

NC STATE UNIVERSITY

Stormwater Management Plan **NCS000376**

May 2024



Prepared by:

NC State University

Environmental Health and Safety

Campus Box 8007 ♦ 2620 Wolf Village Way ♦ Raleigh, North Carolina ♦ 27695

Table of Contents

Contents	
PART 1: INTRODUCTION	1
PART 2: CERTIFICATION	2
PART 3: MS4 INFORMATION	3
1.1 Permitted MS4 Area	3
1.2 Existing MS4 Mapping	4
1.3 Receiving Waters	4
1.4 MS4 Interconnection	6
1.5 Total Maximum Daily Loads (TMDLs)	7
1.6 Endangered and Threatened Species and Critical Habitat	8
1.7 Industrial Facility Discharges	8
1.8 Non-Stormwater Discharges	8
1.9 Target Pollutants and Sources	9
PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION	11
1.10 Organizational Structure	11
1.11 Program Funding and Budget	13
1.12 Shared Responsibility	13
1.13 Co-Permittees	13
1.14 Measurable Goals for Program Administration	13
PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM	15
PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM	18
PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	20
PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM	24
PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM	26
PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS	31

List of Tables

- Table 1: Summary of MS4 Mapping
- Table 2: Summary of MS4 Receiving Waters
- Table 3: Summary of Approved TMDLs
- Table 4: Summary of Federally Listed Species/Habitat Impacted by Surface Water Quality
- Table 5: NPDES Stormwater Permitted Industrial Facilities
- Table 6: Non-Stormwater Discharges
- Table 7: Summary of Target Pollutants and Sources
- Table 8: Summary of Responsible Parties
- Table 9: Shared Responsibilities
- Table 10: Co-Permittee Contact Information
- Table 11: Program Administration BMPs
- Table 12: Summary of Target Pollutants & Audiences
- Table 13: Public Education and Outreach BMPs
- Table 14: Public Involvement and Participation BMPs
- Table 15: Illicit Discharge Detection and Elimination BMPs
- Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program
- Table 17: Construction Site Runoff Control BMPs
- Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program
- Table 19: Summary of Existing Post-Construction Program Elements
- Table 20: Post Construction Site Runoff Control BMPs
- Table 21: Pollution Prevention and Good Housekeeping BMPs

PART 1: INTRODUCTION

The purpose of this Stormwater Management Plan (SWMP) is to establish and define the means by which NC State University will comply with its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and the applicable provisions of the Clean Water Act to meet the federal standard of reducing pollutants in stormwater runoff to the maximum extent practicable.

This SWMP identifies the specific elements and minimum measures that NC State University will develop, implement, enforce, evaluate and report to the North Carolina Department of Environmental Quality (NCDEQ) Division of Energy, Minerals and Land Resources (DEMLR) in order to comply with the MS4 Permit number NCS000376, as issued by NCDEQ. This permit covers activities associated with the discharge of stormwater from the MS4 as owned and operated by NC State University. University areas subject to this permit include the following: Centennial Campus, Central Campus, North Campus, South Campus, and West Precinct. Nearby University facilities such as University Research Unit #1 west of Blue Ridge Road, Reedy Creek Equine Farm, Randleigh Farm, and Lake Wheeler Road Field Laboratories south of Tryon Road are not included in this permit; stormwater runoff at these sites is managed in accordance with local requirements.

In preparing this SWMP, NC State University has evaluated its MS4 and the permit requirements to develop a comprehensive 5-year SWMP that will meet the University's needs, address local water quality issues and provide the minimum measures necessary to comply with the permit.

Once the SWMP is approved by NCDEQ, all provisions contained and referenced in this SWMP, along with any approved modifications of the SWMP, are incorporated by reference into the permit and become enforceable parts of the permit. Any major changes to the approved SWMP will require resubmittal, review and approval by NCDEQ, and may require a new public comment period depending on the nature of the changes.

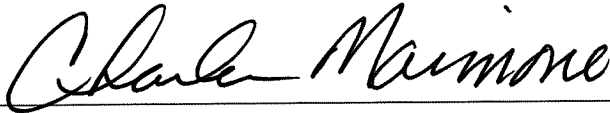
PART 2: CERTIFICATION

By my signature below I hereby 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 fines and imprisonment for knowing violations.

I am also aware that the contents of this document shall become an enforceable part of the NPDES MS4 Permit, and that both the Division and the Environmental Protection Agency have NPDES MS4 Permit compliance and enforcement authority.

- I am a ranking elected official.
- I am a principal executive officer for the permitted MS4.
- I am a duly authorized representative for the permitted MS4 and have attached the authorization made in writing by a principal executive officer or ranking elected official which specifies me as (*check one*):
 - A specific individual having overall responsibility for stormwater matters.
 - A specific position having overall responsibility for stormwater matters.

<i>Signature:</i>	
<i>Print Name:</i>	Charles A. Maimone
<i>Title:</i>	Executive Vice Chancellor for Finance and Administration
Signed this <u>5/14</u> day of 20 <u>24</u> .	

