond.				Stabilize immediately, as needed, and clear blockages.	Owner or professional	
	There is woody growth within 5 feet of the outlet pipe barrel.				Prune vegetation back to leave a clear discharge area.	Owner or Professional	
	There is excessive trash, debris, or other obstructions.				Remove immediately.	Owner or professional	
	There are excessive sediment deposits at the outlet.				Remove sediment.	Professional	
	Discharge is causing undercutting, erosion or displaced rip-rap at or around the outlet.				Repair, reinforce or replace rip rap as needed, and restabilize.	Professional	
Overall	Access to the facility or its components is adequate.				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that hardware can be opened and operated.	Professional and, perhaps, the locality	
	Fences are inadequate				Collapsed fences must be restored to an upright position. Jagged edges and damaged fences must be repaired or replaced.	Professional	
	Water levels in one or more cells are abnormally high or low.				Clear blockages of the riser or orifice(s) and make other adjustments needed to meet the approved design specifications.	Professional	
	Complaints from local residents				Correct real problems.	Owner or professional	
	Mosquito proliferation				Eliminate stagnant pools and stock the basin with mosquito fish to provide natural mosquito & midge control. Treat for mosquitoes as needed. If spraying, then use mosquito larvicide, (e.g., Bacillus thurendensis or Altoside formulations) <i>only if absolutely necessary</i> .	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overall (continued)	Encroachment on the pond or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	
	Safety signage is not adequate.				Provide sufficient, legible safety signage.	Owner or professional	

9-C.9.0. INFILTRATION PRACTICES: O&M CHECKLIST

Inspection Date _____
 Project _____ Site Plan/Permit Number _____
 Location _____ Date BMP Placed in Service _____
 Date of Last Inspection _____ Inspector _____
 Owner/Owner's Representative _____
 As-Built Plans available: Y / N

Facility Type: Level 1 _____ Level 2 _____

Facility Location:

- ☐ Surface
☐ Underground

Hydraulic Configuration:

- ☐ On-line facility
☐ Off-line facility

Filtration Media:

- ☐ No filtration (e.g., dry well, permeable pavement, infiltration facility, etc.)
☐ Sand
☐ Bioretention Soil
☐ Peat
☐ Other: _____

Type of Pre-Treatment Facility:

- ☐ Sediment forebay (above ground)
☐ Sedimentation chamber
☐ Plunge pool
☐ Stone diaphragm
☐ Grass filter strip
☐ Grass channel
☐ Other: _____

Ideally, infiltration facilities should be inspected annually. Spill Prevention measures should be used around infiltration facilities when handling substances that contaminate stormwater. Releases of pollutants should be corrected as soon as identified.

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Contributing Drainage Area	There is excessive trash and debris				Remove immediately	Owner or professional	
	There is evidence of erosion and / or exposed soil				Stabilize immediately	Owner or professional	
	Vegetative cover is adequate				Supplement as needed	Owner or professional	
	There are excessive landscape waste or yard clippings				Remove immediately and recycle or compost	Owner or professional	
Pre-Treatment Facility	There is adequate access to the pre-treatment facility				Establish adequate access	Professional and, perhaps, the locality	
	There is excessive trash, debris, or sediment.				Remove immediately	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Pre-Treatment Facility (continued)	There is evidence of erosion and/or exposed soil				Stabilize immediately	Owner or professional	
	There is evidence of clogging (standing water, noticeable odors, water stains, algae or floating aquatic vegetation)				Identify and eliminate the source of the problem. If necessary, remove and clean or replace the clogged material.	Professional	
	There is dead vegetation or exposed soil in the grass filter				Restabilize and revegetate as necessary	Owner or professional	
Inlets	Inlets provide a stable conveyance into facility				Stabilize immediately, as needed.	Owner or professional	
	There is excessive trash/debris/sediment.				Remove immediately	Owner or professional	
	There is evidence of erosion at or around the inlet				Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
Embankment, Flow Diversion Structures (e.g., Dikes, Berms, etc.) and Side Slopes	There is evidence of erosion or bare soil				Identify the source of erosion damage and prevent it from recurring. Repair erosion damage and reseed or otherwise restabilize with vegetation	Owner or professional	
	There is excess sediment accumulation				Remove immediately	Owner or professional	
	Water is not detained in the infiltration basin				Check for a breach in the containment structure and repair immediately.	Professional	
	Side slopes support nuisance animals.				Animal burrows must be backfilled and compacted. Burrowing animals should be humanely removed from area.	Professional	
Maintaining Facility Capacity and Proper Drainage	Look for weedy growth on the stone surface indicating sediment accumulation and potential clogging				Identify and control sources of sediment and debris. Remove sediment and debris in excess of 4" in depth every 2-5 years (or sooner if performance is affected).	Professional	
	Measure the draw-down rate of the observation well for three days following a storm event in excess of 1/2 inches in depth. If standing water is still observed after three days, this is a clear sign that clogging is a problem.				Immediately clear debris from the underdrain. Replace the underdrain if necessary. If needed, regrade and till to restore infiltration capacity (the need for this can be prevented by preventing upstream erosion and subsequent sediment transport to the facility).	Professional	
	There is excessive trash/debris				Remove immediately	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Vegetation	Grass within the practice is overgrown				Grass must be mowed to a height of 4"-9" and grass clippings removed (ideally recycled or composted).	Owner or professional	
	Pioneer trees are sprouting in the base of the facility				Remove trees to prevent roots from puncturing the filter fabric, allowing sediment to enter		
	Vegetation forms an overhead canopy that may drop leaf litter, fruit and other vegetative materials that may cause clogging.				Prune or remove vegetation as necessary	Owner or professional	
Observation Well	Is each observation well still capped?				Repair, as necessary.	Professional	
Outlet	Outlets are obstructed or erosion and soil exposure is evident below the outlet.				Remove obstructions and stabilize eroded or exposed areas.	Owner or Professional	
	Evidence of flow bypassing facility				Repair immediately	Professional	
	There is excessive trash, debris, or sediment at the outlet				Remove immediately	Owner or professional	
Overflow or Emergency Spillway	The pipe or spillway is not effectively conveying excess water to an adequate receiving system				Clear sediment and debris whenever 25% or more of the conveyance capacity is blocked. When damaged pipe is discovered, it must be repaired or replaced immediately. Identify and control sources of erosion damage. Replace or reinforce stone armament whenever only one layer of stone remains.	Professional	
Structural Components	Evidence of structural deterioration				Repair as necessary	Professional	
	Evidence of spalling or cracking of structural components				Repair or replace, as necessary	Professional	
	Grates are in good condition				Repair or replace, as necessary	Owner or professional	
Overall	Access to the Infiltration facility or its components is adequate				Establish adequate access. Remove woody vegetation and debris that may block access. Ensure that manholes, valves and/or locks can be opened and operated.	Professional and, perhaps, the locality	
	There is evidence of standing water				Fill in low spots and stabilize; correct flow problems causing ponding	Owner or professional	

Element of BMP	Potential Problem	Problem? Y / N	Investigate? Y / N	Repaired? Y / N	How to Fix Problem	Who Will Address Problem	Comments
Overall (continued)	Mosquito proliferation				Eliminate standing water and establish vegetation; treat for mosquitoes as needed. If sprays are considered, then a mosquito larvicide, such as Bacillus thurendensis or Altoside formulations can be applied <i>only if absolutely necessary</i> .	Owner or professional	
	Complaints from local residents				Correct real problems	Owner or professional	
	Encroachment on the infiltration area or easement by buildings or other structures				Inform involved property owners of BMPs status ; clearly mark the boundaries of the receiving pervious area, as needed	Owner or professional (and perhaps the locality)	

Stormwater Outfalls

Watershed/Subshed:	Assessed by:
Outfall ID:	Date of Last Rainfall:
Date: Time:	Rainfall Quantity:

TYPE	MATERIAL	SHAPE	SUBMERGED	GENERAL OBSERVATIONS
☐ Closed Pipe	☐ Concrete ☐ PVC/Plastic ☐ Metal ☐ Brick ☐ Other:	☐ Circular ☐ Other:	☐ Single ☐ Double <u>In Water:</u> ☐ No ☐ Partially ☐ Fully <u>With Sediment:</u> ☐ No ☐ Partially ☐ Fully	
☐ Open Channel	☐ Concrete ☐ Earthen ☐ Other:	☐ Trapezoid: ☐ Parabolic: ☐ Other:		
Flow	☐ None ☐ Trickle ☐ Moderate ☐ Substantial ☐ Estimate flow rate _____			

FOR BOTH FLOWING and NON-FLOWING OUTFALLS:

INDICATOR	DESCRIPTION	COMMENTS
☐ Pipe Condition	☐ Chip/Cracked ☐ Corrosion ☐ Peeling Paint ☐ Other: _____	
☐ Odor	☐ Gas ☐ Sewage ☐ Sulfide ☐ Other: _____	
☐ Deposits/Stains	☐ Oily ☐ Flow Line ☐ Paint ☐ Iron	
☐ Vegetation	☐ Normal ☐ Inhibited ☐ Excessive	
☐ Pipe Benthic Growth	☐ Brown ☐ Orange ☐ Green ☐ Other: _____	
☐ Pool Quality	☐ Good ☐ Odors ☐ Algae ☐ Colors ☐ Oils ☐ Suds	

FOR FLOWING OUTFALLS:

INDICATOR	DESCRIPTION	RELATIVE SEVERITY INDEX		
☐ Odor	☐ Sewage ☐ Petroleum/gas ☐ Sulfide ☐ Rancid/sour ☐ Other: _____	☐ 1 - Faint	☐ 2 - Easily detected	☐ 3 - Noticeable from a distance
☐ Color	☐ Clear ☐ Brown ☐ Orange ☐ Grey ☐ Other: _____	☐ 1 – Trace colors	☐ 2 – Faint Colors	☐ 3 – Clearly visible
☐ Turbidity	See Severity	☐ 1- Slight Cloudiness	☐ 2 – Cloudy	☐ 3 - Opaque
☐ Floatables (not including trash)	☐ Sewage ☐ Suds ☐ Iron ☐ Petroleum (oil sheen)	☐ 1 – Few/slight	☐ 2 - Some; indication of origin	☐ 3 – Many

ROUTINE VISUAL INSPECTION LOG

Date of Inspection: _____ **Time of Inspection:** _____

Name of Inspector (s): _____

Signature of Inspector (s): _____

Inspection Period (Check One)

☐ 1st Quarter (January through March)

☐ 2nd Quarter (April through June)

☐ 3rd Quarter (July through September)

☐ 4th Quarter (October through December)

Weather conditions during inspection: _____

Any discharges occurring at time of inspection: ☐ Yes ☐ No

If Yes explain: _____

Any previously unidentified discharges of pollutants from the site: ☐ Yes ☐ No

If Yes explain: _____

Any control measures needing maintenance or repairs: ☐ Yes ☐ No

If Yes explain: _____

Any failed control measures that need replacement: ☐ Yes ☐ No

If Yes explain: _____

Any incidents of Noncompliance observed: ☐ Yes ☐ No

If Yes explain: _____

Any additional control measures needed to comply with the permit requirements: ☐ Yes ☐ No

If Yes explain: _____

In and around catch basin and outfalls

Catch basin / Outfalls free of debris

☐ Yes ☐ No

Any discharges

☐ Yes ☐ No

Any sheen or chemical odors evident on effluent

☐ Yes ☐ No

General Cleanliness of area

☐ Good ☐ Bad

Comments (Note specific outfall comment is for):

Additional Comments:

Support Facilities Inspection Report

Inspections must be conducted by a person with the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and evaluate the effectiveness of best management practices required by this permit. Retain a copy of the completed and signed form with the SWPPP for at least 3 years.

INSPECTOR NAME:	INSPECTION TIME:	INSPECTION DATE:
WEATHER INFORMATION: Description of Weather Conditions (e.g., sunny, cloudy, raining, snowing, etc.): Was stormwater (e.g., runoff from rain or snowmelt) flowing at outfalls and/or discharge areas shown on the Site Map during the inspection? (Yes X No) Comments:		

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION	
SWPPP and Site Map: Have a copy of the SWPPP and site map with you during the inspection so that you can ensure they are current and accurate. Use it as an aide in recording the location of any issues you identify during the inspection. • Is the Site Map current and accurate? • Is the SWPPP inventory of activities, materials and products current?	Findings and Remedial Action Documentation: Describe any findings below and the schedule for remedial action completion including the date initiated and date completed or expected to be completed.

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION

Vehicle/Equipment Areas

Equipment cleaning:

Is equipment washed and/or cleaned only in designated areas?

- Observe washing: Is all wash water captured and properly disposed of?

Equipment fueling:

- Are all fueling areas free of contaminant buildup and evidence of chronic leaks/spills?
- Are all chemical liquids, fluids, and petroleum products, on an impervious surface that is surrounded with a containment berm or dike that is capable of containing 10% of the total enclosed tank volume or 110% of the volume contained in the largest tank, whichever is greater?
- Are structures in place to prevent precipitation from accumulating in containment areas?
 - If not, is there any water or other fluids accumulated within the containment area?
 - Note: If containment areas are not covered to prevent water from accumulating, the SWPPP must include a plan describing how accumulated water will be managed and disposed of.

Equipment maintenance:

- Are maintenance tools, equipment and materials stored under shelter, elevated and covered?
- Are all drums and containers of fluids stored with proper cover and containment?
- Are exteriors of containers kept outside free of deposits?
- Are any vehicles and/or equipment leaking fluids? Identify leaking equipment.
- Is there evidence of leaks or spills since last inspection? Identify and address.
- Are materials, equipment, and activities located so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas)?

Add any additional site-specific BMPs:

Findings and Remedial Action Documentation:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION

Good Housekeeping BMPs

Are paved surfaces free of accumulated dust/sediment and debris?

- Date of last quarterly vacuum/sweep
- Are there areas of erosion or sediment/dust sources that discharge to storm drains?

Are all waste receptacles located outdoors:

- In good condition?
- Not leaking contaminants?
- Closed when is not being accessed?
- External surfaces and area free of excessive contaminant buildup?

Are the following areas free of accumulated dust/sediment, debris, contaminants, and/or spills/leaks of fluids?

- External dock areas
- Pallet, bin, and drum storage areas
- Maintenance shop(s)
- Equipment staging areas (loaders, tractors, trailers, forklifts, etc)
- Around bag-house(s)
- Around bone yards

Other areas of industrial activity:

Findings and Remedial Action Documentation:

Spill Response and Equipment

Are spill kits available, in the following locations?

- Fueling stations
- Transfer and mobile fueling units
- Vehicle and equipment maintenance areas

Do the spill kits contain all the permit required items?

- Oil absorbents capable of absorbing 15 gallons of fuel.
- A storm drain plug or cover kit.
- A non-water containment boom, a minimum of 10 feet in length with a 12 gallon absorbent capacity.
- A non-metallic shovel.
- Two five-gallon buckets with lids.

Are contaminated absorbent materials properly disposed of?

Findings and Remedial Action Documentation:

I. POTENTIAL POLLUTANT SOURCE AREA INSPECTION AND BMP EVALUATION

General Material Storage Areas

- Are damaged materials stored inside a building or another type of storm resistance shelter?
- Are all uncontained material piles stored in a manner that does not allow discharge of impacted stormwater?
- Are scrap metal bins covered?
- Are outdoor containers covered?

Findings and Remedial Action Documentation:

Stormwater BMPs and Treatment Structures

Visually inspect all stormwater BMPs and treatment structures devices, discharge areas infiltration and outfalls shown on the Site Map.

- Are BMPs and treatment structures in good repair and operational?
- Are BMPs and treatment structures free from debris buildup that may impair function?
- The permit requires Permittees to clean catch basins when the depth of debris reaches 60% of the sump depth. In addition, the Permittee must keep the debris surface at least 6 inches below the outlet pipe. Based on this, do catch basins need to be cleaned?
- Are berms, curbing or other methods used to divert and direct discharges adequate and in good condition?

Findings and Remedial Action Documentation:

Observation of Stormwater Discharges • Is the discharge free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam or any other signs of contamination? • Water from washing vehicles or equipment, steam cleaning and/or pressure washing is considered process wastewater and is not allowed to comeingle with stormwater or enter storm drains. Is process water comingling with stormwater or entering storm drains? Illicit discharges include domestic wastewater, noncontact cooling water, or process wastewater (including leachate). • Were any illicit discharges observed during the inspection?	Findings and Remedial Action Documentation:
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II. CORRECTIVE ACTION AND SWPPP MODIFICATIONS DESCRIPTIONS:	
Additional space to describe inspection findings and corrective actions if needed. Provide brief explanation of the general location and the rationale for the additional or different BMPs.	
Since the initial site inspection, the following hot spot issues of concern have been addressed:	

III. CERTIFICATION STATEMENTS AND SIGNATURES:

Inspector – Certification

This section must be completed by the person who conducted the site inspection prior to submitting this form to the person with signature authority or a duly authorized representative of that person.

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit.
- ☐ *The facility is out of compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.*

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief."

--	--	--	--

Inspector's Name – Printed

Inspector's Signature

Inspector's Title

Date

Permittee – Certification

- ☐ The facility is in compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit.
- ☐ *The facility is out of compliance with the terms and conditions of the SWPPP and the City of Fairfax MS4 Permit. This report includes the remedial actions that must be taken to meet the requirements of the SWPPP and permit, including a schedule of implementation of the remedial actions.*

"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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

--	--	--

PRINTED NAME of person with **Signature Authority** or a **Duly Authorized Representative**¹

SIGNATURE of person with **Signature Authority** or a **Duly Authorized Representative**¹

DATE

¹A person is duly authorized representative only if the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

VISUAL ASSESSMENT LOG

Date Sample Taken: _____ Time Sample Taken: _____

Name of Sampler (s): _____

Signature of Sampler (s): _____

Date of Visual Assessment: _____ Time of Visual Assessment: _____

Name of Assessor (s): _____

Signature of Assessor (s): _____

Visual Assessment Period (Check One):

☐ 1st Quarter (January through March)

☐ 2nd Quarter (April through June)

☐ 3rd Quarter (July through September)

☐ 4th Quarter (October through December)

Sample location(s): _____ Outfall #: _____ Other

If other explain: _____

Weather conditions during sampling: _____

Nature of discharge: _____ Runoff; _____ Snowmelt; _____ Other

If other explain: _____

Sample taken within first 30 minutes of Discharge: _____ Yes; _____ No

If no explain why: _____

Quality of sample:

- Color _____
- Odor _____
- Clarity _____
- Floating Solids _____
- Settled Solids _____
- Suspended Solids _____
- Foam _____
- Oil Sheen _____
- Other _____

Probable sources of any observed stormwater contamination: _____

Any corrective action required as a result of quarterly visual assessment: _____ Yes; _____ No

If yes explain: _____

Appendix B – IDDE Policy



Illicit Discharge Detection and Elimination (IDDE) Policy

Grounds Department
1 Avenue of the Arts, Newport News, VA 23606
Phone: (757) 594-8700
Email: Grounds@cnu.edu

Revised: 5/20/2026

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. CNU further had a Stormwater Master Plan developed in 2019 by VHB that updates the stormwater plan for the campus, providing an approximate total institutional footprint of 152 acres that includes the MS4 area and other facilities that CNU operates in the adjacent City of Newport News MS4.