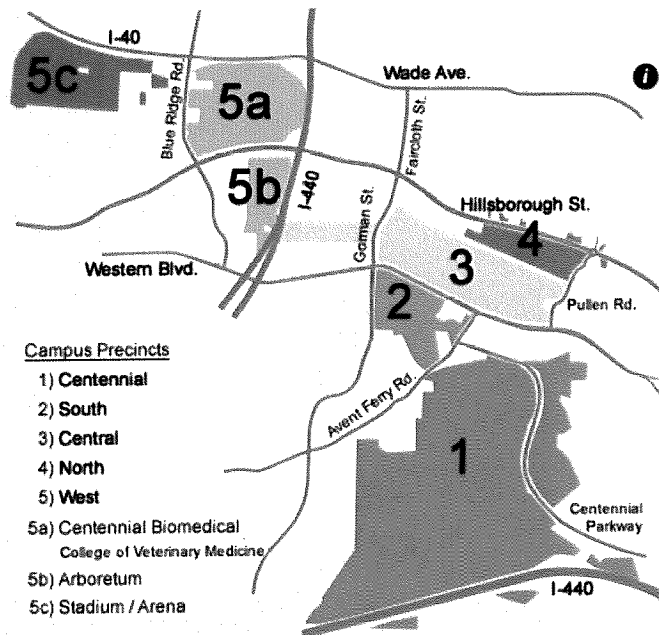
PART 3: MS4 INFORMATION

1.1 Permitted MS4 Area

This SWMP applies to the following areas of NC State University: Centennial Campus, Central Campus, North Campus, South Campus, and West Precinct, and includes all regulated activities associated with the discharge of stormwater from the MS4. The map below shows the permitted MS4 areas of NC State University as of the date of this document.

NCSU owns and operates additional lands in the Raleigh area that are primarily rural/agricultural with relatively undefined stormwater conveyances. These remote facilities such as Randleigh Farm, Howling Cow Dairy Education Center and Creamery, Lake Wheeler Road Field Laboratories south of Tryon Road and Reedy Creek Equine Education Unit located west of Edwards Mill Road are managed in compliance with pertinent requirements for those locations and activities, but are not subject to the NPDES MS4 permit requirements.

NC State University Campus Map



1.2 Existing MS4 Mapping

The current MS4 mapping includes all areas covered under the University's MS4 permit: and consists of pipe, inlet, manhole, catch basin and outfall locations.

The NC State University MS4 map is publicly available online at: <https://ncsugisweb.oit.ncsu.edu/ncstate-stormwater-viewer/>. Not all feature attribute data is available for view in the publicly accessible map. NC State University has included all campus outfalls in Table 1 regardless of pipe diameter or drainage area.

Table 1: Summary of MS4 Mapping

Percent of MS4 Area Mapped	99	%
No. of Major Outfalls* Mapped	45	total

**An outfall is a point where the MS4 discharges from a pipe or other conveyance (e.g. a ditch) directly into surface waters. Major outfalls are required to be mapped to meet permit requirements. A major outfall is a 36-inch diameter pipe or discharge from a drainage area > 50-acres; and for industrial zoned areas a 12-inch diameter pipe or a drainage area \geq 2-acres.*

1.3 Receiving Waters

The NC State University MS4 is located within the Neuse River Basin and discharges directly into receiving waters as listed in Table 2 below. Applicable water quality standards listed below are compiled from the following NCDEQ sources:

- Waterbody Classification Map
- Impaired Waters and TMDL Map
- Most recent NCDEQ Final 303(d) List

Table 2: Summary of MS4 Receiving Waters

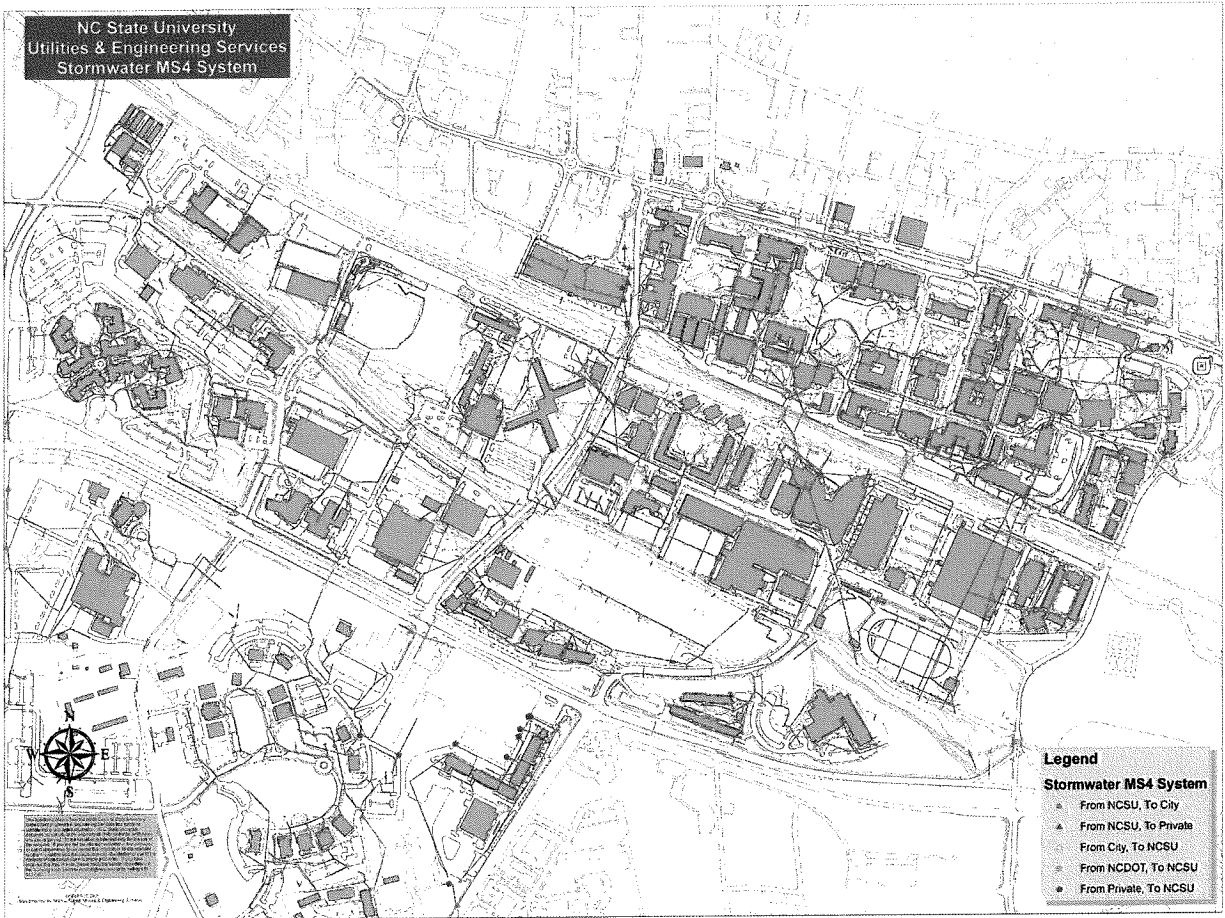
Receiving Water Name	Stream Index / AU Number	Water Quality Classification	303(d) Listed Parameter(s) of Interest
North Creek (UT Lake Raleigh)	27-33-11	C; NSW	Benthos (1996) Fish Tissue Mercury (2012)
Rocky Branch	27-34-6 27-34-6a	C; NSW	PCB Fish Tissue Advisory Fecal Coliform (2012)
Bushy Creek (Bushy Branch)	27-34-3	C; NSW	Fish Tissue Mercury (2008)
UT2 to UT3 to Richlands Creek	27-33-11ut3ut2	C; NSW	Fish Tissue Mercury (2012)
House Creek	27-33-13	C; NSW	Fish Tissue Mercury (2008)

Walnut Creek	27-34-(1.7) 27-34-4a 27-34-4b	C; NSW	Fish Community PCB Fish Tissue Advisory Copper
UT Walnut Creek		C; NSW	Fish Tissue Mercury (2008)
Walnut Creek (Lake Raleigh)	27-34-3.5	B; NSW	PCB Fish Tissue Advisory

1.4 MS4 Interconnection

The NC State University MS4 is interconnected with another regulated MS4 and directly receives stormwater from the City of Raleigh MS4. The number of interconnections entering the NC State University MS4 from the City of Raleigh MS4 is 64, as determined by NC State University's GIS/Autocad Technician using GIS mapping data of our stormwater system.

The NC State University MS4 is interconnected with another regulated MS4 and directly discharges stormwater into the City of Raleigh MS4. The number of interconnections leaving the NC State University MS4 to the City of Raleigh MS4 is 45, as determined by NC State University's GIS/Autocad Technician.



1.5 Total Maximum Daily Loads (TMDLs)

There are no approved TMDL(s) within the NC State University MS4 jurisdictional area.

1.6 Endangered and Threatened Species and Critical Habitat

Significant populations of threatened or endangered species and/or critical habitat are not identified within the regulated MS4 urbanized area, as determined by a review of the Endangered and Threatened Species and Species of Concern by County for North Carolina Map and Listed species believed to or known to occur in North Carolina map as provided by the U.S. Fish and Wildlife Service.

1.7 Industrial Facility Discharges

The NC State University MS4 jurisdictional area includes the following industrial facilities which hold NPDES Industrial Stormwater Permits, as determined from the NCDEQ Active NPDES Stormwater Permit List and/or Active Stormwater Permits Map.

Table 5: NPDES Stormwater Permitted Industrial Facilities

Permit Number	Facility Name
NCG080128	North Carolina State Univ-Wake (Motor Pool)
NCGNE0675	Chemical and Radioactive Waste Mgmt. Facility

1.8 Non-Stormwater Discharges

The water quality impacts of non-stormwater discharges have been evaluated by NC State University as summarized in Table 6 below. The unpermitted non-stormwater flows listed as incidental do not significantly impact water quality. NC State University has evaluated residential and charity car washing and street washing for possible significant water quality impacts; the University does not allow these types of activities to be held on campus.

The Division has not required that other non-stormwater flows be specifically controlled by NC State University.

Table 6: Non-Stormwater Discharges

Non-Stormwater Discharge	Water Quality Impacts
Water line and fire hydrant flushing	Incidental
Landscape irrigation	Incidental
Diverted stream flows	Incidental
Rising groundwater	Incidental
Uncontaminated groundwater infiltration	Incidental
Uncontaminated pumped groundwater	Incidental
Uncontaminated potable water sources	Incidental
Foundation drains	Incidental
Air conditioning condensate	Incidental
Irrigation waters	Incidental
Springs	Incidental
Water from crawl space pumps	Incidental

Footing drains	Incidental
Lawn watering	Incidental
Residential and charity car washing	Not Applicable
Flows from riparian habitats and wetlands	Incidental
Dechlorinated swimming pool discharges	Incidental
Street wash water	Not Applicable
Flows from firefighting activities	Incidental

1.9 Target Pollutants and Sources

In addition to those target pollutants identified above, NC State University is aware of several other significant pollutants affecting water quality within the permitted MS4 area. These include litter, nutrients, sediment, oil, grease, pesticides, fertilizers, and other known pollutants.

The above listed pollutants were identified based on a number of factors, including: complaints, stormwater exposure assessments, routine outfall screening observations, and a review of the University's operations and maintenance activities. Litter is a significant source of pollution in Rocky Branch creek; sources for this pollutant include interconnections with the City of Raleigh MS4, the creek's proximity to a campus greenway and a significant number of parking areas that discharge to the creek. Nutrients are a target pollutant identified in the 2009 Neuse River Basinwide Water Quality Plan; the target sources of these pollutants are landscaping operations and maintenance activities and new development and redevelopment projects. Sediment is the number one stormwater pollutant by volume in the State of North Carolina; the primary source of this pollutant on campus is active construction sites. Oil, grease, pesticides, and fertilizer have the potential to be significant sources of pollution due to the large quantities present on campus and used to support daily operations and maintenance activities; however, the University maintains a robust pollution prevention program to mitigate the risk of a spill or over application of these materials. Other known pollutants on campus include materials used in teaching and research labs. These materials are exclusively used indoors and transported and loaded/unloaded in a highly controlled manner with appropriate containment present to mitigate the risk of contact with stormwater.