1. Purpose of Policy

The purpose of this policy is to provide protection measures to 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 practices in the MS4 to comply with requirements of the National Pollutant Discharge Elimination System ([NPDES](#)) permit process, as implemented through the Virginia Erosion Stormwater Management Program ([VESMP](#)) permit for CNU. The objectives of this policy are as follows:

- A. To prevent or minimize to the maximum extent practicable, illicit discharge from University properties and operations into the storm drainage system.
- B. To minimize pollutants in stormwater runoff.
- C. To develop, implement and enforce a program to detect and eliminate illicit discharges, as defined by 9VAC25-890-20 and 9VAC25-890-40, into the regulated small MS4.
- D. To comply with the requirements of CNU's stormwater permit.

2. Definitions

Best Management Practices (BMPs): 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: Any individual or company, including a subcontractor, hired to perform services on university property.

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

Illicit discharge: Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a separate NPDES or state permit (other than the state permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-890-20.

Municipal separate storm sewer (MS4): 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): All separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems or designated under 9VAC25-890.

Municipal Separate Storm Sewer System Management Program or MS4 Program: 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: 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: Any discharge to the storm drain system that is not composed entirely of stormwater.

Outfall: 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: 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: 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: Any building, structure, facility, installation, or activity from which there is or may be a discharge of pollutants.

State waters: All water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

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

Wetlands: Those areas that are inundated or saturated by surface water 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.

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

3. 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.

4. Responsibility for Administration.

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

5. 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.

6. 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.

7. 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 Erosion and Stormwater Management Program (VESMP)

Regulations (9VAC25-890). 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:

- Wastewater from washout of concrete
- Wastewater from the washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- Oils, toxic substances, or hazardous substances from spills or other releases
- Soaps, solvents, or detergents used in equipment and vehicle washing

8. Allowed Discharges

The following discharges to the storm drainage system are allowed, as per [9VAC25-890-20](#) 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, managed in a manner to avoid an instream impact;
 - Landscape irrigation;
 - Diverted stream flows;
 - Rising groundwaters;
 - Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20);
 - Uncontaminated pumped groundwater;
 - Discharges from potable water sources managed in a manner to avoid instream impact;
 - 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 freshwater swimming pool discharges managed in a manner to avoid instream impact;
 - Street and pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact;
 - Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled or similarly treated prior to discharge;
 - Discharges or flows from firefighting activities;

- Discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with §9.1-207.1 of the Code of Virginia; or
- Other activities generating discharges identified by the department as not requiring VPDES authorization.

9. 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 no flows present from potential illicit discharges. These dry weather screening events shall record the following information:

1. The unique identifier for the outfall or observation point;
2. Time since the last precipitation event;
3. The estimated quantity of the last precipitation event;
4. Site descriptions (e.g., conveyance type and dominant watershed land uses);
5. Observed indicators of possible illicit discharge events, such as floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth);
6. Whether or not a discharge was observed;
7. If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g. odor, color, clarify) and the physical condition of the outfall; and
8. For observation points, the location, downstream outfall unique identifier and risk factors or rationale for establishing the observation point.

Investigations

In the event an unauthorized nonstormwater flow is observed, or evidence suggests that illicit discharges may exist, further investigation shall be administered within the timeframe as follows:

- If the illicit discharge is active, an investigation shall be conducted as soon as practicable.
- If the illicit discharge is intermittent or historic, an investigation shall be conducted as soon as practicable, but within five days of receiving the report.
- If the illicit discharge is suspected of being sanitary sewage or significantly contaminated, it shall be prioritized for investigation first.
- If the illicit discharge is suspected of being less hazardous to human health and safety, the investigation may be delayed until after all suspected sanitary sewage or significantly contaminated discharges have been investigated and addressed.

Methodology for determining the source of illicit discharges are as follows:

- Storm drain network investigations: This isolates the discharge to a specific section of the drainage network through strategic manhole inspections.
 - Manhole inspections – Moving through the storm sewer system upstream from the outfall point or point in the system where an illicit discharge has been identified. Manholes closest to the outfall or discharge point should be investigated first, with staff

progressively moving up the storm sewer system and inspecting manholes until it can be determined either where the source is coming in or between which two manholes the source is coming into the system. Visual observations should be used to look for presence of flow, colors, odors, floatable materials, or deposits or stains. **Do not enter the pipe** unless properly equipped for confined space entry. Photographs should be taken whenever possible.

- Drainage area investigations: Conducting surveys and analyses of the drainage area where the discharge has been located. This method is useful when the discharge has distinct or unique characteristics that can be linked to a specific business or operation.
 - Can include drive-by surveys of the drainage area to locate possible generating sites; and/or
 - GIS analysis to identify potential properties with septic systems, industrial and other potential generating sites.
- On-site investigations: Once the segment of the storm sewer system has been identified, one of the following on-site investigative strategies may be considered:
 - Video inspection (CCTV)
 - Dye and/or smoke testing

If an illicit discharge is found, but within six months of the beginning of the investigation neither the source has been identified nor the same discharge has been observed again, it shall be documented and the investigation can be closed. If the observed/reported discharge is intermittent, a minimum of three separate attempts shall be made to observe the discharge while it is active. If these attempts are not successful, it shall be documented and the investigation can be closed. If the source of the discharge is determined to be the result of an operational activity, the activity shall be immediately stopped. Any remedial actions that can be taken to mitigate the discharge are assessed and implemented as appropriate.

If the source of the discharge is a spill or release of hazardous material, qualified professionals shall be called to respond to the situation and employ appropriate spill response measures. If the source of the discharge is the result of an illegal or illicit connection to the storm sewer system, measures to eliminate or disconnect the connection shall be employed.

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 or University Police 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 and 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 our IDDE Database and include:

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:

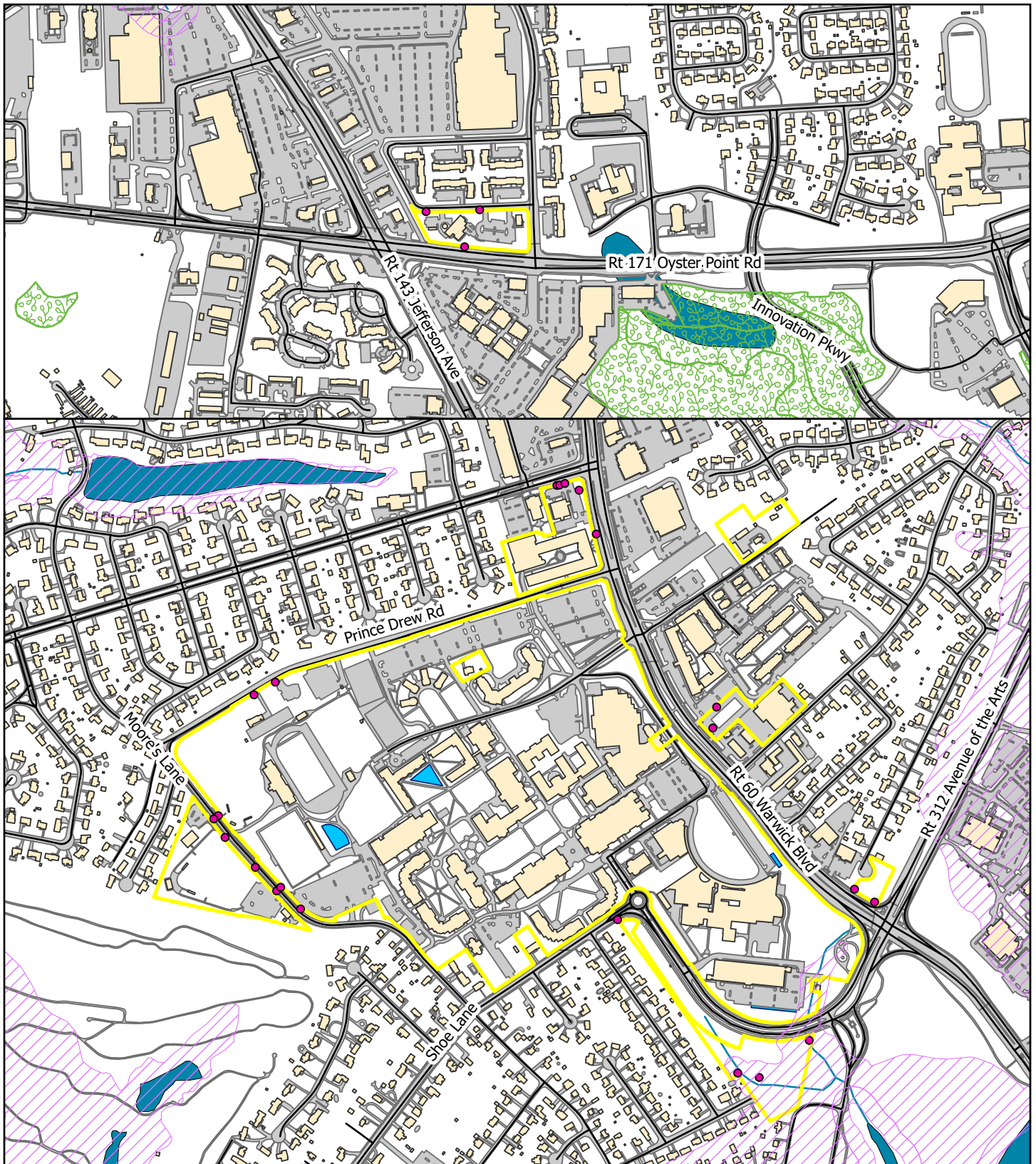
1. The performance of monitoring, analyses, and reporting;
2. The elimination of prohibited discharges or connections;
3. Cessation of any violating discharges, practices, or operations;
4. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected 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.

10. Training and Education

A training program for Stormwater Pollution Prevention/Good Housekeeping and IDDE is presented to applicable employees upon hire and no less than once per 24 months. Educational materials for Stormwater Pollution Prevention and IDDE are distributed through various forms of media to the members of the University.

Appendix C – Maps



Legend

Wetlands	Building Footprints
CBPA	Paved Areas
CNU Outfalls	Stream / River
CNU Regulated Area	Waterbodies
Virginia Road Centerlines	BMPs

CHRISTOPHER NEWPORT UNIVERSITY

Figure 1:
MS4 GIS Data
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

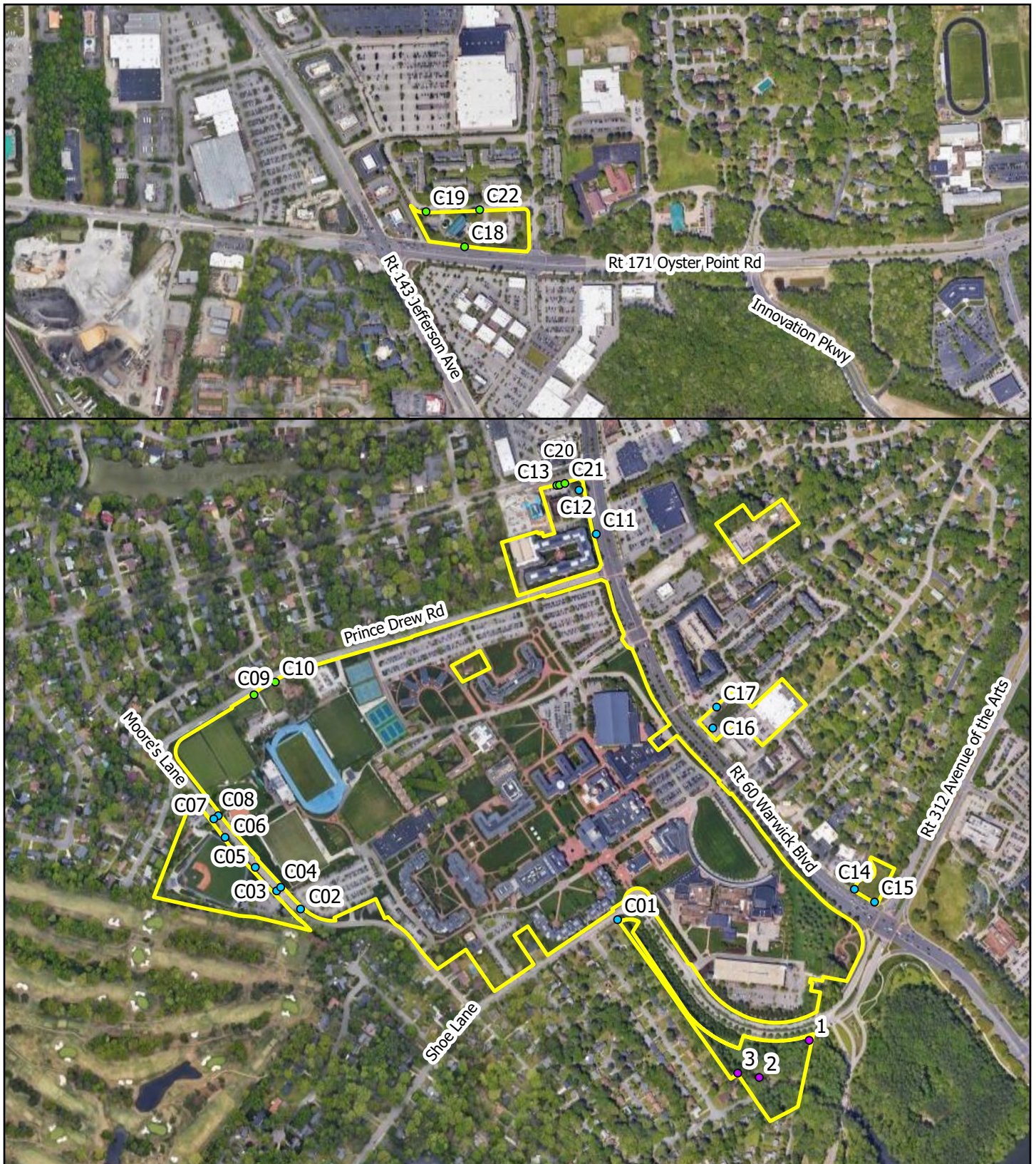
Basemap: Google Imagery

Last updated: 06/05/2026 by Timmons Group

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

0 400 800 Feet





Legend

CNU Outfalls

- James River-Cooper Creek,
- James River-Cooper Creek, Interconnected outfall to Newport News
- Warwick River, Interconnected outfall to Newport News
- CNU Regulated Area

Figure 3:
CNU Outfall Map
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

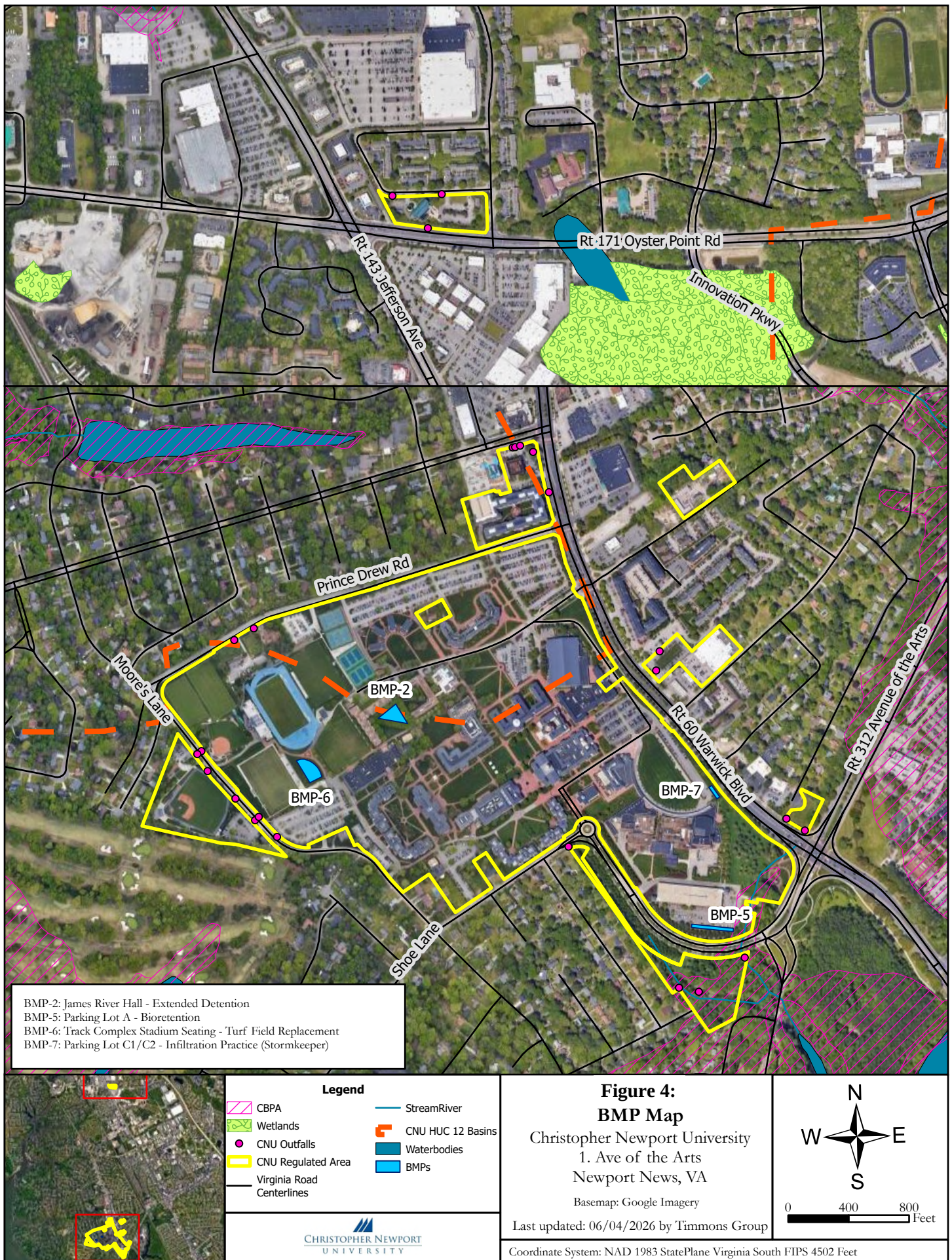
Last updated: 06/04/2026 by Timmons Group

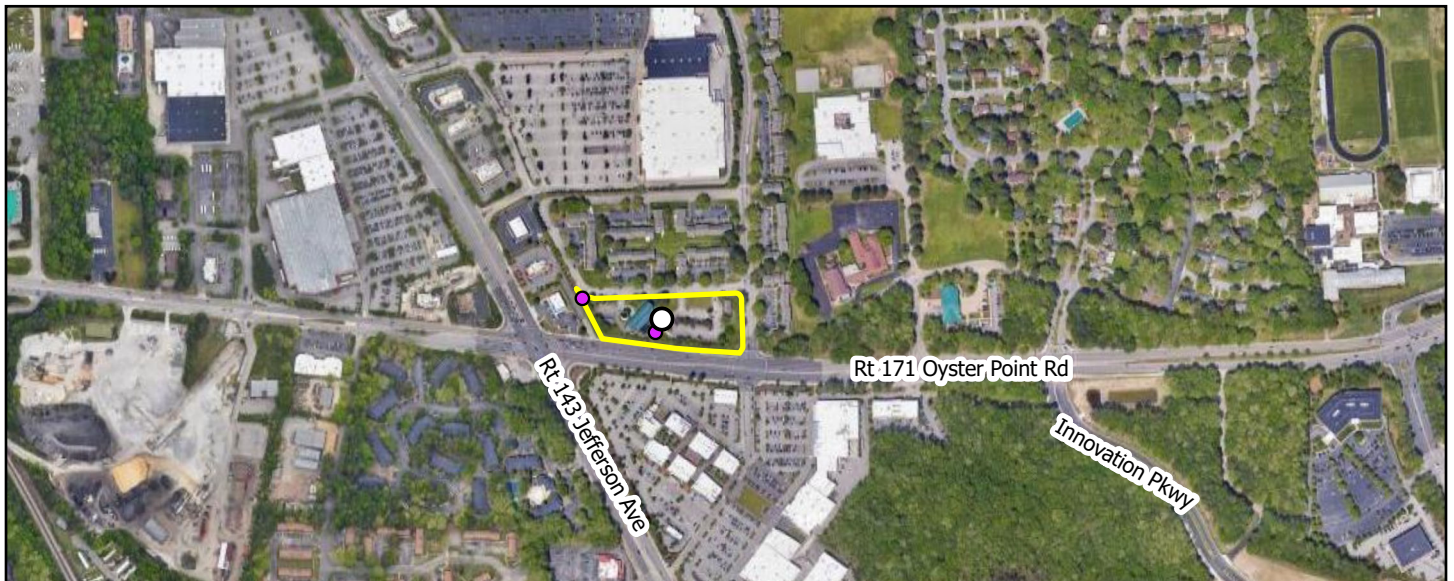
Basemap: Google Imagery

Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet



0 400 800 Feet





Legend

- High Priority Areas
- CNU Outfalls
- CNU Regulated Area
- BMPs

Figure 5:
SWPPP Areas of High Priority
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

Last updated: 02/04/2026 by Timmons Group

Basemap: Google Imagery Coordinate System: NAD 1983 StatePlane Virginia South FIPS 4502 Feet

North arrow pointing North (N), South (S), East (E), and West (W).