Table 7 below summarizes the water quality pollutants identified throughout Part 3 of this SWMP, the likely activities/sources/targeted audiences attributed to each pollutant, and identifies the associated SWMP program(s) that address each. In addition, NC State University has designated the campus population, facilities and athletics maintenance field staff, and dining staff as target audiences that are likely to have significant stormwater impacts.

Table 7: Summary of Target Pollutants and Sources

Target Pollutant(s)	Likely Source(s)/Target Audience(s)	SWMP Program Addressing Target Pollutant(s)/Audience(s)
Litter	Campus population Maintenance field employees	Public Education & Outreach Program Pollution Prevention and Good Housekeeping Program
Nutrients	Maintenance field employees	Public Education & Outreach Program Post-Construction Site Runoff Control Pollution Prevention and Good Housekeeping Program
Sediment	Construction project managers Maintenance field employees	Public Education & Outreach Program Construction Site Runoff Control Program Pollution Prevention and Good Housekeeping Program
Oil & Grease	Maintenance field employees	Public Education & Outreach Program Pollution Prevention and Good Housekeeping Program
Pesticides & Fertilizers	Maintenance field employees	Pollution Prevention and Good Housekeeping Program
Other Known Pollutants	Lab waste management employees	Pollution Prevention and Good Housekeeping Program

PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION

1.10 Organizational Structure

The University holds both responsibility and liability under NPDES Stormwater Permit NCS000376. The Executive Vice Chancellor for Finance and Administration is the University's Executive Officer who has ultimate responsibility for implementation, compliance and enforcement of the University's NPDES Stormwater Permit and associated Stormwater Management Program. The SMAC is the University's stakeholder team in charge of development, implementation and compliance with the permitted Stormwater Management Program. The SMAC shall consist of a minimum of five (5) members who represent the primary organizations (Facilities, Real Estate & Development, and Environmental Health & Safety) affected by the Stormwater Management Program. The Environmental Health & Safety Department is responsible for the administration, management, and oversight of the permit. University Stakeholders and component organizations affected by the implementation of the permit shall develop and implement procedures, practices, and programs to ensure compliance with the permit.

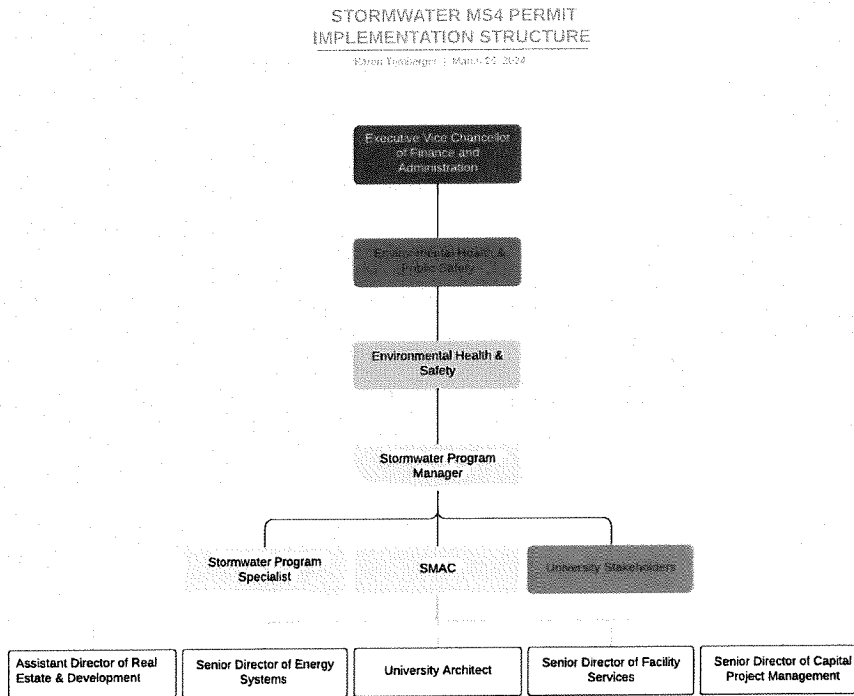


Table 8: Summary of Responsible Parties

SWMP Component	Responsible Position	Department
Stormwater Program Administration	Environmental Affairs Manager	Environmental Health and Safety
SWMP Management	Environmental Compliance Specialist	Environmental Health and Safety
Public Education & Outreach	Environmental Compliance Specialist	Environmental Health and Safety
Public Involvement & Participation	Environmental Affairs Manager	Environmental Health and Safety
Illicit Discharge Detection & Elimination	Environmental Compliance Specialist	Environmental Health and Safety
Construction Site Runoff Control	Environmental Compliance Specialist	Environmental Health and Safety
Post-Construction Stormwater Management	Environmental Compliance Specialist	Environmental Health and Safety
Pollution Prevention/Good Housekeeping for Campus Operations	Senior Director Assistant Director Facility Ops Director Ast. Athletic Director HFL Superintendent	Facilities Services URED Campus Enterprises Athletics Horticulture
Facilities Operation & Maintenance Program	Senior Director	Facilities Services
Spill Response Program	Environmental Affairs Manager/EHS Professional	Environmental Health and Safety/Utilities and Engineering
MS4 Operation & Maintenance Program	Senior Director Assistant Director Facility Ops Director Ast. Athletic Director HFL Superintendent	Facilities Services URED Campus Enterprises Athletics Horticulture
SCM Operation & Maintenance Program	Senior Director Assistant Director Facility Ops Director Ast. Athletic Director HFL Superintendent	Facilities Services URED Campus Enterprises Athletics Horticulture

Pesticide, Herbicide & Fertilizer Management Program	Senior Director Assistant Director Facility Ops Director Ast. Athletic Director HFL Superintendent	Facilities Services URED Campus Enterprises Athletics Horticulture
Vehicle & Equipment Cleaning Program	Senior Director Facility Ops Director	Facilities Services Campus Enterprises
Pavement Management Program	Senior Director	Facilities Services

1.11 Program Funding and Budget

In accordance with the issued permit, NC State University shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and comply with the requirements of the NPDES MS4 Permit. The budget includes the permit administering and compliance fee, which is billed by the Division annually. The NC State Stormwater budget has two funding sources. Environmental Health and Safety has a \$14,000 budget for educational materials, printing costs, supplies, permit fees, and etc. The Facilities Department has a \$250,000 budget for the inspection, maintenance, and renewal of SCMs on campus which is allocated from the Utilities budget. Major SCM renewal projects are funded through central University resources.

1.12 Shared Responsibility

NC State University does not share responsibility for implementing minimum control measures. The University is responsible for implementing all minimum control measures in accordance with NPDES MS4 Permit requirements.

1.13 Co-Permittees

There are no other entities applying for co-permittee status under the NPDES MS4 permit number NCS000376 for NC State University.

1.14 Measurable Goals for Program Administration

NC State University will manage and report the following Best Management Practices (BMPs) for the administration of the Stormwater Management Program.

Table 11: Program Administration BMPs

Permit Ref.	2.1.2 Program Implementation Measures to evaluate the performance and effectiveness of the SWMP program components at least annually. Results shall be used by the permittee to modify the program components as necessary to accomplish the intent of the Stormwater Program.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
1.	Annual Self-Assessment			
	Evaluate the performance and effectiveness of the program components at least annually. Results shall be used to modify the program components as necessary to accomplish the intent of the Stormwater Program..	1. Prepare, conduct and document an annual evaluation of the program components..	1. Annually for Permit Years 1 –5	1. Yes/No
2.	Shared Responsibility (Permit Ref. 1.4)			
	Agreements with entities operating on behalf of the University will be reviewed to confirm that the entity has agreed to implement part of the program on the University’s behalf and that all required documentation will be submitted to the University for documentation and reporting purposes.	1. Review all agreements and confirm that they meet all requirements outlined in 1.4 of the MS4 permit.	1. Permit Year 1	1. Yes/No/NA
3.	Minimum Control Measures (Permit Ref. 2.2.2)			
	Written programs will be created to assure compliance with part 2.2.2 of the MS4 Permit. Written programs shall be reviewed on an annual basis and modified if needed to best outline the program and needs of the University.	1. Develop and maintain written programs for all minimum control measures.	1. Permit Year 1	1. Yes/No
		2. Review written programs and modify/update.	2. Annually	2. Yes/No
4.	Funding and Staffing (Permit Ref. 2.1.1)			
	The funding and staffing status of the program will be evaluated by the SMAC Committee staff to confirm that the program is meeting permit requirements.	1. Review and analyze the current funding and staffing of the program.	1. Annually	1. Adequate/inadequate

Permit Ref.	1.6: Permit Renewal Application Measures to submit a permit renewal application no later than 180 days prior to the expiration date of the NPDES MS4 permit.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
5.	Permit Renewal Application			
	Submit a permit renewal application and Draft SWMP no later than 180 prior to permit expiration.	1. Draft SWMP applicable to the proceeding 5 years following permit re-issuance.	1. Permit Year 5	1 Yes/No
		2. Certify the stormwater permit renewal application (Permit renewal application form and Draft SWMP for the next 5-year permit cycle) and submit to NCDEQ at least 180 days prior to permit expiration.	2. Permit Year 5	2. Date of permit renewal application submittal.

PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM

NC State University will implement a Public Education and Outreach Program to distribute educational materials to the University community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and steps the University community can take to reduce pollutants in stormwater runoff.

The target audiences and identified pollutants listed in Part 3.9 of this SWMP, which will be addressed by the Public Education and Outreach Program, are summarized in Table 12 below. In addition, NC State University is required to inform students, faculty, and employees of the hazards associated with illicit discharges, illegal dumping, and improper disposal of waste.

Table 12: Summary of Target Pollutants & Audiences

Target Pollutants/Sources	Target Audience(s)
Litter	Campus Population, Facilities and Athletics Maintenance Field Employees
Nutrients	Campus Population, Facilities and Athletics Maintenance Field Employees
Sediment	Facilities and Athletics Maintenance Field Employees
Oil & Grease	Campus Population, Facilities and Athletics Maintenance Field Employees, Dining Employees
Illicit Discharges	Campus Population, Facilities and Athletics Maintenance Field Employees, Dining Employees
Illegal Dumping	Campus Population, Facilities and Athletics Maintenance Field Employees, Dining Employees
Improper Disposal of Waste	Campus Population, Facilities and Athletics Maintenance Field Employees, Dining Employees

NC State University will manage, implement and report the following public education and outreach BMPs.

Table 13: Public Education and Outreach BMPs				
Permit Ref.	3.2.2 and 3.2.4: Outreach to Targeted Audiences Measures to identify the specific elements and implementation of a Public Education and Outreach Program to share educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and how the public can reduce pollutants in stormwater runoff. The permittee shall provide educational information to identified target audiences on pollutants/sources identified in table 12 above, and shall document the extent of exposure of each media, event or activity, including those elements implemented locally or through a cooperative agreement.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric

6.	Public Education and Outreach Program			
	The University currently implements a Public Education and Outreach Plan; the Plan identifies target audiences and methods for communicating information about targeted pollutants, illicit discharges, illegal dumping, and improper disposal of waste to target audiences.	1. Establish a tracking system(s) to document University public education activities.	1. Annually	1 Yes/No
7.	Public Education and Outreach			
	Develop/update and distribute pollution prevention brochures & educational materials	1. Develop/update educational media for campus.	1. Annually.	1. Yes/No
		2. Man a table at a campus event	2. Annually	2. Contact hours and date of event
Permit Ref.	2.1.7, 3.2.3 and 3.6.5(c): Web Site Measures to provide a web site designed to convey the program's message(s) and provide online materials including ordinances, or other regulatory mechanisms, or a list identifying the ordinances or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of the permit and SWMP. The web page shall also provide developers with all relevant post-construction requirements, design standards, checklists and/or other materials.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
8.	Stormwater Webpage			
	The University currently maintains a Stormwater Program webpage (go.ncsu.edu/stormwaterprogram). The webpage provides information about the MS4 program, training resources, and access to current Program Plans, checklists, and forms. Additionally, the website has a link to a digital form for users to report illicit discharge events.	1. Review and update webpage information, resources, and links to provide most current Stormwater program information to users.	1. Annually (Permit Years 1-5)	1. Yes/No
Permit Ref.	3.2.5: Stormwater Hotline Measures for a stormwater hotline/helpline for the purpose of public education and outreach.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
9.	Public Education and Outreach Hotline			

	The University currently maintains a hotline as a resource for public education and general stormwater inquiries with the University police. Additionally, Stormwater Program personnel contact information is available on the University's Environmental Health and Safety website.	1. Review University Police SOP for responding to hotline reports.	1. Annually	1. Yes/No
		2. Maintain operation of the current Hotline.	1. Monitored daily	1. Yes/No.

PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

This SWMP identifies the minimum elements and implementation of a Public Involvement and Participation Program that complies with applicable State, Tribal and local public notice requirements. NC State University will manage, implement, and report the following public involvement and participation BMPs.

Table 14: Public Involvement and Participation BMPs				
Permit Ref.	3.3.1: Public Input Mechanisms for public involvement that provide for input on stormwater issues and the stormwater program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
10.	SMAC Committee			
	The University's Stormwater Management Advisory Committee oversees implementation and compliance of the Stormwater Management Program.	1. Meets Quarterly to discuss issues	1. Quarterly	1. Total number of meetings
		2. Publish SMAC meeting schedule on stormwater program website	2. As needed	2. Yes/No
Permit Ref.	3.3.2: Volunteer Opportunities Measures to provide volunteer opportunities designed to promote ongoing citizen participation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
11.	Clean Up Events			
	Facility Services donates gloves, bags, etc. for student group clean up activities.	1. Facilitate campus cleanup events benefiting stormwater quality	1. Annually	1. Yes/No

PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

NC State University will develop, manage, implement, document, report and enforce an Illicit Discharge Detection and Elimination Program which shall, at a minimum, include the following illicit discharge detection and elimination BMPs.

Table 15: Illicit Discharge Detection and Elimination BMPs				
Permit Ref.	3.4.1: MS4 Map Measures to develop, update and maintain a municipal storm sewer system map including stormwater conveyances, flow direction, major outfalls and waters of the United States receiving stormwater discharges.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
12.	MS4 Map Updating			
	The existing map will be continuously updated.	1. When new pipes and/or outfalls are added to the system, they will be added to the map	1. Annually	1. Yes/No
Permit Ref.	3.4.2: Regulatory Mechanism Measures to provide an IDDE ordinance or other regulatory mechanism that provides legal authority to prohibit, detect, and eliminate illicit connections and discharges, illegal dumping and spills into the MS4, including enforcement procedures and actions.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
13.	Regulatory Mechanism			
	The University's Stormwater Program Manager oversees the implementation of the Illicit Discharge Program in accordance with NCS000376 and the University's Illicit Discharge Program document, with the exception of disciplinary actions against University staff and faculty. All disciplinary actions shall be managed through the office of the Executive Vice Chancellor for Finance and Administration (https://policies.ncsu.edu/regulation/reg-04-05-01 .)	1. Review and update as necessary	1. Annually	1. Yes/No.
Permit Ref.	3.4.3: IDDE Plan			

	<p>Measures to maintain and implement a written IDDE Plan to detect and address illicit discharges, illegal dumping and any non-stormwater discharges identified as significant contributors of pollutants to the MS4. The plan shall provide standard procedures and documentation to:</p> <ol style="list-style-type: none"> Locate priority areas likely to have illicit discharges, Conduct routine dry weather outfall inspections, Identify illicit discharges and trace sources, Eliminate the source(s) of an illicit discharge, and Evaluate and assess the IDDE Program. 			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
14.	Outfall Inspections			
	Perform dry weather (no precipitation within 72 hours) outfall inspections to identify any illicit discharges	1. Train personnel to perform dry weather outfall inspections	1. Annually	1. Report date and attendee number.
		2. Inspect 100% Major outfalls each permit year	2. Annually	2. Number of inspections
		3. Inspect 20% of minor outfalls each permit year	3. Annually	3. Number of inspections
15.	IDDE Identification Procedure			
	Maintain and revise, when necessary, the standard operating procedures (SOPs) for illicit discharges/connections	1. Maintain a written IDDE program	1. Continuously	1. Yes/No/
16.	IDDE Program Evaluation			
	Evaluate IDDE program to ensure effectiveness and continuous improvement and identify areas of improvement	1. Review IDDE program with stakeholders	1. Annually	1. Yes/No
		2. Review IDDE reports and identify areas of concern	2. Annually	2. Report the number of IDDE found, verified, and resolved
Permit Ref.	3.4.4: IDDE Tracking Measures for tracking and documenting the date(s) of illicit discharge, illicit connection or illegal dumping was observed, the results of the investigation, any follow-up of the investigation, the date the investigation was closed, the issuance of enforcement actions, and the ability to identify chronic violators.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
17.	Tracking System			
	A tracking system for reported/observed IDDE violations	1. Continue use of the IDDE spreadsheet to track IDDE reports,	1. Continuously	1. Report the number of IDDE found, verified, and resolved