Scale bar: 0, 400, 800 Feet



Receiving Waterway:
Cooper Creek

Christopher Newport University

Police

Peters Ln

Warwick Blvd

60

C14

C15

12254

401

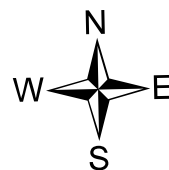
12

16



 Garbage Dumpsters
 Stockpiles
 Vehicle Storage & Maintenance
 Storage Areas
 Grease Traps
 High Risk Inlets
 CNU Outfalls
 CNU Regulated Area
 Direction of Drainage

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



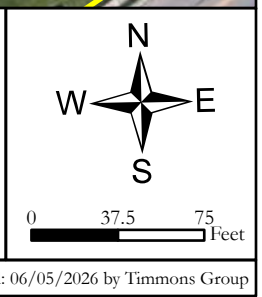
A horizontal scale bar with a black background. It has three white tick marks labeled '0', '37.5', and '75' from left to right. The word 'Feet' is written in white at the far right end of the bar.

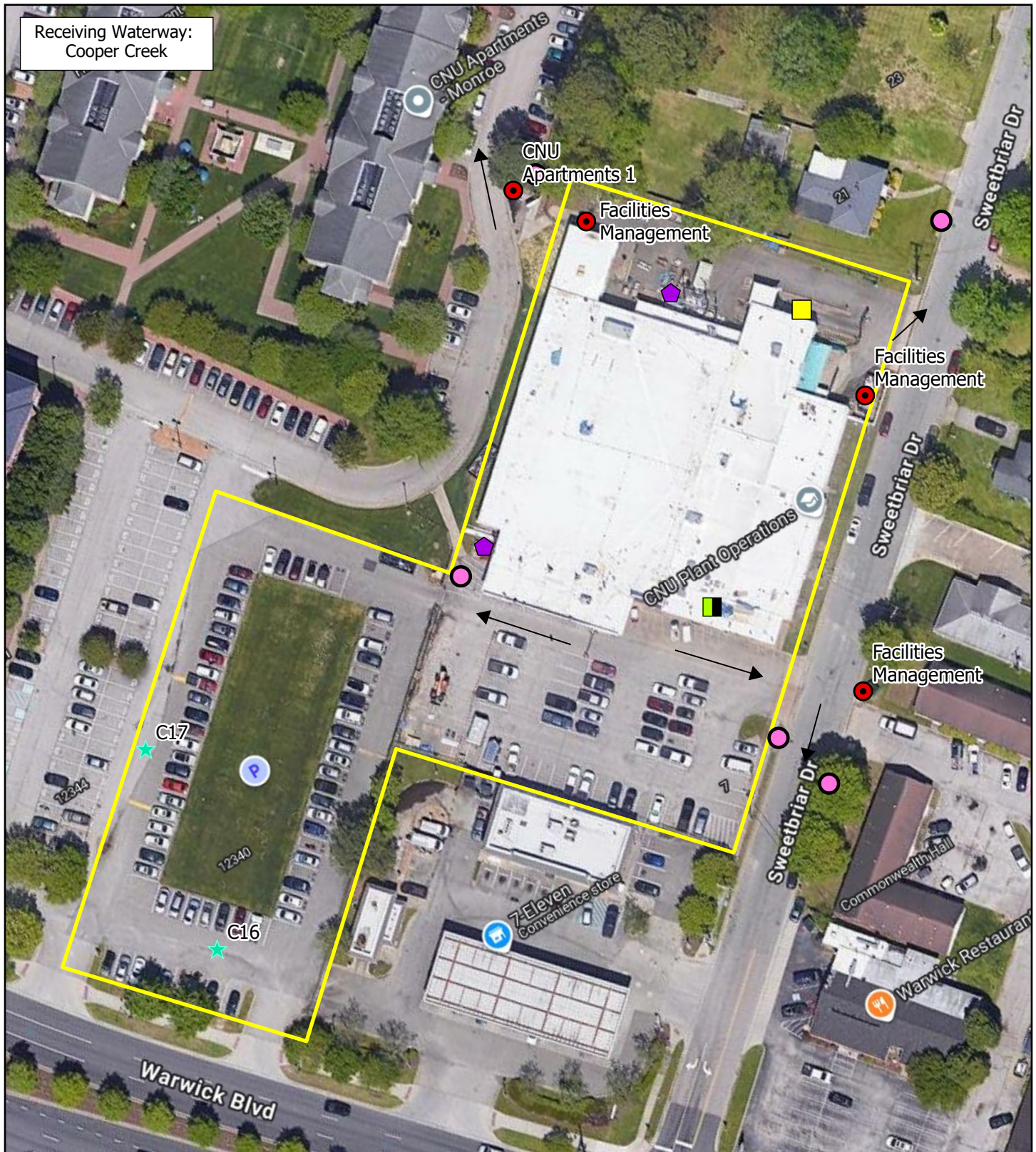
Last updated: 06/05/2026 by Timmons Group



Legend	
	Garbage Dumpsters
	Loading Unloading Areas
	Vehicle Storage & Maintenance
	Grease Traps
	Stockpiles
	Storage Areas
	CNU Regulated Area
	Direction of Drainage

Figure 5.4:
David Student Union
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

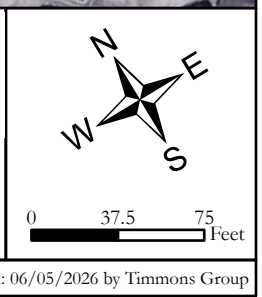


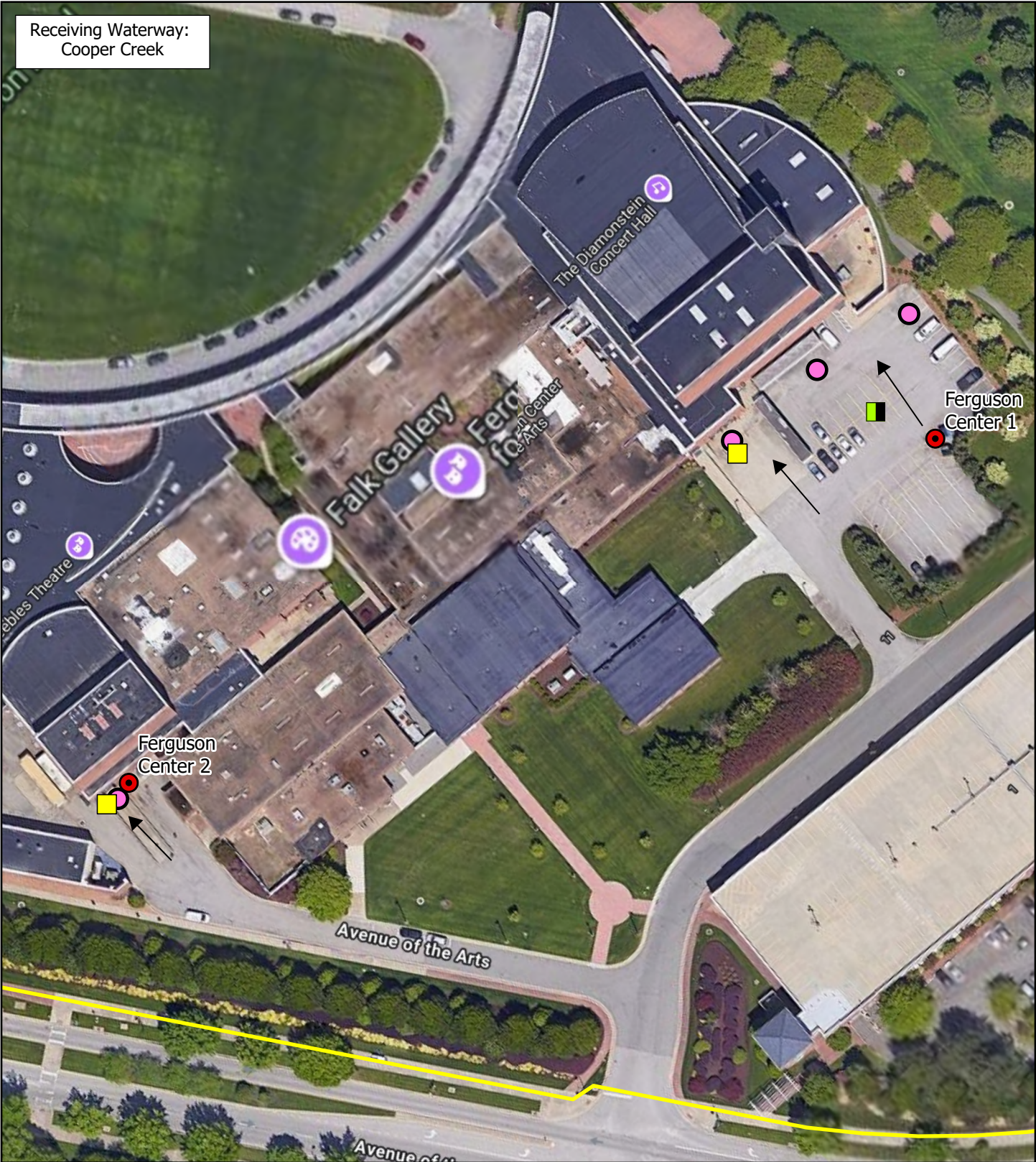


Legend	
● Garbage Dumpsters	★ CNU Outfalls
□ Loading Unloading Areas	◆ Stockpiles
□ Vehicle Storage & Maintenance	◆ Storage Areas
□ Grease Traps	● High Risk Inlets
	□ CNU Regulated Area
	→ Direction of Drainage

Figure 5.5:
CNU Apartments and Facilities Management Building

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

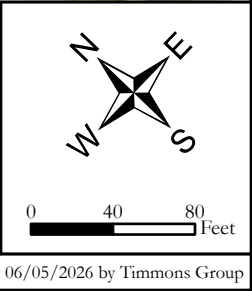


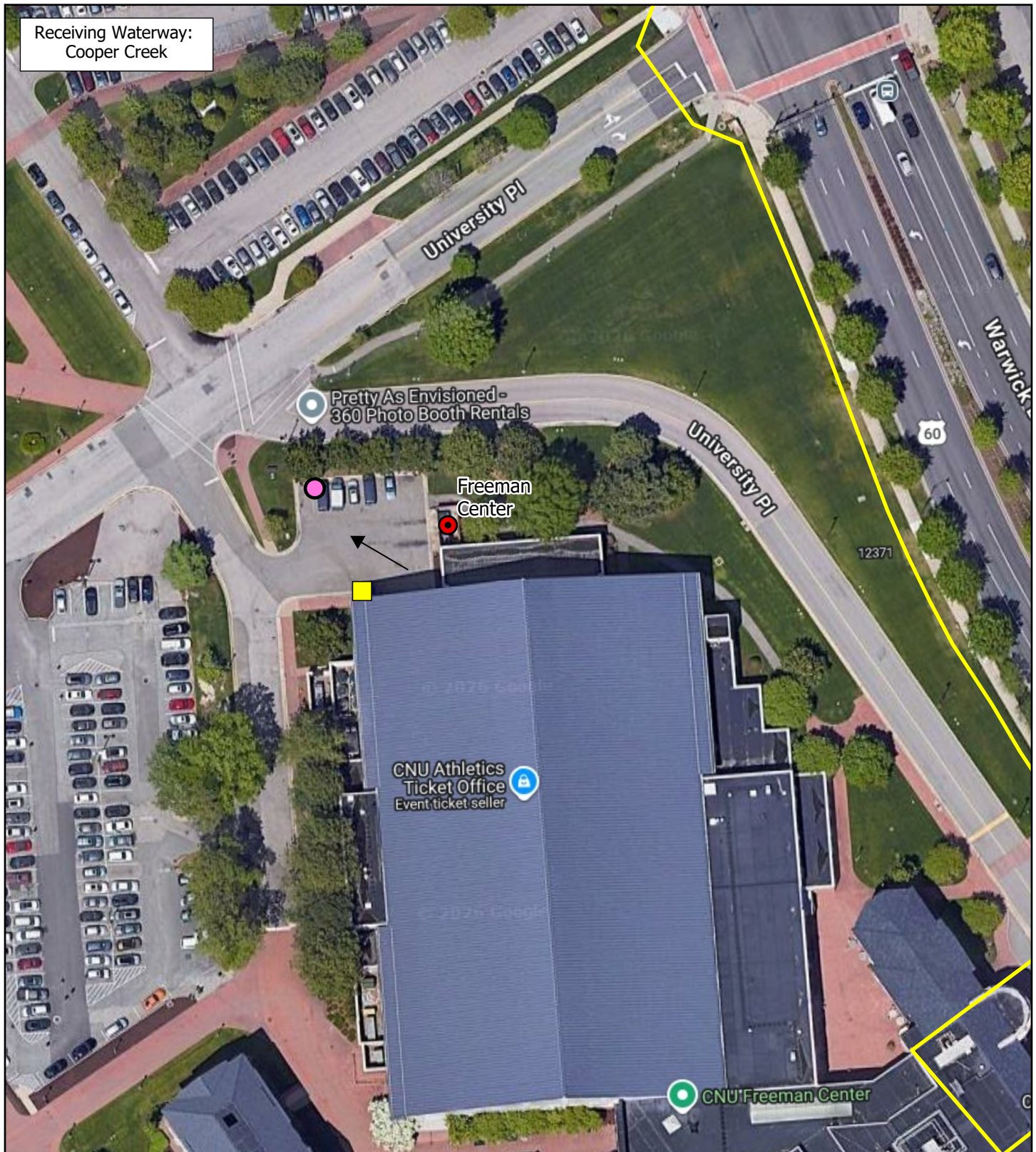


Legend	
	Garbage Dumpsters
	Loading Unloading Areas
	Vehicle Storage & Maintenance
	Grease Traps
	Stockpiles
	Storage Areas
	High Risk Inlets
	CNU Regulated Area
	Direction of Drainage

Figure 5.6:
Ferguson Center

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

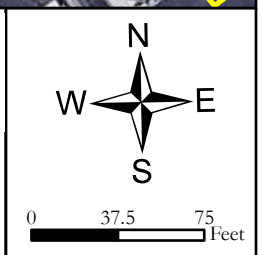


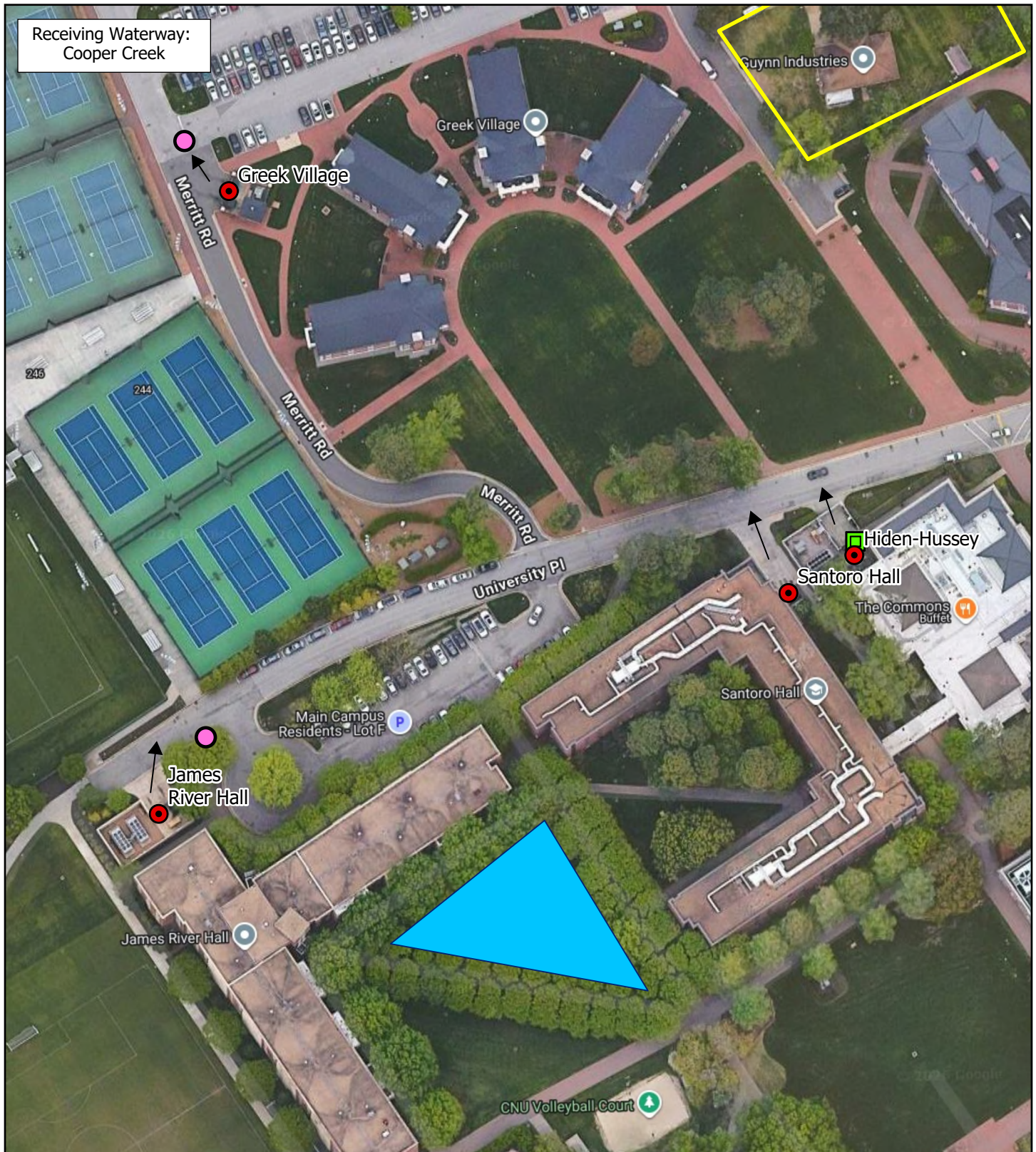


Legend	
	Garbage Dumpsters
	Loading Unloading Areas
	Vehicle Storage & Maintenance
	Grease Traps
	Stockpiles
	Storage Areas
	High Risk Inlets
	CNU Regulated Area
	Direction of Drainage

**Figure 5.7:
Freeman Center**

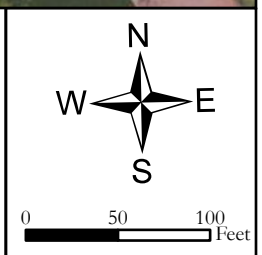
Christopher Newport University
1. Ave of the Arts
Newport News, VA

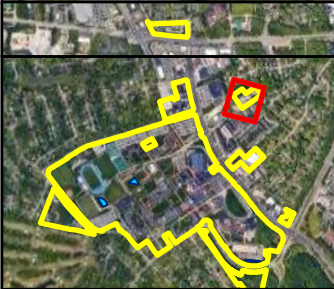




Legend			
	Garbage Dumpsters		Storage Areas
	Vehicle Storage & Maintenance		High Risk Inlets
	Grease Traps		CNU Regulated Area
	Stockpiles		BMPs
	Direction of Drainage		

Figure 5.8:
Greek Village, Hidden-Hussey Commons, Santoro Hall and James River Hall
 Christopher Newport University
 1. Ave of the Arts
 Newport News, VA

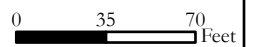


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|-------------------------|-----------------------------|
| Basemap: Google Imagery | Coordinate System: NAD 1983 |
|-------------------------|-----------------------------|

**Figure 5.9:
Grounds Department
Compound**

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



Last updated: 06/05/2026 by Timmons Group



Receiving Waterway:
Warwick River

Rappahannock

CNU
Staf

CNU Faculty/
Staff Parking

CNU Business and
Technology Center

Rappahannock
River Hall

Prince Drew Rd

C13

C21

C20

C12

C11

60



Legend

- Garbage Dumpsters
- Vehicle Storage & Maintenance
- Grease Traps
- ★ CNU Outfalls
- ◆ Stockpiles
- ◆ Storage Areas
- High Risk Inlets
- ▭ CNU Regulated Area
- Direction of Drainage

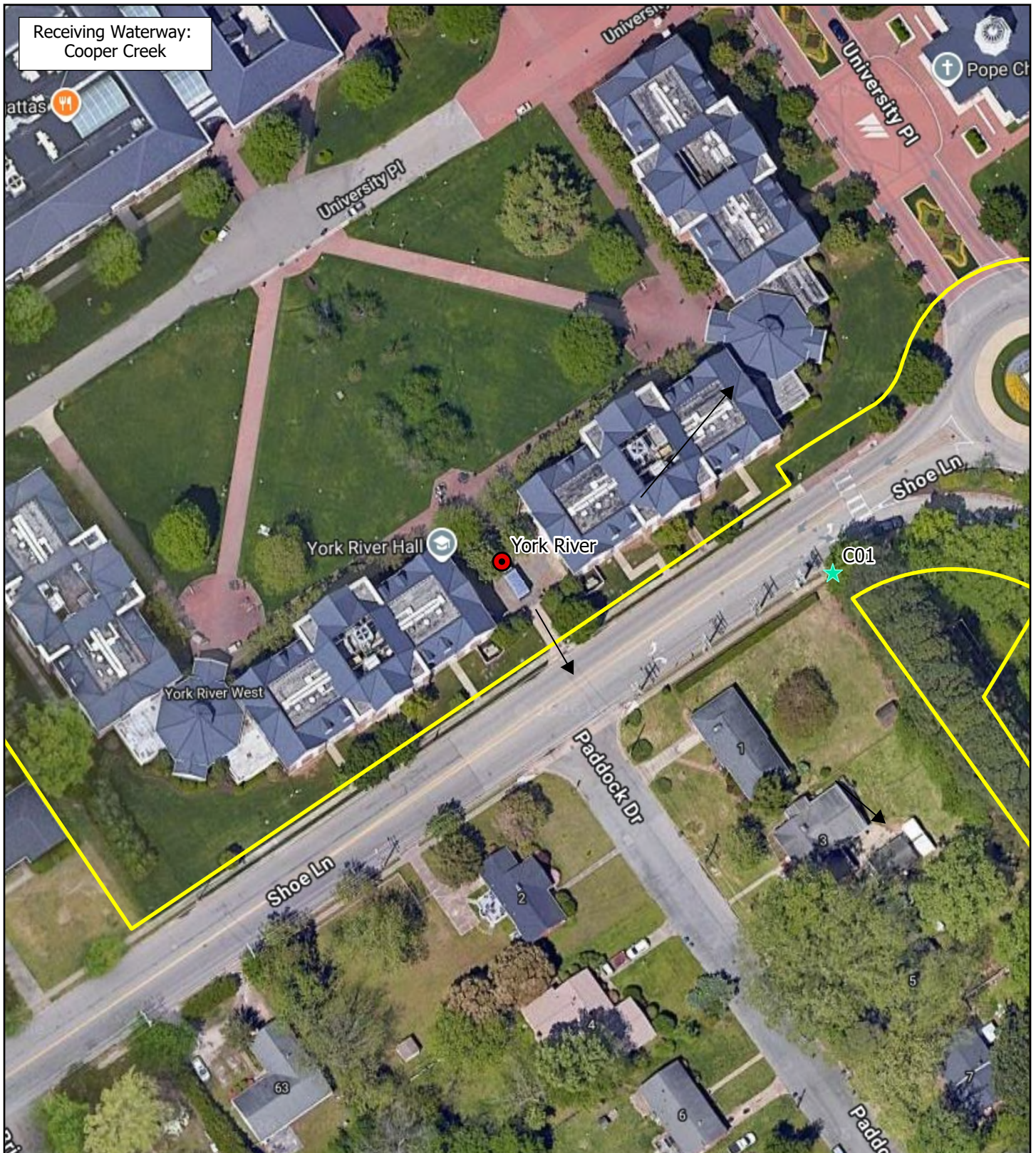
**Figure 5.10:
Rappahannock River Hall**

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



0 37.5 75 Feet





Receiving Waterway:
Cooper Creek



Legend

- Garbage Dumpsters
- Vehicle Storage & Maintenance
- Grease Traps
- ★ CNU Outfalls
- Stockpiles
- Storage Areas
- CNU Regulated Area
- Direction of Drainage

**Figure 5.12:
York River Hall**

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



0 37.5 75 Feet

Appendix D – MS4 General Permit

Virginia Administrative Code

Title 9. Environment

Agency 25. State Water Control Board

Chapter 890. Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s)

9VAC25-890-40. General permit.

Any MS4 operator whose registration statement is accepted by the department will receive coverage under the following general permit and shall comply with the requirements in this general permit and be subject to all applicable requirements of the Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870) and the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulations (9VAC25-31).

General Permit No.: VAR04

Effective Date: November 1, 2023

Expiration Date: October 31, 2028

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

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

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

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

Part I

Discharge Authorization and Special Conditions

A. Coverage under this state permit. During the period beginning with the date of coverage under this general permit and lasting until the expiration and reissuance of this state permit, the permittee is authorized to discharge stormwater and those authorized nonstormwater discharges described in 9VAC25-890-20 D in accordance with this state permit from the small municipal separate storm sewer system identified in the registration statement into surface waters within the boundaries of the Commonwealth of Virginia and consistent with 9VAC25-890-30.

B. The permittee shall develop, implement, and enforce an MS4 program designed to reduce the discharge of pollutants from the MS4 to the MEP in accordance with this permit, to protect water quality, and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations. The permittee shall utilize the legal authority provided by the laws and regulations of the Commonwealth of Virginia to control discharges to and from the MS4. This legal authority may be a combination of statute, ordinance, permit, policy, specific contract language, order, or interjurisdictional agreements. The MS4 program shall include the minimum control measures (MCM) described in Part I E. For the purposes of this permit term, implementation of MCMs in Part I E and the Chesapeake Bay and local TMDL requirements in Part II (as applicable) consistent with the provisions of an iterative MS4 program required pursuant to this general permit constitutes compliance with the standard of reducing pollutants to the MEP, provides adequate progress in meeting water quality standards, and satisfies the appropriate water quality requirements of the State Water Control Law and its attendant regulations.

C. The MS4 program plan.

1. The MS4 program plan shall include, at a minimum, the following written items:

a. The roles and responsibilities of each of the permittee's divisions and departments in the implementation of the requirements of the permit tasked with ensuring that the permit requirements are met;

b. If the permittee utilizes another entity to implement portions of the MS4 program, a copy of the written agreement. The description of each party's roles and responsibilities, including any written agreements with third parties, shall be updated as necessary;

c. For each MCM in Part I E, the following information shall be included:

(1) Each specific requirement as listed in Part I E for each MCM;

(2) A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions in Part I E;

(3) All standard operating procedures or policies necessary to implement the BMPs;

(4) The measurable goal by which each BMP or strategy will be evaluated; and

(5) The persons, positions, or departments responsible for implementing each BMP or strategy; and

d. A list of documents incorporated by reference, including the version and date of the document being incorporated.

2. If the permittee is receiving initial coverage under this general VPDES permit for the discharge of stormwater, the permittee shall:

a. No later than six months following the date of permit coverage, submit to the department a schedule for the development of each component of the MS4 program plan in accordance with Part I C 1 that does not exceed October 31, 2028, unless the department

grants a later date; and

b. Provide to the department a copy of the MS4 program plan upon completion of development.

3. If the permittee was previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, the permittee shall update the MS4 program plan to meet the requirements of this permit no later than six months after the effective date of this permit unless otherwise specified in another permit condition and shall post the most up-to-date version of MS4 program plan on the permittee's website or location where the MS4 program plan can be obtained as required by Part I E 2 within 30 days of updating the MS4 program plan. Until such time that the MS4 program plan is updated in accordance with Part I E, the permittee shall continue to implement the MS4 program plan in effect at the time that coverage is issued under this general permit.

4. Revisions to the MS4 program plan are expected throughout the life of this permit as part of the iterative process to reduce pollutant loading and protect water quality to the MEP. As such, revisions made in accordance with this permit as a result of the iterative process do not require modification of this permit. The permittee shall summarize revisions to the MS4 program plan as part of the annual report as described in Part I D 3.

5. The permittee may demonstrate compliance with one or more MCM in Part I E through implementation of separate statutory or regulatory programs provided that the permittee's MS4 program plan identifies and fully describes any program that will be used to satisfy one or more of the minimum control measures of Part I E. If the program that the permittee is using requires the approval of a third party, the program shall be fully approved by the third party, or the permittee shall be working toward getting full approval. Documentation of the program's approval status or the progress toward achieving full approval shall be included in the annual report required by Part I D. The permittee shall remain responsible for compliance with the permit requirements if the other entity fails to implement one or more components of the control measures.

6. The permittee may rely on another entity to satisfy the permit requirements to implement a minimum control measure if:

- a. The other entity, in fact, implements the control measure;
- b. The particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement;
- c. The other entity agrees to implement the control measure on behalf of the permittee; and
- d. The agreement between the parties is documented in writing and retained by the permittee with the MS4 program plan for as long as the agreement is active.

The permittee shall remain responsible for compliance with requirements of the permit and shall document in the annual reports required in accordance with Part I D that another entity is being relied on to satisfy all or part of the state permit requirements. The permittee shall

provide the information required in Part I D.

7. If the permittee relies on another governmental entity regulated under 9VAC25-870-380 to satisfy all of the state permit obligations, including the obligation to file periodic reports required by Part I D, the permittee must note that fact in the registration statement, but is not required to file the periodic reports. The permittee remains responsible for compliance with the state permit requirements if the other entity fails to implement the control measures or components thereof.

D. Annual reporting requirements.

1. The permittee shall submit an annual report to the department no later than October 1 of each year in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department; the required content of the annual report is specified in Part I E and Part II B. The report shall cover the previous year from July 1 to June 30.

2. Following notification from the department of the start date for the required electronic submission of annual reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. The annual report shall include the following general information:

- a. The permittee, system name, and permit number;
- b. The reporting period for which the annual report is being submitted;
- c. A signed certification as per Part IV K;
- d. Each annual reporting item as specified in an MCM in Part I E; and
- e. An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program's effectiveness and whether or not changes to the MS4 program plan are necessary.

4. For permittees receiving initial coverage under this general VPDES permit for the discharge of stormwater, the annual report shall include a status update on each component of the MS4 program plan being developed. Once the MS4 program plan has been updated to include implementation of a specific MCM in Part I E, the permittee shall follow the reporting requirements established in Part I D 3.

5. For those permittees with requirements established under Part II B, the annual report shall include a status report on the implementation of the local TMDL action plans in accordance with Part II B including any revisions to the plan.

6. For the purposes of this permit, the MS4 program plan , annual reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports shall be

maintained as separate documents and submitted to the department as required by this permit as separate documents.

E. Minimum control measures.

1. Public education and outreach.

a. The permittee shall implement a public education and outreach program designed to:

(1) Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;

(2) Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and

(3) Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

b. The permittee shall identify no fewer than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control, BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration projects, and illicit discharges from commercial sites.

c. The high-priority public education and outreach program, as a whole, shall:

(1) Clearly identify the high-priority stormwater issues;

(2) Explain the importance of the high-priority stormwater issues;

(3) Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues; and

(4) Provide a contact and telephone number, website, or location where the public can find out more information.

d. The permittee shall use two or more of the strategies listed in Table 1 per year to communicate to the target audience the high-priority stormwater issues identified in accordance with Part I E 1 b, including how to reduce stormwater pollution.

Table 1 Strategies for Public Education and Outreach	
Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact

	sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, newspaper, or GIS story maps
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials
Public education activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials

	to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, climate change's effects on stormwater management, voluntary residential low impact development, or other stormwater issues

e. The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.

f. The MS4 program plan shall include:

- (1) A list of the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;
- (2) The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;
- (3) Identification of the target audience to receive each high-priority stormwater message;
- (4) Nontraditional permittees may identify staff, students, members of the general public, and other users of facilities operated by the permittee as the target audience for education and outreach strategies;
- (5) Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience;
- (6) Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach;

(7) The strategies from Table 1 of Part I E 1 d to be used to communicate each high-priority stormwater message; and

(8) The anticipated time periods the messages will be communicated or made available to the public.

g. The annual report shall include the following information:

(1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program;

(2) A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues;

(3) A description of any changes in high-priority stormwater issues, including, strategies used to communicate high-priority stormwater issues or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of these changes ; and

(4) A description of public education and outreach activities conducted that included education regarding climate change.

2. Public involvement and participation.

a. The permittee shall develop and implement procedures for the following:

(1) The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;

(2) The public to provide comments on the permittee's MS4 program plan;

(3) Responding to public comments received on the MS4 program plan ; and

(4) Maintaining documentation of public comments received on the MS4 program and associated MS4 program plan and the permittee's response.

b. No later than three months after this permit's effective date, the existing permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:

(1) The effective MS4 permit and coverage letter;

(2) The most current MS4 program plan or location where the MS4 program plan can be obtained;

(3) The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department;

(4) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained;

(5) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department;

(6) A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1);

(7) Methods for how the public can provide comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13; and

(8) Federal and state nontraditional permittees with security policies preventing a MS4 program and stormwater pollution prevention webpage from being publicly accessible may utilize an internal staff accessible webpage such as an intranet webpage to meet the requirements of Part 1 E 2 b.

c. Traditional permittees shall implement no fewer than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

d. Nontraditional permittees shall implement, promote, participate in, or coordinate on no fewer than four activities per year from two or more of the categories listed in Table 2 to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

Table 2 Public Involvement Opportunities	
Public involveme nt opportunit ies	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoratio n	Stream , watershed, shoreline, beach, or park clean-up day, adopt-a- waterway program, tree plantings, and riparian buffer plantings

Public education activities	Booth at community fair, demonstration of stormwater control projects, climate change's effects on stormwater management, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, voluntary residential low impact development, climate change's effects on stormwater management, or other stormwater issues
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking

	program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.
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e. The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.

f. The permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, groundskeeping, and maintenance duties in order for an event to qualify as a public participation event.

g. Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity solicits participation from target audiences beyond staff or contractors with stormwater, groundskeeping, and maintenance duties.

h. The MS4 program plan shall include:

(1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;

(2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and

(3) A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup or the number of participants in a hazardous waste collection event.

i. The annual report shall include the following information:

(1) A summary of any public comments on the MS4 program received and how the permittee responded;

(2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1), excluding natural flooding complaints, and how the permittee responded;

(3) A webpage address to the permittee's MS4 program and stormwater website;

(4) Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website, such as intranet, shall provide evidence of the

current internal MS4 program and stormwater pollution prevention webpage;

(5) A description of the public involvement activities implemented by the permittee, including any efforts to reach out and engage all economic and ethnic groups;

(6) A description of public education and outreach activities conducted that also included education regarding climate change;

(7) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and

(8) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.

3. Illicit discharge detection and elimination.

a. The permittee shall develop and maintain an accurate MS4 map and information table as follows:

(1) An updated map of the MS4 owned or operated by the permittee within the MS4 regulated service area no later than 24 months after the permit effective date that includes, at a minimum:

(a) MS4 outfalls discharging to surface waters, except as follows:

(i) In cases where the outfall is located outside of the MS4 permittee's legal responsibility, the permittee may elect to map the known point of discharge location closest to the actual outfall; and

(ii) In cases where the MS4 outfall discharges to receiving water channelized underground, the permittee may elect to map the point downstream at which the receiving water emerges above ground as an outfall discharge location. If there are multiple outfalls discharging to an underground channelized receiving water, the map shall identify that an outfall discharge location represents more than one outfall. This is an option a permittee may choose to use and recognizes the difficulties in accessing outfalls to underground channelized stream conveyances for purposes of mapping, screening, or monitoring;

(b) A unique identifier for each mapped item required in Part I E 3;

(c) The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;

(d) MS4 regulated service area; and

(e) Stormwater management facilities owned or operated by the permittee.