	and follow-up actions will be maintained.	dates, locations, and follow ups		
Permit Ref.	3.4.5: Staff IDDE Training Measures to provide training for municipal staff and contractors who, as part of their normal job responsibilities, may observe an illicit discharge, illicit connection, illegal dumping or spills. Training shall include how to identify and report illicit discharges, illicit connections, illegal dumping and spills. Each staff training event shall be documented, including the agenda/materials, date, and number of staff participating.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
18.	Staff Training			
	Develop a program to educate staff of indicators of potential illicit discharges/connections and the reporting process	1. Train staff with IDDE responsibilities to be aware of the potential to discover IDDE during regular work activities	1. By Permit Year 3 and annually thereafter	1. Report training dates and number of attendees
		2. Pollution Prevention and IDDE identification/reporting training is provided as part of New Employee Orientation.	1. At OnBoarding	1. Report number of attendees
Permit Ref.	3.4.6: IDDE Reporting Measures for the public and staff to report illicit discharges, illegal dumping and spills. The mechanism shall be publicized to facilitate reporting and shall be managed to provide rapid response by appropriately trained personnel.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
19.	Stormwater Hotline			
	The University currently implements a hotline for the purposes of reporting illicit discharge incidents to University police. Additionally, Stormwater Program personnel contact information is available on the University's Environmental Health and Safety website.	1. Maintain operation of the current Hotline.	1. Monitored daily	1. Yes/No.
20.	Stormwater Webpage			
	The University currently maintains a Stormwater Program webpage (go.ncsu.edu/stormwater_program). The webpage provides information about the MS4 program, training resources, and access to current Program Plans, checklists, and forms. Additionally, the website has a link	1. Review and update webpage information, resources, and links to provide most current Stormwater program information to users.	1. Annually	1. Yes/No

	to a digital form for users to report illicit discharge events.			
--	---	--	--	--

PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

In accordance with 15A NCAC 02H .0153, NC State University relies upon the North Carolina Sedimentation Pollution Control Act (SPCA) of 1973 and the NCG010000 permit for construction activities as qualifying alternative programs to meet the NPDES MS4 Permit requirements for all construction site runoff control measures to reduce pollutants in stormwater runoff from construction activities that result in land disturbance of greater than or equal to one acre and any construction activity that is part of a larger common plan of development that would disturb one acre or more.

Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program

Permit Reference	State or Local Program Name	Legal Authority	Implementing Entity	Meets Whole or Part of Requirement
3.5.1 - 3.5.4	State Implemented SPCA Program	15A NCAC Chapter 04	NCDEQ	Whole

NC State University also implements the following BMPs to meet NPDES MS4 Permit requirements.

Table 17: Construction Site Runoff Control BMPs				
Permit Ref.	3.5.6: Public Input Measures to provide and promote a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
21.	Staff Training			
	Train staff who receive calls from the public on the protocols for referral and tracking of construction site runoff control complaints. Most of these calls are received through the stormwater hotline mentioned in BMP #6.	1. Train staff on proper handling of construction site runoff control complaints.	1. Annually	1. Document and report number of staff trained, training date(s) and topics covered.
22	Erosion and Sediment Control (ESC) Program <1 acres			
	NC State personnel review and approve/disapprove all < 1 acre erosion and sediment control plans.	1. Plan Reviews	1. Continuously	1. # of plan reviews
	NC State personnel inspect active land disturbances	2. Inspections Completed	2. Continuously	2. # of inspections
	Tracking non-conformance to erosion & sediment controls	3. Notices Issued	3. Continuously	3. # of notices
Permit Ref.	3.5.5: Waste Management Measures to require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impact to water quality.			

BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
23.	Contractor Education			
	Continue to communicate the NC State University Design and Construction Guidelines Division 02 Waste Material Management - Reuse, Recycling, and Hazardous Waste to all construction contractors	1. Continue to share Design Guideline 02	1. Continuously	1. Yes/No

PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

This SWMP identifies the minimum elements to develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that are located within the NC State University permitted area and discharge into the MS4. These elements are designed to minimize water quality impacts utilizing a combination of structural Stormwater Control Measures (SCMs) and/or non-structural BMPs appropriate for the community, and ensure adequate long-term operation and maintenance of SCMs.

In accordance with 15A NCAC 02H .0153 and .1017, the NC State University implements the following State post-construction program requirements, which satisfy the NPDES Phase II MS4 post-construction site runoff control requirements as Qualifying Alternative Programs (QAPs) in the MS4 area(s) where they are implemented.

Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program

State QAP Name	State Requirements	Local Ordinance / Regulatory Mechanism Reference
Neuse River Basin Nutrient Sensitive (NSW) Management Strategy	15A NCAC 2B .0235	NC State University's Stormwater Management Manual

The NC State University has existing requirements other than Qualifying Alternative Program(s) for implementation of the NPDES Phase II MS4 post-construction program requirements. These existing requirements are codified in local ordinance(s), and implementation is further defined in guidance, manuals and/or standard operating procedure(s) as summarized in Table 19 below.

Table 19: Summary of Existing Post-Construction Program Elements

Permit Requirements for Plan Review and Approval	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(a) Authority	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://policies.ncsu.edu/regulation/reg-04-05-01/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
3.6.3(a) & 15A NCAC 02H.0153(c) Federal, State & Local Projects	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
3.6.3(b) Plan Review	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
3.6.3(c) O&M Agreement	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	
3.6.3(d) O&M Plan	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
3.6.3(e) Deed Restrictions/Covenants	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	

3.6.3(f) Access Easements	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
Permit Requirements for Inspections and Enforcement	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(b) Documentation	https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	
3.6.2(c) Right of Entry	https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	
3.6.4(a) Pre-CO Inspections	https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	
3.6.4(b) Compliance with Plans	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
3.6.4(c) Annual SCM Inspections	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
3.6.4(d) Low Density Inspections	N/A	
3.6.4(e) Qualified Professional	POL 04.20.07 – Occupational Health and Safety Policy https://compliance.ncsu.edu/compliance/matrix/ https://ehs.ncsu.edu/home-page-info/environmental-affairs/storm-water-management/	April 19, 2023
Permit Requirements for Fecal Coliform Reduction	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.6(a) Pet Waste	NC State University RUL 11.30.07; CVM Pet Waste Collection Program	July 12, 2018
3.6.6(b) On-Site Domestic Wastewater Treatment	N/A	

The annual reporting metrics for the post construction program are provided in Table 20: Post Construction Site Runoff Control BMPs below.