(2) The permittee shall maintain an outfall information table associated with the MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a). The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following:

- (a) A unique identifier as specified on the MS4 map;
 - (b) The latitude and longitude of the outfall or point of discharge;
 - (c) The estimated regulated acreage draining to the outfall or point of discharge;
 - (d) The name of the receiving water;
 - (e) The 6th Order Hydrologic Unit Code of the receiving water;
 - (f) An indication as to whether the receiving water is listed as impaired in the Virginia 2022 305(b)/303(d) Water Quality Assessment Integrated Report; and
 - (g) The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.
- (3) No later than 24 months after permit issuance, the permittee shall submit to DEQ, a format file geodatabase or two shapefiles that contain at a minimum:
- (a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (2); and
 - (b) A polygon feature class or shapefile for the MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information:
 - (i) MS4 operator name;
 - (ii) MS4 permit number (VAR04); and
 - (iii) MS4 service area total acreage rounded to the nearest hundredth.
- (4) All file geodatabase feature classes or shapefiles shall be submitted in the following data format standards:
- (a) Point data in NAD83 or WGS84 decimal degrees global positional system coordinates;
 - (b) Data projected in Virginia Lambert Conformal Conic format;
 - (c) Outfall location accuracy shall be represented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy (e.g., 37.61741, -78.15279); and
 - (d) Metadata that shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection.
- (5) No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.
- (6) The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.
- b. The permittee shall prohibit, through ordinance, policy, standard operating procedures,

or other legal mechanism, to the extent allowable under federal, state, or local law, regulations, or ordinances, unauthorized nonstormwater discharges into the MS4. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.

c. The permittee shall maintain, implement, and enforce illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping, to the MS4 to effectively eliminate the unauthorized discharge. Written procedures shall include:

(1) A description of the legal authorities, policies, standard operating procedures, or other legal mechanisms available to the permittee to eliminate identified sources of ongoing illicit discharges, including procedures for using legal enforcement authorities.

(2) Dry weather field screening protocols to detect, identify, and eliminate illicit discharges to the MS4. The protocol shall include:

(a) A prioritized schedule of field screening activities and rationale for prioritization determined by the permittee based on such criteria as age of the infrastructure, land use, historical illegal discharges, dumping, or cross connections;

(b) If the total number of MS4 outfalls is equal to or less than 50, a schedule to screen all outfalls annually;

(c) If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years;

(d) The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges;

(e) Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I E 3 c (2) (b) or (2) (c); however, at least 50% of the minimum annual screening events must include outfall screening;

(f) Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however once the resolution of the investigation and the date the investigation was closed has been documented, an observation point may be established for future screening events; and

(g) A checklist or mechanism to track the following information for dry weather screening events:

(i) The unique identifier for the outfall or observation point;

- (ii) Time since the last precipitation event;
 - (iii) The estimated quantity of the last precipitation event;
 - (iv) Site descriptions (e.g., conveyance type and dominant watershed land uses);
 - (v) Observed indicators of possible illicit discharge events, such as floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth);
 - (vi) Whether or not a discharge was observed;
 - (vii) If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall; and
 - (viii) For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point.
- (3) A timeframe upon which to conduct an investigation to identify and locate the source of any observed unauthorized nonstormwater discharge. Priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety. Discharges authorized under a separate VPDES or state permit require no further action under this permit.
- (4) Methodologies to determine the source of all illicit discharges. If the permittee is unable to identify the source of an illicit discharge within six months of beginning the investigation then the permittee shall document that the source remains unidentified. If the observed discharge is intermittent, the permittee shall document that attempts to observe the discharge flowing were unsuccessful.
- (5) Methodologies for conducting a follow-up investigation for illicit discharges that are continuous or that permittees expect to occur more frequently than a one-time discharge to verify that the discharge has been eliminated except as provided for in Part I E 3 c (4);
- (6) A mechanism to track all illicit discharge investigations to document the following:
- (a) The dates that the illicit discharge was initially observed, reported, or both;
 - (b) The results of the investigation, including the source, if identified;
 - (c) Any follow-up to the investigation;
 - (d) Resolution of the investigation; and
 - (e) The date that the investigation was closed.
- d. The MS4 program plan shall include:
- (1) The MS4 map and outfall information table required by Part I E 3 a. The map and outfall information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;
 - (2) Copies of written notifications of physical interconnections given by the permittee to

other MS4s; and

(3) The IDDE procedures described in Part I E 3 c.

e. The annual report shall include:

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

(2) The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program; and

(3) A list of illicit discharges to the MS4, including spills reaching the MS4 with information as follows:

(a) The location and source of illicit discharge;

(b) The dates that the discharge was observed, reported, or both;

(c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);

(d) How the investigation was resolved;

(e) A description of any follow-up activities; and

(f) The date the investigation was closed.

4. Construction site stormwater runoff and erosion and sediment control.

a. The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The permittee shall control construction site stormwater runoff as follows:

(1) If the traditional permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);

(2) If the traditional permittee is a town that has not adopted a VESCP, implementation of a VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840) by the surrounding county shall constitute compliance with Part I E 4 a; such town shall notify the surrounding county of erosion, sedimentation, or other construction stormwater runoff problems;

(3) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Erosion and

Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications; or

(4) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, as follows:

- (a) During or immediately following initial installation of erosion and sediment controls;
- (b) At least once per every two-week period;
- (c) Within 48 hours following any runoff producing storm event; and
- (d) At the completion of the project prior to the release of any performance bond.

(5) If the nontraditional permittee is a school board or other local government body, the permittee shall inspect those projects resulting in a land disturbance as defined in § 62.1-44.15.51 of the Code of Virginia occurring on lands owned or operated by the permittee that result in the disturbance of 10,000 square feet or greater, 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, or in accordance with more stringent thresholds established by the local government, as follows:

- (a) During or immediately following initial installation of erosion and sediment controls;
- (b) At least once per every two-week period;
- (c) Within 48 hours following any runoff producing storm event; and
- (d) At the completion of the project prior to the release of any performance bond.

b. The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.

c. Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;

d. The permittee's MS4 program plan shall include:

(1) If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for

the VESCP program;

(2) If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (2), the county ordinance citations for the VESCP program the town is subject to;

(3) If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department;

(4) A description of the legal authorities utilized to ensure compliance with Part I E 4 a for erosion and sediment control and construction site stormwater runoff control, such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

(5) For traditional permittees, written inspection procedures to ensure VESCP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60 B;

(6) For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the department in accordance with § 62.1-44.15:55 of the Code of Virginia. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following:

(a) An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to ensure continued performance of their intended function; and

(b) A list of all associated documents utilized for inspections, including checklists, department approved erosion and sediment control plans, or the most recently department approved annual standards and specifications, and any other documents utilized;

(7) Traditional permittees shall maintain written procedures for requiring VESCP compliance through corrective action or enforcement action in accordance with § 62.1-44.15:58 of the Code of Virginia;

(8) Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and

(9) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site

stormwater runoff control requirements in Part I E 4.

e. The annual report shall include the following:

- (1) Total number of erosion and sediment control inspections conducted;
- (2) Total number of each type of compliance action and enforcement action implemented; and
- (3) For nontraditional permittees:
 - (a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved annual standards and specifications for erosion and sediment control; and
 - (b) If any land disturbing projects were conducted without department approved annual standards and specifications, a list of all land disturbing projects that occurred during the reporting period with erosion and sediment control plan approval dates for each project.

5. Post-construction stormwater management for new development and development on prior developed lands.

a. The permittee shall address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program as follows:

- (1) If the traditional permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as maintain an inspection and maintenance program in accordance with Part I E 5 b and c;
- (2) If the traditional permittee is a town that has not adopted a VSMP, implementation of a VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) by the surrounding county shall constitute compliance with Part I E 5 a; such town shall notify the surrounding county of erosion, sedimentation, or other post-construction stormwater runoff problems and maintain an inspection and maintenance program in accordance with Part I E 5 c and d;
- (3) If the traditional permittee is a city, county, or town receiving initial permit coverage during the permit term and must obtain VSMP approval from the department, the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Part I E 5 b and c no later than 60 months after receiving permit coverage;
- (4) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations

(9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and maintain an inspection and maintenance program in accordance with Part I E 5 b;

(5) If the nontraditional permittee is a state agency; public institution of higher education, including community colleges, colleges, and universities; or federal entity, and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b no later than 60 months after receiving permit coverage; or

(6) If the nontraditional permittee is a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b.

b. The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee as follows:

(1) Within six months of the permit effective date, the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities. The permittee may use inspection and maintenance specifications available from the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines;

(2) Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations;

(3) The permittee shall inspect stormwater management facilities owned or operated by the permittee no less frequently than once per year. The permittee may choose to implement an alternative schedule to inspect these stormwater management facilities based on facility type and expected maintenance needs provided that the alternative schedule and rationale is included in the MS4 program plan. The alternative inspection frequency shall be no less often than once per five years; and

(4) If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).

c. For traditional permittees described in Part I E 5 a (1) , (2), or (3), the permittee shall:

(1) Implement an inspection and enforcement program for stormwater management

facilities not owned by the permittee (i.e., privately owned) that includes:

- (a) An inspection frequency of no less often than once per five years for all privately owned stormwater management facilities that discharge into the MS4; and
- (b) Adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a maintenance agreement, including an inspection schedule to the extent allowable under state or local law or other legal mechanism;
- (2) Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner;
- (3) The permittee may develop and implement a progressive compliance and enforcement strategy provided that the strategy is included in the MS4 program plan;
- (4) The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114 C.

d. The MS4 program plan shall include:

- (1) If the permittee implements a VSMP in accordance with Part I E 5 a (1) , (2), or (3):
 - (a) A copy of the VSMP approval letter issued by the department;
 - (b) Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and
 - (c) Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned stormwater management facilities;
- (2) If the permittee implements a post-development stormwater runoff control program in accordance with Part I E 5 a (4):
 - (a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and
 - (b) A copy of the most recent standards and specifications approval letter from the department;
 - (3) A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;
 - (4) Written inspection and maintenance procedures and other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and
 - (5) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program.

e. The annual report shall include the following information:

(1) If the traditional permittee implements a VSMP in accordance with Part I E 5 a (1) , (2), or (3):

(a) The number of privately owned stormwater management facility inspections conducted; and

(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;

(2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;

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

(4) For traditional permittees as specified in Part I E 5 a (1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);

(5) A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and

(6) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee within the MS4 service area.

a. The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee designed to meet the following objectives:

(1) Prevent illicit discharges;

(2) Ensure permittee staff or contractors properly dispose of waste materials, including landscape wastes and prevent waste materials from entering the MS4;

(3) Prevent the discharge of wastewater or wash water not authorized in accordance with

9VAC25-890-20 D 3 u, into the MS4 without authorization under a separate VPDES permit; and

(4) Minimize the pollutants in stormwater runoff.

b. The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities:

(1) Road, street, sidewalk, and parking lot maintenance and cleaning:

(a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with Part I E to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage;

(b) Procedures developed in accordance with Part I E shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus;

(2) Renovation and significant exterior maintenance activities (e.g., painting, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months after permit issuance;

(3) Discharging water pumped from construction and maintenance activities not covered by another permit covering such activities;

(4) Temporary storage of landscaping materials;

(5) Maintenance of permittee owned or operated vehicles and equipment (i.e., prevent pollutant discharges from leaking permittee vehicles and equipment);

(6) Application of materials, including pesticides and herbicides shall not exceed manufacturer's recommendations; and

(7) Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations.

c. The permittee shall require through the use of contract language, training, written procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities described in Part I E 6 b follow established good housekeeping procedures and use appropriate control measures to minimize the discharge of pollutants to the MS4.

d. The written procedures established in accordance with Part I E 6 a and b shall be utilized as part of the employee training program , and the permittee shall develop a written training plan for applicable field personnel that ensures the following:

(1) Applicable field personnel shall receive training in the prevention, recognition, and elimination of illicit discharges no less often than once per 24 months;

(2) Employees performing road, street, sidewalk, and parking lot maintenance shall receive training in good housekeeping procedures required under Part I E 6 b (1) no less often than once per 24 months;

(3) Employees working in and around facility maintenance, public works, or recreational facilities shall receive training in applicable Part I E 6 a and b good housekeeping procedures required no less often than once per 24 months;

(4) Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less often than once per 24 months;

(5) Employees whose duties include emergency spill control and response shall be trained in spill control and response. Emergency responders, such as firefighters and law-enforcement officers, trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan; and

(6) Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification.

e. The permittee shall maintain documentation of each training activity conducted by the permittee to fulfill the requirements of Part I E 6 d for a minimum of three years after training activity completion. The documentation shall include the following information:

(1) The date when applicable employees have completed the training activity;

(2) The number of employees who have completed the training activity; and

(3) The training objectives and good housekeeping procedures required under Part I E 6 a covered by training activity.

f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.

g. Within 12 months of permit coverage, the permittee shall identify any new high-priority facilities located in expanded 2020 census urban areas with a population of at least 50,000.

h. Within 36 months of permit coverage, the permittee shall implement SWPPPs for high-priority facilities meeting the conditions of Part I E 6 i and which are located in expanded 2020 census urban areas with a population of at least 50,000.

i. The permittee shall maintain and implement a site specific SWPPP for each high-priority facility as defined in 9VAC25-890-1 that does not have or require separate VPDES permit

coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt, or runoff:

- (1) Areas where residuals from using, storing, or cleaning machinery or equipment remain and are exposed to stormwater;
- (2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;
- (3) Material handling equipment;
- (4) Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);
- (5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- (6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated, or leaking storage drums, barrels, tanks, and similar containers;
- (7) Waste material except waste in covered, nonleaking containers (e.g., dumpsters);
- (8) Application or disposal of process wastewater (unless otherwise permitted); or
- (9) Particulate matter or visible deposits of residuals from roof stacks, vents, or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

j. Each SWPPP as required in Part I E 6 g shall include the following:

- (1) A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies;
- (2) A description and checklist of the potential pollutants and pollutant sources;
- (3) A description of all potential nonstormwater discharges;
- (4) A description of all structural control measures, such as stormwater management facilities and other pollutant source controls, applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to the SWPPP), such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4;
- (5) A maintenance schedule for all stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4);
- (6) Site specific written procedures designed to reduce and prevent pollutant discharge that incorporate by reference applicable good housekeeping procedures required under Part I E 6 a and b;
- (7) A description of the applicable training as required in Part I E 6 d (4);
- (8) An inspection frequency of no less often than once per year and maintenance

requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP;

(9) A log of each unauthorized discharge, release, or spill incident reported in accordance with Part IV G including the following information:

(a) Date of incident;

(b) Material discharged, released, or spilled; and

(c) Estimated quantity discharged, released, or spilled;

(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and

(11) The point of contact for SWPPP implementation.

k. No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which an SWPPP has not been developed to determine if the facility meets any of the conditions described in Part I E 6 g. If the facility is determined to need an SWPPP, the permittee shall develop an SWPPP meeting the requirements of Part I E 6 h no later than December 31 of that same year. The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain an SWPPP in accordance with Part I E 6 g and this list shall be available upon request.

l. The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with Part IV G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

m. The SWPPP shall be kept at the high-priority facility and utilized as part of employee SWPPP training required in Part I E 6 d (4). The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

n. If activities change at a facility such that the facility no longer meets the definition of a high-priority facility , the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.

o. If activities change at a facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage.

p. The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than

one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.

q. Within 12 months of permit coverage, the permittee shall identify contiguous areas greater than one acre located in expanded 2020 census urban areas with population of at least 50,000 and within the permittee's MS4 service area requiring turf and landscape nutrient management plans.

r. Within 36 months of permit coverage, the permittee shall implement turf and landscape nutrient management plans on contiguous areas greater than one acre located in expanded 2020 census urban areas with a population of least 50,000 and within the permittee's MS4 service area.

s. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization.

t. Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval.

u. Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal within six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee.

v. Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

w. Nontraditional permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement.

x. The MS4 program plan shall include:

(1) A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I E 6 a and b;

(2) A list of all high-priority facilities owned or operated by the permittee required to maintain an SWPPP in accordance with Part I E 6 g that includes the facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference;

(3) A list of locations for which turf and landscape nutrient management plans are required

in accordance with Part I E 6 n and s, including the following information:

- (a) The total acreage covered by each nutrient management plan;
- (b) The DCR approval date and expiration date for each nutrient management plan;
- (c) The location of the nutrient management plan hardcopy or electronic document being maintained;
- (4) A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate; and
- (5) The written training plan as required in Part I E 6 d.

y. The annual report shall include the following:

- (1) A summary of any written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period;
- (2) A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period;
- (3) A list of any new SWPPPs developed in accordance Part I E 6 i during the reporting period;
- (4) A summary of any SWPPPs modified in accordance with Part I E 6 j, 6 l, or 6 m;
- (5) The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period;
- (6) The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired);
- (7) A list of the training activities conducted in accordance with Part I E 6 d, including the following information:
 - (a) The completion date for the training activity;
 - (b) The number of employees who completed the training activity; and
 - (c) The objectives and good housekeeping procedures covered by the training activity.

Part II

TMDL Special Conditions

A. Chesapeake Bay TMDL special condition.

1. The Commonwealth in its Phase I , Phase II, and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I , Phase II , and Phase III WIPs to meet the Level 2 (L2) scoping run for existing developed lands as it

represents an implementation of an additional 60% of L2 as specified in the Phase I , Phase II, and Phase III WIPs. In combination with the 40% reduction of L2 that has already been achieved, a total reduction no later than October 31, 2028, of 100% of L2 shall be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

2. The following definitions apply to Part II of this state permit for the purpose of the Chesapeake Bay TMDL special condition for discharges in the Chesapeake Bay Watershed:

"Existing sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.

"New sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.

"Pollutants of concern" or "POC" means total nitrogen and total phosphorus.

"Transitional sources" means regulated land disturbing activities that are temporary in nature and discharge through the MS4.

3. Reduction requirements for permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018. No later than October 31, 2028, the permittee shall reduce the load of total nitrogen and total phosphorus from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least 100% of the Level 2 (L2) Scoping Run Reductions. The 100% reduction is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; (iii) the second phase reduction of at least 40% of the L2 Scoping Run, which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023; and (iv) the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable:

Table 3a Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven, and Little Creek Basins							
		A	B	C	D	E	F
Pollutant	Subsource	Loading rate (lbs/ac/yr) ¹	Existing developed lands as of 6/30/09 served by the MS4	Load(lbs/yr) ³	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	100% cumulative reduction Required by 10/31/2028 (lbs/yr) ⁴	Sum of 100% cumulative reduction (lb/yr) ⁵

			within the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	9.39			9%		
	Regulate d urban pervious	6.99			6%		
Phosphor us	Regulate d urban impervio us	1.76			16%		
	Regulate d urban pervious	0.5			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsorce cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3b

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Potomac River Basin

		A	B	C	D	E	F
Pollutant	Subsour ce	Loadin g rate (lbs/ac/ yr) ¹	Existin g develop ed lands as of 6/30/09 served by the MS4 within	Load (lbs/ yr) ³	Percenta ge of MS4 required Chesapea ke Bay total L2 loading reductio n	100% cumulati ve reductio n required by 10/31/20 28 (lbs/yr) ⁴	Sum of 100% cumulati ve reductio n (lb/yr) ⁵

			the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	16.86			9%		
	Regulate d urban pervious	10.07			6%		
Phosphor us	Regulate d Urban Impervio us	1.62			16%		
	Regulate d urban pervious	0.41			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsorce cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3c

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Rappahannock River Basin

		A	B	C	D	E	F
Pollutant	Subsour ce	Loadin g rate (lbs/ac/ yr) ¹	Existin g develop ed lands as of 6/30/09 served by the MS4 within	Load (lbs/ yr) ³	Percenta ge of MS4 required Chesapea ke Bay total L2 loading reductio n	100% cumulati ve reductio n Require d by 10/31/20 28 (lbs/yr) ⁴	Sum of 100% cumulati ve reductio n (lb/yr) ⁵

			the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	9.38			9%		
	Regulate d urban pervious	5.34			6%		
Phosphor us	Regulate d urban impervio us	1.41			16%		
	Regulate d urban pervious	0.38			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsorce cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

Table 3d

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the York River and Poquoson Coastal Basin

		A	B	C	D	E	F
Pollutant	Subsour ce	Loadin g rate (lbs/ac/ yr) ¹	Existin g develop ed lands as of 6/30/09 served by the MS4 within	Load (lbs/ yr) ³	Percenta ge of MS4 required Chesapea ke Bay total L2 loading reductio n	100% cumulati ve reductio n required by 10/31/20 28 (lbs/yr) ⁴	Sum of 100% cumulati ve reductio n (lb/yr) ⁵

			the 2010 CUA (acres) ²				
Nitrogen	Regulate d urban impervio us	7.31			9%		
	Regulate d urban pervious	7.65			6%		
Phosphor us	Regulate d urban impervio us	1.51			16%		
	Regulate d urban pervious	0.51			7.25%		

¹Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

²To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

³Column C = Column A x Column B.

⁴Column E = Column C x Column D .

⁵Column F = The sum of the subsurface cumulative reduction required by 10/31/2028 (lbs/yr) as calculated in Column E.

4. No later than October 31, 2028, the permittee shall offset 100% of the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply:

- a. The activity disturbed one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent pollutant load for new sources of nitrogen meeting the requirements of this condition.

5. No later than October 31, 2028, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply:

- a. The activity disturbs one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 to develop the equivalent pollutant load for grandfathered sources of nitrogen meeting the requirements of this condition.

Table 4 Ratio of Phosphorus Loading Rate to Nitrogen Loading Rates for Chesapeake Bay Basins		
Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphor us Loading Rate (lbs/acre)	Nitrog en Loadin g Rate (lbs/ac re)
James River Basin, Lynnhaven, and Little Creek Basins	1.0	5.2
Potomac River Basin	1.0	6.9
Rappahann ock River Basin	1.0	6.7
York River Basin (including Poquoson Coastal Basin)	1.0	9.5

6. Reductions achieved in accordance with the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems effective July 1, 2013, and November 1, 2018, shall be applied toward the total reduction requirements to demonstrate compliance with Part II A 3, A 4, and A 5.

7. 40% of L2 reductions for total nitrogen and total phosphorus shall be maintained by the permittee during the permit term.

8. Reductions shall be achieved in each river basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered

project occurred.

9. Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.

10. Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:

- a. BMPs approved by the Chesapeake Bay Program;
- b. BMPs approved by the department; or
- c. A trading program described in Part II A 11.

11. The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of Virginia for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, and Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:

- a. The credits are generated and applied to a compliance obligation in the same calendar year;
- b. The credits are generated and applied to a compliance obligation in the same tributary;
- c. The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;
- d. No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits; and
- e. Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia.

12. Chesapeake Bay TMDL action plan requirements.

- a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information:

(1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5 ;

(2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a:

(a) Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern;

(3) A preliminary schedule for implementation of the BMPs included in the Chesapeake Bay TMDL action plan; and

(4) A summary of any comments received as a result of public participation required in Part II A 14, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

b. For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018, no later than 12 months after the permit effective date, the permittee shall submit a third phase Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:

(1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.

(2) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin.

(4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL, including:

(a) The date of implementation; and

(b) The reductions achieved.

(5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:

- (a) Type of BMP;
 - (b) Project name;
 - (c) Location;
 - (d) Percent removal efficiency for each pollutant of concern;
 - (e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and
 - (f) A preliminary schedule for implementation of the BMPs included in the Chesapeake Bay TMDL action plan.
- (6) A summary of any comments received as a result of public participation required in Part II A 13, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

13. Prior to submittal of the action plan required in Part II A 12 a and b, permittees shall provide an opportunity for public comment for no fewer than 15 days on the additional BMPs proposed in the third phase Chesapeake Bay TMDL action plan .

14. Chesapeake Bay TMDL implementation annual status report.

- a. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall submit a Chesapeake Bay TMDL implementation annual status report in a method (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.
- b. Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.
- c. The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL action plan received and how the permittee responded.
- d. Each Chesapeake Bay TMDL implementation annual status report shall include the following information:
 - (1) A list of Chesapeake Bay TMDL action plan BMPs, not including annual practices, implemented prior to the reporting period that includes the following information for reported BMP;

- (a) The number of BMPs for each BMP type;
 - (b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and
 - (c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using the DEQ BMP Warehouse in accordance with Part III B 5.
- (2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period:
- (a) The BMP type and a description of the location for each BMP;
 - (b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and
 - (c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.
- e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired.
- f. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented.
- g. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen and total phosphorus.
- h. Any revisions made to the Chesapeake Bay TMDL action plan.
- i. A list of BMPs that are planned to be implemented during the next reporting period.

15. Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, that are located in the expanded 2020 census urban areas with a population of at least 50,000, and within the permittee's MS4 service area, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.), if the following conditions apply:

- a. The activity disturbed one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent nitrogen pollutant load for new sources meeting the requirements of this condition.

16. Within 60 months after permit issuance, the permittee shall update the Phase III Chesapeake Bay TMDL action plan to offset the increased loads from projects grandfathered in

accordance with 9VAC25-870-48 that are located in the expanded 2020 census urban areas with a population of least 50,000, and within the permittee's MS4 service area, and began construction after July 1, 2014, if the following conditions apply:

- a. The activity disturbs one acre or greater; and
- b. The resulting total phosphorous load was greater than 0.45 pounds per acre per year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 6 to develop the equivalent nitrogen pollutant load for grandfathered sources meeting the requirements of this condition.

B. Local TMDL special condition.

1. Permittees applying for initial coverage under this general permit shall develop a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee. The permittee shall develop action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable. Each local TMDL action plan shall be provided to the department no later than October 31, 2028, unless the department grants a later date.

2. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018, shall develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 2 a and 2 b:

a. For TMDLs approved by EPA prior to July 1, 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate or update as applicable the local TMDL action plans to meet the conditions of Part II B 4, B 6, B 7, and B 8, as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Updated action plans shall include:

- (1) An evaluation of the results achieved by the previous action plan; and
- (2) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation.

b. For TMDLs approved by EPA on or after July 1, 2018, and prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8, as applicable no later than 30 months after the permit effective date.

3. The permittee shall complete implementation of the TMDL action plans as determined by the schedule. TMDL action plans may be implemented in multiple phases over more than one permit cycle using the adaptive iterative approach provided adequate progress is achieved in

the implementation of BMPs designed to reduce pollutant discharges in a manner that is consistent with the assumptions and requirements of the applicable TMDL.

4. Each local TMDL action plan developed by the permittee shall include the following:

- a. The TMDL project name;
- b. The EPA approval date of the TMDL;
- c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable;
- d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants of concern means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;
- e. The BMPs designed to reduce the pollutants of concern in accordance with Part II B 5, B 6, B 7, and B 8;
- f. Any calculations required in accordance with Part II B 5, B 6, B 7, or B 8;
- g. For action plans developed in accordance with Part II B 5, B 6, and B 8, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and
- h. A schedule of anticipated actions planned for implementation during this permit term.

5. Bacterial TMDLs.

- a. Traditional permittees shall select and implement at least three of the strategies listed in Table 5 designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in Part II B 4 d.
- b. Nontraditional permittees shall select at least one strategy listed in Table 5 designed to reduce the load of bacteria to the MS4 relevant to sources of bacteria applicable within the MS4 regulated service area. Selection of the strategies shall correspond to sources identified in Part II B 4 d.

Table 5 Strategies for Bacteria Reduction Stormwater Control/Management Strategy	
Source	Strategies (provided as an example and not meant to be all inclusive or limiting)

Domestic pets (dogs and cats)	Provide signage to pick up dog waste, providing pet waste bags and disposal containers. Adopt and enforce pet waste ordinances or policies, or leash laws or policies. Place dog parks away from environmentally sensitive areas. Maintain dog parks by removing disposed of pet waste bags and cleaning up other sources of bacteria. Protect riparian buffers and provide unmanicured vegetative buffers along streams to dissuade stream access.
Urban wildlife	Educate the public on how to reduce food sources accessible to urban wildlife (e.g., manage restaurant dumpsters and grease traps, residential garbage, feed

	pets indoors). Install storm drain inlet or outlet controls. Clean out storm drains to remove waste from wildlife. Implement and enforce urban trash management practices. Implement rooftop disconnection programs or site designs that minimize connections to reduce bacteria from rooftops. Implement a program for removing animal carcasses from roadways and properly disposing of the same (either through proper storage or through transport to a licensed facility).
Illicit connections or illicit discharges to the MS4	Implement an enhanced dry weather screening and illicit discharge, detection, and elimination program

	beyond the requirements of Part I E 3 to identify and remove illicit connections and identify leaking sanitary sewer lines infiltrating to the MS4 and implement repairs. Implement a program to identify potentially failing septic systems. Educate the public on how to determine whether their septic system is failing. Implement septic tank inspection and maintenance program. Implement an educational program beyond any requirements in Part I E 1 through E 6 to explain to citizens why they should not dump materials into the MS4.
Dry weather urban flows (irrigations, car washing, powerwashing, etc.)	Implement public education programs to reduce dry weather flows

	from storm sewers related to lawn and park irrigation practices, car washing, powerwashing and other nonstormwater flows. Provide irrigation controller rebates. Implement and enforce ordinances or policies related to outdoor water waste. Inspect commercial trash areas, grease traps, washdown practices, and enforce corresponding ordinances or policies.
Birds (Canadian geese, gulls, pigeons, etc.)	Identify areas with high bird populations and evaluate deterrents, population controls, habitat modifications and other measures that may reduce bird-associated bacteria loading. Prohibit feeding of birds.

Other sources	Enhance maintenance of stormwater management facilities owned or operated by the permittee. Enhance requirements for third parties to maintain stormwater management facilities. Develop BMPs for locating, transporting, and maintaining portable toilets used on permittee-owned sites. Educate third parties that use portable toilets on BMPs for use. Provide public education on appropriate recreational vehicle dumping practices.
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6. Local sediment, phosphorus, and nitrogen TMDLs.

- a. The permittee shall reduce the loads associated with sediment, phosphorus, or nitrogen through implementation of one or more of the following:
 - (1) One or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65 or other approved BMPs found on the Virginia Stormwater BMP Clearinghouse website;
 - (2) One or more BMPs approved by the Chesapeake Bay Program. Pollutant load reductions generated by annual practices, such as street and storm drain cleaning, shall only be applied to the compliance year in which the annual practice was implemented; or

(3) Land disturbance thresholds lower than Virginia's regulatory requirements for erosion and sediment control and post development stormwater management.

b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented or sediment, phosphorus, or nitrogen credits acquired. BMPs implemented and nutrient and sediment credits acquired to meet the requirements of the Chesapeake Bay TMDL in Part II A may also be utilized to meet local TMDL requirements as long as the BMPs are implemented or the credits are generated in the watershed for which local water quality is impaired.

c. The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in Part II B 4 f.

d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department an update on the progress made toward achieving local TMDL action plan goals and the anticipated end dates by which the permittee will meet each wasteload allocation for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with Part II B 3.

7. Polychlorinated biphenyl (PCB) TMDLs.

a. For each PCB TMDL action plan, the permittee shall include an inventory of potentially significant sources of PCBs owned or operated by the permittee that drains to the MS4 that includes the following information:

(1) Location of the potential source;

(2) Whether or not the potential source is from current site activities or activities previously conducted at the site that have been terminated (i.e., legacy activities); and

(3) A description of any measures being implemented or to be implemented to prevent exposure to stormwater and the discharge of PCBs from the site.

b. If at any time during the term of this permit, the permittee discovers a previously unidentified significant source of PCBs within the permittee's MS4 regulated service area, the permittee shall notify DEQ in writing within 30 days of discovery.

c. As part of its annual reporting requirements, the permittee shall submit results of any action plan PCB monitoring or product testing conducted and any adaptive management strategies that have been incorporated into the updated action plan based upon monitoring or product testing results if the permittee has elected to perform monitoring or product testing or both.

8. Chloride TMDLs.

a. No later than 36 months after the permit effective date, permittees shall develop an anti-icing and deicing agent education and outreach strategy that identifies target audiences for increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and de-icing agents used for snow and ice management.

b. Anti-icing and deicing agent education and outreach strategies shall contain a schedule to implement two or more of the strategies listed in Part I E 1 d Table 1 per year to communicate to target audiences the importance of responsible anti-icing and deicing agent application, transport, and storage.

c. No later than 36 months after permit issuance, the permittee shall review good housekeeping procedures for anti-icing and deicing agent application, handling, storage, and transport activities required under Part I E 6 b (1) (a) and identify a minimum of two strategies for implementing enhanced BMPs that promote efficient management and application of anti-icing and deicing agents while maintaining public safety.

9. Prior to submittal of the action plan required in Part II B 2, the permittee shall provide an opportunity for public comment for no fewer than 15 days on the proposal to meet the local TMDL action plan requirements .

10. The MS4 program plan as required by Part I B of this permit shall incorporate each local TMDL action plan. Local TMDL action plans may be incorporated by reference into the MS4 program plan provided that the program plan includes the date of the most recent local TMDL action plan and identification of the location where a copy of the local TMDL action plan may be obtained.

11. For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.

C. Inspection and maintenance of ecosystem restoration projects used for TMDL compliance.

1. Within 36 months of permit issuance the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of ecosystem restoration projects as defined in 9VAC25-890-1 and implemented as part of a TMDL action plan developed in accordance with Part II A, B, or both. The permittee may utilize inspection and maintenance protocols developed by the Chesapeake Bay Program or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines.

2. The permittee shall inspect ecosystem restoration projects owned or operated by the permittee and implemented as part of a current TMDL action plan developed in accordance with Part II A or B no less than once every 60 months.

Part III

DEQ BMP Warehouse Reporting

A. For the purpose of Part III of this permit, "best management practice" or "BMP" means a practice that achieves quantifiable nitrogen, phosphorus, or total suspended solids reductions, including stormwater management facilities, ecosystem restoration projects, annual practices, and other practices approved by the department for reducing nitrogen, phosphorus, and total suspended solids pollutants.

B. No later than October 1 of each year the permittee shall electronically report new BMPs

implemented and inspected as applicable between July 1 and June 30 of each year using the DEQ BMP Warehouse.

1. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part III B 5 , including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830), if applicable, and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.
 2. The permittee shall use the DEQ BMP Warehouse to report BMPs that were not reported in accordance with Part III B 1 or B 5 and were implemented as part of a TMDL action plan to achieve nitrogen, phosphorus, and total suspended solids reductions in accordance with Part II A or B.
 3. The permittee shall use the DEQ BMP Warehouse to report any BMPs that were not reported in accordance with Part III B 1, B 2, or B 5.
 4. The permittee shall use the DEQ BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I E 5 b or 5 c, or in accordance with Part II C and the most recent associated TMDL action plan.
 5. Traditional permittees specified in Part I E 5 a (1) shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.
- C. The following information for each new BMP reported in accordance with Part III B 1, B 2, B 3, or B 5 shall be reported to the DEQ BMP Warehouse as applicable:
1. The BMP type;
 2. The BMP location as decimal degree latitude and longitude;
 3. The acres treated by the BMP, including total acres and impervious acres;
 4. The date the BMP was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use 06/2005;
 5. The 6th Order Hydrologic Unit Code in which the BMP is located;
 6. Whether the BMP is owned or operated by the permittee or privately owned;
 7. Whether or not the BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;
 8. If the BMP is privately owned, whether a maintenance agreement exists;
 9. The date of the permittee's most recent inspection of the BMP; and

10. Any other information specific to the BMP type required by the DEQ BMP Warehouse (e.g., linear feet of stream restoration).

D. No later than October 1 of each year, the permittee shall electronically report the most recent inspection date for any existing BMP that was previously reported and re-inspected between July 1 and June 30 using the BMP Warehouse. If an existing BMP has not been previously reported, the BMP shall be reported as new in accordance with Part III B and Part III C. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

E. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

Part IV

Conditions Applicable to All State and VPDES Permits

NOTE: Discharge monitoring is not required for compliance purposes by this general permit. If the operator chooses to monitor stormwater discharges for informational or screening purposes, the operator does not need to comply with the requirements of Part IV A, B, or C.

A. Monitoring.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitoring activity.
2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this state permit. Analyses performed according to test procedures approved under 40 CFR Part 136 shall be performed by an environmental laboratory certified under regulations adopted by the Department of General Services (1VAC30-45 or 1VAC30-46).
3. The operator shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Monitoring records and reports shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individuals who performed the sampling or measurements;
 - c. The dates and times analyses were performed;
 - d. The individuals who performed the analyses;
 - e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this state permit, and records of all data used to complete the registration statement for this state permit, for a period of at least three years from the date of the sample, measurement, report, or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the operator, or as requested by the department.

C. Reporting monitoring results.

1. The operator shall submit the results of the monitoring as may be performed in accordance with this state permit with the annual report unless another reporting schedule is specified elsewhere in this state permit.

2. Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved, or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included. Following notification from the department of the start date for the required electronic submission of monitoring reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with 9VAC25-31-1020 and this section. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the operator monitors any pollutant specifically addressed by this state permit more frequently than required by this state permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this state permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this state permit.

D. Duty to provide information. The operator shall furnish within a reasonable time, any information that the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this state permit or to determine compliance with this state permit. The department or EPA may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and Virginia Stormwater Management Act. The operator shall also furnish to the department or EPA upon request, copies of records required to be kept by this state permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress

reports on, interim and final requirements contained in any compliance schedule of this state permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized stormwater discharges. Pursuant to § 62.1-44.5 of the Code of Virginia, except in compliance with a state permit issued by the department, it shall be unlawful to cause a stormwater discharge from a MS4.

G. Reports of unauthorized discharges. Any operator of a MS4 who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, or § 62.1-44.34:19 of the Code of Virginia that occurs during a 24-hour period into or upon surface waters or who discharges or causes or allows a discharge that may reasonably be expected to enter surface waters shall notify the department of the discharge immediately (see Part IV I 4) upon discovery of the discharge, but in no case later than within 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this state permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge, including a bypass in Part IV U or an upset in Part IV V, should occur from a facility and the discharge enters or could be expected to enter surface waters, the operator shall promptly notify (see Part IV I 4), in no case later than within 24 hours, the department after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part IV I 2. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the facilities; and
4. Flooding or other acts of nature.

I. Reports of noncompliance.

1. The operator shall report any noncompliance that may adversely affect surface waters or may endanger public health.
 - a. A report to the department shall be provided within 24 hours from the time the operator becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under Part IV I:
 - (1) Any unanticipated bypass; and
 - (2) Any upset that causes a discharge to surface waters.
 - b. A written report shall be submitted within five days and shall contain:
 - (1) A description of the noncompliance and its cause;
 - (2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - (3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The department may waive the written report on a case-by-case basis for reports of noncompliance under Part IV I if the report has been received within 24 hours and no adverse impact on surface waters has been reported.
2. The operator shall report all instances of noncompliance not reported under Part IV I 1 b, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part IV I 2.
3. The immediate (within 24 hours) reports required in Part IV G, H, and I shall be made to the department. Reports may be made by telephone, email , or online at <https://www.deq.virginia.gov/our-programs/pollution-response/pollution-data-and-reporting> . For reports outside normal working hours, the online portal shall be used. For emergencies, call the Virginia Department of Emergency Management's Emergency Operations Center (24-hours) at 1-800-468-8892.
4. Where the operator becomes aware of a failure to submit any relevant facts, or submittal of incorrect information in any report, including a registrations statement, to the department, the operator shall promptly submit such facts or correct information.

J. Notice of planned changes.

1. The operator shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The operator plans an alteration or addition to any building, structure, facility, or installation that may meet one of the criteria for determining whether a facility is a new source in 9VAC25-870-420:

b. The operator plans an alteration or addition that would significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this state permit; or

2. The operator shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with state permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this chapter, 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 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;

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

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this chapter, a principal executive officer of a public agency includes:

(1) The chief executive officer of the agency, or

(2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by state permits, including annual reports, and other information requested by the department shall be signed by a person described in Part IV K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part IV K 1;

b. 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 operator. (A duly authorized representative may thus be either a named

individual or any individual occupying a named position.); and

c. The signed and dated written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part IV K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the MS4, a new authorization satisfying the requirements of Part IV K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part IV K 1 or K 2 shall make the following 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."

L. Duty to comply. The operator shall comply with all conditions of this state permit. Any state permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act, except that noncompliance with certain provisions of this state permit may constitute a violation of the Virginia Stormwater Management Act but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for state permit termination, revocation and reissuance, or modification; or denial of a state permit renewal application.

The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this state permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the operator wishes to continue an activity regulated by this state permit after the expiration date of this state permit, the operator shall submit a new registration statement at least 90 days before the expiration date of the existing state permit, unless permission for a later date has been granted by the department. The department shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit.

N. Effect of a state permit. This state permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this state permit shall be construed to preclude the institution of any legal action under, or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in state permit conditions on bypassing in Part IV U and

upset in Part IV V nothing in this state permit shall be construed to relieve the operator from civil and criminal penalties for noncompliance.

P. Oil and hazardous substance liability. Nothing in this state permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law or § 311 of the Clean Water Act.

Q. Proper operation and maintenance. The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the operator to achieve compliance with the conditions of this state permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by the operator only when the operation is necessary to achieve compliance with the conditions of this state permit.

R. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering surface waters and in compliance with all applicable state and federal laws and regulations.

S. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this state permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this state permit.

U. Bypass.

1. "Bypass," as defined in 9VAC25-870-10, means the intentional diversion of waste streams from any portion of a treatment facility. The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of Part IV U 2 and U 3.

2. Notice.

- a. Anticipated bypass. If the operator knows in advance of the need for a bypass, the operator shall submit prior notice to the department, if possible at least 10 days before the date of the bypass.

- b. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in Part IV I.

3. Prohibition of bypass.

- a. Except as provided in Part IV U 1, bypass is prohibited, and the department may take

enforcement action against an operator for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The operator submitted notices as required under Part IV U 2.
- b. The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three conditions listed in Part IV U 3 a.

V. Upset.

1. An "upset," as defined in 9VAC25-870-10, means an exceptional incident in which there is unintentional and temporary noncompliance with technology based state permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based state permit effluent limitations if the requirements of Part IV V 4 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
3. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
4. An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the operator can identify the causes of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The operator submitted notice of the upset as required in Part IV I; and
 - d. The operator complied with any remedial measures required under Part IV S.
5. In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The operator shall allow the department , EPA, or an authorized

representative (including an authorized contractor), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this state permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this state permit;
3. Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this state permit; and
4. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the Clean Water Act and the Virginia Stormwater Management Act, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. State permit actions. State permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the operator for a state permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any state permit condition.

Y. Transfer of state permits.

1. State permits are not transferable to any person except after notice to the department. Except as provided in Part IV Y 2, a state permit may be transferred by the operator to a new operator only if the state permit has been modified or revoked and reissued, or a minor modification made, to identify the new operator and incorporate such other requirements as may be necessary under the Virginia Stormwater Management Act and the Clean Water Act.
2. As an alternative to transfers under Part IV Y 1, this state permit may be automatically transferred to a new operator if:
 - a. The current operator notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new operators containing a specific date for transfer of state permit responsibility, coverage, and liability between them; and
 - c. The department does not notify the existing operator and the proposed new operator of its intent to modify or revoke and reissue the state permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV Y 2 b.

Z. Severability. The provisions of this state permit are severable, and if any provision of this state permit or the application of any provision of this state permit to any circumstance is held invalid,

the application of such provision to other circumstances, and the remainder of this state permit, shall not be affected thereby.

Statutory Authority

§62.1-44.15:28 of the Code of Virginia.

Historical Notes

Former 4VAC50-60-1240, derived from Virginia Register Volume 21, Issue 3, eff. January 29, 2005; amended, Virginia Register Volume 24, Issue 20, eff. July 9, 2008; Volume 29, Issue 4, eff. November 21, 2012; Volume 29, Issue 17, eff. July 1, 2013; amended and renumbered, Virginia Register Volume 30, Issue 2, eff. October 23, 2013; amended, Virginia Register Volume 35, Issue 2, eff. November 1, 2018; Volume 40, Issue 3, eff. November 1, 2023; Volume 40, Issue 4, eff. October 9, 2023.

Appendix E – Standard Operating Procedures (SOPs)



Standard Operating Procedures (SOPS) to Prevent Stormwater Pollution

Grounds Department
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SOP:	Equipment Maintenance and Washing
Purpose of SOP:	Procedures for the proper management of equipment maintenance and washing.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities, Housing, Dining, Catering

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. Equipment Maintenance and Repair
 - a. Move leaking equipment indoors or onto impervious surface and under cover.
 - b. Use drip pans or absorbent pads under equipment if needed.
 - Empty drip pans or replace absorbent pads before they become full.
 - c. If equipment is inoperable tag equipment, **“DO NOT USE”**.
 - d. Perform all maintenance activities (except for emergencies) indoors.
 - e. Transfer fluids from drip pans to appropriate waste containers.
 - f. Routinely check equipment for signs of leaks.
 - Notify supervisor if a leak is discovered or suspected.
 - g. Sweep and pick up trash in maintenance and repair areas daily.

III. Equipment Washing

1. Small equipment should only be washed inside at designated washing areas.
 - a. Mop buckets and mop water may only be dumped inside at designated areas.
2. Large equipment in good condition, with no signs of leaks, may be washed at the wash pad located at the Grounds Department.
3. 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.
4. Only use approved water-based or detergent cleaners.

SOP:	Outdoor Events
Purpose of SOP:	Procedures for outdoor events to prevent wastes or wastewater from entering storm drains and waterways.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management, Events, Catering

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. 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.
2. 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.
3. 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.
4. Spills
 - a. Refer to SOP: Spill Prevention, Control, Clean Up and Reporting on page 20.
 - b. Small spills (<5 gallons) that pose no immediate danger to human life or property notify MS4 Program Manager (4-8700).
 - c. Small Spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).
 - d. Large Spills (>5 gallons) of any substance report to CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

*** Things to Know: What spilled; Where it is located; Estimate of amount of product***

SOP:	Kitchen Waste: Fats, Oils, and Greases (FOG) Transfer, Storage, and Disposal
Purpose of SOP:	Procedures for the management, handling, and storage of kitchen grease to prevent the discharge of pollutants to stormwater.
SOP Administrator:	Grounds Department
Responsible Department:	Dining Services, Catering

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. 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.
2. Transfer of FOG from Kitchen to Exterior FOG Container
 - a. Prepare your route from the kitchen to the exterior FOG container.
 - Eliminate and obstacles that might lead to a slip, trip, fall and potential spill.
 - Ensure that a spill kit is easily accessible in the event of spill.
 - 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.
 - It is safer to make multiple transfers of smaller volumes than to attempt to handle larger quantities at once.
 - 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.
 - 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.

3. 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 during transfer.
- 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.
- g. The disposal hauler vehicle shall be inspected prior to departure to ensure that the hose is disconnected from the tank.
- h. The University representative shall inspect the loading point and the tank to verify that no leaks have occurred, or that any leaked or spilled material has been cleaned up and disposed of properly (SOP - Spill Prevention, Control, Clean Up and Reporting and SOP - Pressure Washing and Exterior Surface Cleaning).

SOP:	Equipment Fueling Activities
Purpose of SOP:	Procedures for the proper management of the transfer and dispensing of fuel.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management, Housing, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Drip pans

II. Standard Operating Procedures

1. Dispensing of Fuel from Above Ground Storage Tanks (ASTs)
 - a. Turn off all equipment prior to dispensing fuel.
 - Do not use any mobile electronic devices when dispensing fuel.
 - b. Ensure that the fuel type is the proper type of fuel.
 - c. Inspect the fueling hose and dispenser for any signs of cracking or leaking prior to dispensing any fuel.
 - Report leaks in hoses or tanks to your supervisor immediately.
 - d. Stay with the equipment while dispensing fuel, do not “top off” fuel tanks.
 - In the event of spill use dry methods (absorbents) to clean up the spill (refer to SOP: Spill Prevention, Control, Clean Up and Reporting).
 - Notify your supervisor immediately.
2. Dispensing of Fuel from Flammable Containers
 - a. Mobile/field fueling shall be minimized. Whenever, practical equipment should be transported to a designated fueling area at Grounds.
 - b. When performing mobile/field fueling select an area on concrete at least 25 feet up gradient from a storm drain.
 - c. Turn off all equipment
 - Do not use any mobile electronic devices when transferring fuel.
 - If possible, transfer fuel over a drip pan or absorbent pad.
 - In the event of a spill use dry methods to clean up the spill.
 - Notify your supervisor immediately.
3. Maintenance & Inspection
 - a. Fueling areas, storage tanks, and transfer equipment should be inspected monthly.
 - b. Spill Kits should be inspected and inventoried on a regular basis.
 - c. Any equipment, tanks, pumps, piping and fuel dispensing equipment found to be leaking or in disrepair must be repaired or replaced immediately.

SOP:	Grounds Maintenance
Purpose of SOP:	Procedures for grounds keeping maintenance activities.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. General Landscaping Maintenance

- a. Remove litter, debris, and trash from the landscape 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 or pruning activities, all debris should be disposed of at designated area.
- d. Five-day weather forecast should be 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.

2. 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.
 - When storing stockpiles of sand, salt, dirt, mulch, gravel cover piles with a tarp.
 - 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.

3. Storage and Disposal of Pesticides, Herbicides, and Fertilizers

- a. Do not store pesticides, herbicides, and fertilizers near storm drains or water bodies.
- b. Do not dispose of pesticides, herbicides, and fertilizers near or in storm drains or water bodies.
- c. Store pesticides, herbicides, and fertilizers in a covered container, off the floor, in a dry location according to the manufacturer's specifications.

- d. Where possible, store pesticides, herbicides, and fertilizers in an enclosed, controlled area. (i.e. locked storage shed or cabinet)
 - e. Use proper containers for storing chemicals and clearly label.
 - f. Use and clearly label secondary containers.
 - g. Store Safety Data Sheets (SDS) near chemical storage areas.
 - h. Order only the amount needed to prevent surplus or expired chemicals.
 - i. Order chemicals just prior to usage to reduce storage time.
 - j. Use entire order of chemicals to minimize disposal.
 - k. Properly dispose of fertilizers and pesticides according to manufactures specifications and applicable regulations.
 - l. Follow all applicable federal and state regulations for storing pesticides, herbicides, and fertilizers.
4. Handling and Application of Pesticides, Herbicides, and Fertilizers
- a. Do not apply pesticides, herbicides, and fertilizers before a heavy rainfall.
 - b. Do not dispose of pesticides, herbicides, and fertilizers in storm drains or water bodies.
 - c. Only a Certified Pesticide Applicator may apply pesticides, herbicides, and fertilizers.
 - d. Use proper Personal Protection Equipment (PPE) when handling and applying chemicals.
 - e. All employees handling, mixing, and applying pesticides, herbicides, and fertilizers should be trained on the use of MSDS.
 - f. Mix only enough chemical for immediate use.
 - g. Follow manufacturer's recommendations for handling, mixing, and applying chemicals.
 - h. Follow all federal and state regulations when handling, mixing, and applying pesticides, herbicides, and fertilizers.
 - i. Mix pesticides, herbicides, and fertilizers in designated areas and away from storm drains or water bodies.
 - j. Employees applying pesticides, herbicides, and fertilizers should read the MSDS for each product they use.
 - k. Calibrate application equipment to ensure proper amount of product is applied.
 - l. Use caution when broadcasting product near a waterway or storm drain structure.
 - m. If fertilizer is broadcast or spilled on a sidewalk, street or driveway, sweep up the excess and dispose of properly.
 - n. Promptly cleanup any spills or leakage. Use dry absorbent for liquids and sweep up solid product. Properly dispose of waste. Do not rinse with water.
 - o. Use fertilizers with no phosphorous content.
 - p. Pesticide application equipment should have an emergency shut-off switch.
 - q. Use the least toxic product or method available to do the job.
 - r. Use biodegradable products when available.
 - s. Spot treat problem areas with pesticides rather than treating larger areas.
 - t. Avoid broadcast spraying of pesticides or herbicides.
 - u. Use the granular form of fertilizers, herbicides, and pesticides to minimize application losses. If using liquids, be aware of wind direction to avoid wind drift of chemicals.
 - v. Apply products when ground is not frozen; fertilizer during the fall or spring as needed, pesticides and herbicides only as needed.
5. 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.

SOP:	Liquid Materials Loading, Unloading, and Storage
Purpose of SOP:	Procedures for the proper management of the loading, unloading, and storage of liquid materials.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management, Warehouse

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. 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 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.
 - If transfers must take place near a storm drain inlet, place a cover or mat over the inlet to protect it during transfer operations.
 - d. 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.
 - e. At least one qualified University representative must attend any transfer operation for the entire duration of the loading or unloading operation.
 - f. 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.
 - g. Keep loading and unloading areas neat and tidy. Sweep outdoor areas as needed.
2. 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.

SOP:	Trash & Recycling Handling, Storage, Transfer, and Disposal
Purpose of SOP:	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
Responsible Department:	Grounds, Facilities Management, Housing, Dining, Catering, Events, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the university.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. Trash & Recycling Handling, Storage, Transfer, and Disposal
 - a. All waste and recycle receptacles must be leak-tight with tight-fitting lids or covers.
 - b. Place waste or recycle receptacles indoors or under a roof or overhang whenever possible.
 - c. Prior to transporting waste, trash, or recycling ensure that containers are not leaking (double bag if needed) and properly secure to the vehicle.
 - d. Clean and sweep up around outdoor waste containers regularly.
 - e. Clean up any liquid leaks or spills with dry clean-up methods. (See SOP: Spill Prevention, Clean Up and Reporting).
 - f. Arrange for wastes or recyclables to be picked up regularly and disposed at approved disposal facilities.
 - g. Never place hazardous materials, liquids, or liquid-containing wastes in a dumpster, recycle or trash receptacle.
 - Please contact the Environmental Health Safety Department for information on proper disposal
 - h. 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.
 - i. Do not wash out waste containers (trash cans) or recycling containers outdoors or in a parking lot.
 - j. Containers, compactors and dumpsters must be returned to the waste disposal contractor for cleaning at the contractor's facility.
 - k. 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.
2. Dumpster Areas
 - a. Locate dumpsters on a flat, paved surface and install berms or curbs around the storage area to prevent run-on and run-off.
 - b. Keep lids on dumpsters closed at all times unless adding or removing material.
 - c. In the event that a dumpster lid is missing or damaged report it to Facilities Management.
 - d. If using an open top roll off dumpster, cover and tie down with a tarp unless adding materials.
 - e. Inspect regularly for leaks and correct if there is a problem.
 - f. Regularly sweep the area and pick up trash/debris.

3. Compactors

- a. Regularly check the hydraulic fluid hoses and reservoir to ensure there are no cracks or leaks.
 - In the event of leak report it immediately to the compactor service contractor and refer to SOP: Spill Prevention, Clean Up and Reporting.
 - Inspect regularly for leaks and correct if there is a problem.
 - Regularly sweep the area and pick up trash/debris.

SOP:	Parking Lot, Streets, and Roads Maintenance
Purpose of SOP:	Procedures for general maintenance of parking lots, parking garages, elevated parking structures, streets, or roads.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds, Facilities Management

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

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

II. Standard Operating Procedures

1. General Maintenance

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

2. 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. A concrete wash-out area shall be designated at each capital construction site and managed by the project superintendent for the duration of the project. For all university projects, the washout site shall be next to the Ground Department off University Place. It shall include, at a minimum:
 - A concrete wash-out bag or other leak-proof container/settling basin.
 - A pool or containment system that holds the bag to prevent any seepage into the ground or overflows due to inadequate sizing or precipitation.
 - The bag can be disposed of properly after the material has dried in a manner consistent with the handling of other construction wastes. Liquid concrete wastes shall not be discharged to surface waters.

3. 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.

4. 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.

SOP:	Pressure Washing and Exterior Surface Cleaning
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
Responsible Department:	Facilities Management, Housing, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. 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)

II. Standard Operating Procedures

1. 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.
2. Heat Transfer Equipment and HVAC Equipment Cleaning
 - a. HVAC or chiller condenser tube flushing liquid must be captured and disposed of properly.
3. 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.
4. 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.

5. 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.

SOP:	Dewatering Utility Construction and Maintenance Activities
Purpose of SOP:	Procedure for disposal of water pumped during maintenance or construction operations.
SOP Administrator:	Grounds Department
Responsible Department:	Facilities Management, Capital Outlay

I. Stormwater Protection Equipment and Materials

- Drum (55 gallon)
- Sediment bag
- Storm drain inlet protection devices (drain covers, booms, berms)
- Vegetated Swale
- Silt Fence
- Straw bales

II. Standard Operating Procedures

1. Tunnels, Vaults, Electrical Manholes, and other Structures

- a. Visually inspect the water to be removed. Determine if there are visible pollutants in the water to be pumped and the potential sources of those pollutants on site.
- b. Water collected in vaults or tunnels often results from rainwater or groundwater infiltration. If there is no reason to suspect the water has become contaminated as determined by the visual inspection and lack of potential pollutant sources, clear water can be pumped into a nearby vegetated area and allowed to infiltrate. The dewatering procedure should be monitored to ensure the pumped water does not travel from the vegetated area or cause localized erosion. If a suitable vegetated area is not available, the pumped water can be discharged to the sanitary sewer or hauled off from site for disposal at an appropriate treatment facility.
- c. Water that is suspected of having chemical or biological contamination or to contain anything other than pure rain or groundwater should be evaluated for proper disposal options by Environmental Health and Safety (EHS) or MS4 Program Coordinator. Proper disposal options could include discharging the water to the sanitary sewer, hauling it to an off-site permitted disposal facility, or if it is deemed appropriate, to the surface.

2. Excavations

- a. CNU staff and/or the contractor are encouraged to take appropriate measures to restrict the flow of water from the surface into an excavation if possible.
- b. Visually inspect the water to be removed. Water in excavations usually results from groundwater infiltration or rainfall. Determine if the water is laden with sediment or shows visible signs of any other contaminants.
- c. Sediment laden water may be allowed to settle to remove suspended solids prior to dewatering. Once the water is clear, the water can be pumped into a nearby vegetated area to promote infiltration and filtration.
- d. Sediment laden water that needs to be removed immediately must be pumped through an appropriately sized sediment bag following manufacturer's specifications. Discharge water from the sediment bag should be directed into a vegetated area, wherever possible, but is allowed to discharge into stormwater conveyances after passing through the sediment bag. The sediment bag must be routinely inspected during the pumping operation to make sure that it is functioning properly and has not become clogged. If muddy water is being released from the sediment bag, additional measures may be needed to minimize impacts from the discharge. This could include surrounding the bag with silt fence and straw bales or placing the bag on a gravel pad.

SOP:	Spill Prevention, Control, Clean Up and Reporting
Purpose of SOP:	Procedures for spill prevention, control, clean up and reporting.
SOP Administrator:	Grounds Department
Responsible Department:	All

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- Spill Kit and equipment for dry clean up (socks, absorbent pads, absorbents, broom, and dustpan)
- Storm drain inlet protection (drain covers, booms, berms)

II. Standard Operating Procedures

1. Spill Prevention

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

2. Spill Kit Maintenance

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

3. Spill Clean Up and Storm Drain Protection

- Clean up minor spills (< 5 gallons) immediately.
- Block any down gradient storm drains with berms, covers, absorbent socks or “pigs”.
- Never hose down spills or leaks.
- Always use “Dry Clean-up Methods” for clean-up of liquid spills (gasoline, diesel, paint, kitchen grease).
- Absorbents (loose absorbents, sheets, pillows, pigs, or socks) on the spill.
- Spread Sweep up or pick up the absorbed materials.
- Dispose of wastes properly and in accordance with all regulations.
- 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.
- After clean up, be sure to sweep up the contaminated absorbent and remove the berm or dike at storm drain.
- 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.

4. Internal Reporting of Spills

a. For Employees (Non-supervisors)

- Notify your direct supervisor immediately
- What spilled, Where it is located, Estimated amount of product

b. For Supervisors

- Small spills (<5 gallons) that pose no immediate danger to human life or property notify MS4 Program Manager (4-8700).
- Small spills (<5 gallons) of a hazardous substance that is an immediate danger to human life or property notify CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).

- Large Spills (>5 gallons) of any substance report to CNU Police (4-7777), EHS Director (4-7280), and MS4 Program Manager (4-8700).
5. 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 PD.**
 - Notify the **Virginia Department of Environmental Quality.**
 - If spill occurs during *nights, weekends, or holidays* notify the **Virginia Department of Emergency Management's 24-hour hotline.**
 - **Notify the National Response Center.**
 - 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.
 - b. 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.**
 - **National Response Center.**

SOP:	Anti-icing and Deicing Agent Application, Transport, and Storage
Purpose of SOP:	Procedures for anti-icing and deicing agent application, transport and storage.
SOP Administrator:	Grounds Department
Responsible Department:	Grounds Department

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

I. Stormwater Protection Equipment and Materials

- All anti-icing and deicing agents applied must be free of urea or other forms of nitrogen and phosphorus
- Tarps with tie downs

II. Standard Operating Procedures

1. Application

- a. If anti-icing or deicing agents are spilled or overapplied during application, excess material should be swept and disposed of immediately.
- b. Bulk products are to be applied to roads and parking lots by means of truck spreader.
- c. Bagged products are to be applied to sidewalks by means of push spreader or mechanized spreader attached to the back of utility carts.
- d. Product should be applied at rate specified by manufacturer.

2. Transport

- a. Whenever possible, anti-icing and deicing agents should be transported under cover.

3. Storage

- a. Whenever possible, bagged anti-icing and deicing agents should be stored, indoors or under cover.
- b. Whenever possible, bulk anti-icing and deicing agents should be stored in concrete containment with tarp cover.
 - Excess bulk material left after a storm event should be bagged and stored indoors. This material should be used prior to new bulk material.

SOP:	Exterior Renovation and Maintenance Activities
Purpose of SOP:	Stormwater pollution prevention procedures for the renovation and maintenance of exterior surfaces not covered under a separate VSMP construction general permit.
SOP Administrator:	Grounds Department
Responsible Department:	Facilities Management, Housing, Building Operations, Athletics

Managers and Supervisors are responsible for ensuring that employees are properly informed of and trained on how to follow the procedures for this SOP. Contractors should also be notified to follow SOP while working for the University.

III. Stormwater Protection Equipment and Materials

- Mulch, grass seed appropriate for temporary seeding purposes, matting, or other appropriate erosion control measures.
- Silt fence or other sediment filtering measures

IV. Standard Operating Procedures

1. Storm Drain Protection
 - a. Prior to renovation or maintenance work, identify where all downstream storm drains are located; water contaminated by sediment, chemicals, or building materials must not be allowed to flow down gutters or enter storm drains.
 - b. Block or cover storm drains with booms and weighted storm drain covers before renovation.
 - c. Determine where water will pool for collection. Use a wet vacuum to collect the wastewater or allow water to evaporate.
2. Renovation Activities
 - a. Renovation which disturbs land must utilize appropriate erosion and sediment control measures to prevent sediment-laden water from entering storm drains.
 - b. If sections of the site which have been disturbed will not be disturbed again for 14 days, temporary seeding, matting, mulching, or other appropriate erosion control measures should be applied to prevent rainfall from causing erosion.
 - c. Keep renovation sites clean and free of debris to prevent debris from entering storm drains.
 - d. Materials required for renovation work, such as concrete, fertilizer, grout, etc should be protected from rain by being stored under cover and promptly returned to their appropriate storage location on campus once they are no longer necessary for renovation in order to prevent contaminants from entering storm drains.
 - e. Renovation or maintenance which would remove or disturb hazardous materials that could enter waterways (e.g. old paints containing heavy metals) should dispose of contaminated materials properly and prevent contamination of stormwater with hazardous waste. If contamination occurs, water should be completely contained on site and disposed of according to hazardous waste regulations.
3. Disposal of Contaminated Water
 - a. Use a wet vacuum to collect water for disposal.
 - 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.
4. 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.

Appendix F –

Log of UNAUTHORIZED DISCHARGE, RELEASE, OR SPILL INCIDENT REPORTED

Documentation of any unauthorized discharges, release, or spill incidents reported must be noted and retained with the SWPPP as required by the MS4 General Permit 9VAC25-890-40. Please contact CNU to see findings, responses, and follow-up actions for potential illicit discharges.

[illegible]

APPENDIX F

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) POLICY



Illicit Discharge Detection and Elimination (IDDE) Policy

Grounds Department
1 Avenue of the Arts, Newport News, VA 23606
Phone: (757) 594-8700
Email: Grounds@cnu.edu

Revised: 5/20/2026

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. CNU further had a Stormwater Master Plan developed in 2019 by VHB that updates the stormwater plan for the campus, providing an approximate total institutional footprint of 152 acres that includes the MS4 area and other facilities that CNU operates in the adjacent City of Newport News MS4.

1. Purpose of Policy

The purpose of this policy is to provide protection measures to 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 practices in the MS4 to comply with requirements of the National Pollutant Discharge Elimination System ([NPDES](#)) permit process, as implemented through the Virginia Erosion Stormwater Management Program ([VESMP](#)) permit for CNU. The objectives of this policy are as follows:

- A. To prevent or minimize to the maximum extent practicable, illicit discharge from University properties and operations into the storm drainage system.
- B. To minimize pollutants in stormwater runoff.
- C. To develop, implement and enforce a program to detect and eliminate illicit discharges, as defined by 9VAC25-890-20 and 9VAC25-890-40, into the regulated small MS4.
- D. To comply with the requirements of CNU's stormwater permit.

2. Definitions

Best Management Practices (BMPs): 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: Any individual or company, including a subcontractor, hired to perform services on university property.

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

Illicit discharge: Any discharge to a municipal separate storm sewer that is not composed entirely of stormwater, except discharges pursuant to a separate NPDES or state permit (other than the state permit for discharges from the municipal separate storm sewer), discharges resulting from firefighting activities, and discharges identified by and in compliance with 9VAC25-890-20.

Municipal separate storm sewer (MS4): 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): All separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems or designated under 9VAC25-890.

Municipal Separate Storm Sewer System Management Program or MS4 Program: 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: 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: Any discharge to the storm drain system that is not composed entirely of stormwater.

Outfall: 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: 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: 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: Any building, structure, facility, installation, or activity from which there is or may be a discharge of pollutants.

State waters: All water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

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

Wetlands: Those areas that are inundated or saturated by surface water 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.

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

3. 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.

4. Responsibility for Administration.

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

5. 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.

6. 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.

7. 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 Erosion and Stormwater Management Program (VESMP)

Regulations (9VAC25-890). 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:

- Wastewater from washout of concrete
- Wastewater from the washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- Oils, toxic substances, or hazardous substances from spills or other releases
- Soaps, solvents, or detergents used in equipment and vehicle washing

8. Allowed Discharges

The following discharges to the storm drainage system are allowed, as per [9VAC25-890-20](#) 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, managed in a manner to avoid an instream impact;
 - Landscape irrigation;
 - Diverted stream flows;
 - Rising groundwaters;
 - Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20);
 - Uncontaminated pumped groundwater;
 - Discharges from potable water sources managed in a manner to avoid instream impact;
 - 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 freshwater swimming pool discharges managed in a manner to avoid instream impact;
 - Street and pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact;
 - Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled or similarly treated prior to discharge;
 - Discharges or flows from firefighting activities;

- Discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with §9.1-207.1 of the Code of Virginia; or
- Other activities generating discharges identified by the department as not requiring VPDES authorization.

9. 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 no flows present from potential illicit discharges. These dry weather screening events shall record the following information:

1. The unique identifier for the outfall or observation point;
2. Time since the last precipitation event;
3. The estimated quantity of the last precipitation event;
4. Site descriptions (e.g., conveyance type and dominant watershed land uses);
5. Observed indicators of possible illicit discharge events, such as floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth);
6. Whether or not a discharge was observed;
7. If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g. odor, color, clarify) and the physical condition of the outfall; and
8. For observation points, the location, downstream outfall unique identifier and risk factors or rationale for establishing the observation point.

Investigations

In the event an unauthorized nonstormwater flow is observed, or evidence suggests that illicit discharges may exist, further investigation shall be administered within the timeframe as follows:

- If the illicit discharge is active, an investigation shall be conducted as soon as practicable.
- If the illicit discharge is intermittent or historic, an investigation shall be conducted as soon as practicable, but within five days of receiving the report.
- If the illicit discharge is suspected of being sanitary sewage or significantly contaminated, it shall be prioritized for investigation first.
- If the illicit discharge is suspected of being less hazardous to human health and safety, the investigation may be delayed until after all suspected sanitary sewage or significantly contaminated discharges have been investigated and addressed.

Methodology for determining the source of illicit discharges are as follows:

- Storm drain network investigations: This isolates the discharge to a specific section of the drainage network through strategic manhole inspections.
 - Manhole inspections – Moving through the storm sewer system upstream from the outfall point or point in the system where an illicit discharge has been identified. Manholes closest to the outfall or discharge point should be investigated first, with staff

progressively moving up the storm sewer system and inspecting manholes until it can be determined either where the source is coming in or between which two manholes the source is coming into the system. Visual observations should be used to look for presence of flow, colors, odors, floatable materials, or deposits or stains. **Do not enter the pipe** unless properly equipped for confined space entry. Photographs should be taken whenever possible.

- Drainage area investigations: Conducting surveys and analyses of the drainage area where the discharge has been located. This method is useful when the discharge has distinct or unique characteristics that can be linked to a specific business or operation.
 - Can include drive-by surveys of the drainage area to locate possible generating sites; and/or
 - GIS analysis to identify potential properties with septic systems, industrial and other potential generating sites.
- On-site investigations: Once the segment of the storm sewer system has been identified, one of the following on-site investigative strategies may be considered:
 - Video inspection (CCTV)
 - Dye and/or smoke testing

If an illicit discharge is found, but within six months of the beginning of the investigation neither the source has been identified nor the same discharge has been observed again, it shall be documented and the investigation can be closed. If the observed/reported discharge is intermittent, a minimum of three separate attempts shall be made to observe the discharge while it is active. If these attempts are not successful, it shall be documented and the investigation can be closed. If the source of the discharge is determined to be the result of an operational activity, the activity shall be immediately stopped. Any remedial actions that can be taken to mitigate the discharge are assessed and implemented as appropriate.

If the source of the discharge is a spill or release of hazardous material, qualified professionals shall be called to respond to the situation and employ appropriate spill response measures. If the source of the discharge is the result of an illegal or illicit connection to the storm sewer system, measures to eliminate or disconnect the connection shall be employed.

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 or University Police 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 and 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 our IDDE Database and include:

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.

10. Training and Education

A training program for Stormwater Pollution Prevention/Good Housekeeping and IDDE is presented to applicable employees upon hire and no less than once per 24 months. Educational materials for Stormwater Pollution Prevention and IDDE are distributed through various forms of media to the members of the University.

APPENDIX G

SAMPLES OF PUBLIC EDUCATION MATERIALS



Side 1



Side 2

No Dumping Coasters



Stormwater Stickers



Stormwater Business Cards



Pet Waste Bags

Test, don't just guess about fertilizing.

Testing your soil allows you to see what, if any, nutrients your lawn is lacking.

You'll need

- 1 Soil test kit
- 1 Stainless steel or chrome-plated soil probe, hand garden trowel, shovel or spade
- 1 Clean plastic bucket or container

Do not use brass, bronze or galvanized tools because they will contaminate samples with copper and/or zinc.

Visit askH2Green.org/soil-testing for more info.

See back page for a list of locations where you can pick up a soil test kit.

GOOD TO DO

Pick up a soil test kit today at your local garden store or a Virginia Cooperative Extension office near you...

CHESAPEAKE
310 Shaw Drive
Chesapeake, VA 23322
757.382.6348

GLoucester County
7800 Gensage Court
Gloucester, VA 23061
804.693.2602

HAMPTON
3915 Cameron Dr., Ste 340
Hampton, VA 23666
757.7271001

ISLE OF WIGHT COUNTY
Public Services Center
6700 Ronsaville Circle, Ste 2
Isle of Wight, VA 23367
757.365.6297

JAMES CITY COUNTY/ WILLIAMSBURG
2527 Fagan St., P.O. Box 63
Trenton, VA 23168
757.564.2070

NEWPORT NEWS
729 Florida Shells Blvd.,
Ste 1000
Newport News, VA 23606
757.597.4838

NORFOLK
830 Southampton Ave.,
Ste 2000
Norfolk, VA 23510
757.643.2816

PORTSMOUTH
125 Union Street
Portsmouth, VA 23701
757.363.5907

SOUTHAMPTON COUNTY
21300 Plains Road
Courtland, VA 22837
703.653.2572

SUFFOLK
440 Market Street
P.O. Box 218
Suffolk, VA 23434
757.514.4330

SURRY COUNTY
45 School Street
Surry Government Center
Surry, VA 22853
757.284.0759

VIRGINIA BEACH
2449 Virginia Anne Road
Building #14, 2nd Floor
Virginia Beach Municipal Center
Virginia Beach, VA 23456
757.285.4700

YOKE COUNTY/POQUOSON
100 County Drive
Yorktown, VA 23690
757.850.4940

GOOD TO KNOW

Time to fertilize or is it?

Follow our guidelines before fertilizing... It might save you money and it will definitely save our waterways.

BEFORE YOU FERTILIZE test your soil.

GOOD TO DO

soil testing guidelines

When

Take a soil sample a few months before initiating any new landscaping. In Hampton Roads, it's best to test every two to three years.

How

- 1 Open a hole with a shovel, spade or trowel from the surface to the proper depth for your landscape area, about two to four inches for established lawns. Set that soil aside. If you are using a soil probe, insert it into the soil to the proper depth and remove the plug from the ground.
- 2 With your shovel or trowel, remove a one-inch-thick slice from the smooth side of the open hole.
- 3 With the slice of soil on the blade of the shovel, remove the sides of the slice with a trowel knife or your hands to create a ribbon of soil two inches wide and one inch thick of the proper depth. Place the ribbon (or plug if using a soil probe) into a container.

SOIL TEST REPORT

You will learn the following information about your soil:

- pH (between 5.5 acids or 8.5 basic)
- Phosphorus (ppm) content
- Potassium (ppm) content
- Calcium (ppm) content
- Magnesium (ppm) content
- Zinc (ppm) content
- Manganese (ppm) content
- Copper (ppm) content
- Iron (ppm) content
- Boron (ppm) content

Where

To obtain accurate soil test results, a soil sample must be made up of multiple sub-samples. These sub-samples are mixed together to make up the composite soil sample for this lawn. For a typical lawn, it is recommended that two sub-samples be collected from the front yard and two be collected from the back yard.

- 4 Remove any surface mat of grass, litter and any rocks. Place the soil in a clean bucket or container. Remember that a clean, plastic container is best.
- 5 Continue to take additional soil sub-samples from the uniform landscape area. By mixing these sub-samples together, you create the composite sample that will be sent to the Soil Testing Laboratory.

A soil test is not usually performed for the presence of N (nitrogen). Soil Testing Laboratories still provide nitrogen fertilizer recommendations. You can often use much less than is recommended to get successful results.

You may not need to use any fertilizer if you are mulching your grass clippings back onto your lawn.

In Hampton Roads, our soil is naturally rich in phosphorus so, with the exception of new plantings, adding phosphorus is often not necessary.

If your soil test indicates you need to fertilize, make sure you fertilize at the right time of year for your grass.

Cool-season grasses

- Tall fescue } mow to 2-3"
- Fine fescue }
- Ryegrass mow to 1 1/2 - 2 1/2"

ideal for areas that get light shade
seed in late summer
if needed, fertilize in fall
mow at higher heights during summer months

Warm-season grasses

- Zoysia mow to 1 1/2 to 2"
- Centipede mow to 1 1/2 - 1"
- Bermudagrass mow to 1/2 - 1"

ideal for areas that get full sun
seed in early spring
if needed, fertilize in spring

CHOOSE SLOW-RELEASE FERTILIZERS

Coated and water-insoluble slow-release fertilizers help roots develop and wash away less easily. Do not apply slow- or time-released nitrogen at rates above one pound per 1,000 square feet. Apply only as much as it says.

FOR A CLEANER, GREENER HAMPTON ROADS

askH2Green.org | [Facebook](#) | [Twitter](#) | [LinkedIn](#)

Fertilizer Flyers