Table 20: Post Construction Site Runoff Control BMPs				
Permit Ref.	3.6.5(a), 3.6.5(b), and 4.1.3: Minimum Post-Construction Reporting Requirements Measures to document activities over the course of the fiscal year (July 1 – June 30) including appropriate information to accurately describe progress, status, and results.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
24.	Standard Reporting			
	Implement standardized tracking, documentation, inspections and reporting mechanisms to compile appropriate data for the annual self-assessment process. Data shall be provided for each Post-Construction/Qualifying Alternative Program being implemented as listed in Tables 18 and 19.	1. Track number stormwater management plan reviews performed.	1. Continuously	1. Number of plan reviews performed
		2. Track number of stormwater management plans approved.	2. Continuously	2. Number of plan approvals issued
		3. Maintain a current inventory of projects and constructed SCMs including SCM type, location and last inspection date.	3. Continuously	3. Summary of number and type of SCMs added to the inventory.
		4. Track number of SCM inspections performed.	4. Continuously	4. Number of SCM inspections.
		5. Track number and type of enforcement actions taken.	5. Continuously	5. Number and type of enforcement actions taken.
Permit Ref.	2.3 and 3.6: Qualifying Alternative Program(s) Measures to develop, implement and enforce additional BMPs in order to comply with the QAP state program requirements.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
25.	The QAP requirements are fully met by the existing QAP for post-construction, see references provided in Table 18.			
	The QAP requirements are fully met by the existing QAP for post-construction, see references provided in Table 18.	1. Plan Reviews	1. Continuously	1# of plan approvals

Permit Ref.	3.6.2: Legal Authority Measures to maintain adequate legal authorities through ordinance or other regulatory mechanism to: (a) review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained, (b) request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program, and (c) enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with the Post-Construction Stormwater Management Program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
26.	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.			
	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.	1. See Table 19	1. See Table 19	1. See Table 19
Permit Ref.	3.6.3: Plan Review and Approval Measures to maintain plan review and approval authority, standards and procedures to: (a) Require Federal, State, and local government projects to comply with Post-Construction Program requirements throughout the entire MS4 permitted area, unless the entity is subject to its own NPDES MS4 permit or a qualifying alternative program, (b) Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre, and sites that disturb less than one acre that are part of a larger common plan of development or sale for compliance with 15A NCAC 02H .1017 and the qualifying alternative programs that apply within your jurisdiction, (c) Ensure that each project has an Operation and Maintenance Agreement that complies with 15A NCAC 02H .1050(12), (d) Ensure that each project has an Operation and Maintenance Plan that complies with 15A NCAC 02H .1050(13), (e) Ensure that each project has recorded deed restrictions and protective covenants, that require the project to be maintained consistent with approved plans, and (f) Ensure that each SCM and associated maintenance accesses be protected in a permanent recorded easement per 15A NCAC 02H 1050 (9) and (10).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
27.	Municipal Separate Storm Sewer System (MS4) Program Plans			
	NC State MS4 Program Plans details our process for reviewing and approving plans including but not limited to SCM design and acceptance, operation & maintenance plans and agreements, and inspections.	Plan reviewed and updated	Annually	Yes/No

Permit Ref.	3.6.4: Inspections and Enforcement Measures to maintain inspection and enforcement authority, standards and procedures to: (a) Conduct post-construction inspections prior to issuing a Certificate of Occupancy or a Temporary Certificate of Occupancy. Alternatively, the project owner may provide a surety bond to guarantee compliance with the approved plan(s), (b) Ensure that the project has been constructed in accordance with the approved plan(s), (c) Ensure annual inspection of each permitted SCM to ensure compliance with the approved Operation and Maintenance Agreement, (d) Ensure inspection of low density projects at least once during the permit term, and (e) Require that inspections be conducted by a qualified professional.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
28.	Municipal Separate Storm Sewer System (MS4) Program Plans			
	NC State MS4 Program Plans details our process for reviewing and approving plans including but not limited to SCM as built approval and acceptance, and inspections by qualified personnel.	Plan reviewed and updated	Annually	Yes/No
Permit Ref.	3.6.6: Fecal Coliform Reduction Measures to control, to the maximum extent practicable, sources of fecal coliform per 15A NCAC 02H .1017(7). At a minimum, the program shall include: (a) A pet waste management component, which may be achieved by revising an existing litter ordinance, and (b) An on-site domestic wastewater treatment system component, if applicable, which may be coordinated with local county health department, to ensure proper operation and maintenance of such systems.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
29.	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.			
	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19.	1. See Table 19	1. See Table 19	1. See Table 19

PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS

This SWMP provides a comprehensive pollution prevention and good housekeeping strategy for the NC State University municipal facilities and operations. Pollution prevention and good housekeeping is accomplished through the implementation of seven required programs, which collectively address the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as parks and open space maintenance, fleet and building maintenance, new construction and land disturbances, and municipal storm sewer system maintenance.

Pollution prevention and good housekeeping for operations includes the following programs:

1. Facilities Operation and Maintenance Program
2. Spill Response Program
3. MS4 Operation and Maintenance Program
4. SCM Operation and Maintenance Program
5. Pesticide, Herbicide and Fertilizer Management Program
6. Vehicle and Equipment Maintenance Program
7. Pavement Management Program

The NC State University will manage, implement and report the pollution prevention and good housekeeping BMPs as specified in Table 21 below for each required program.

Table 21: Pollution Prevention and Good Housekeeping BMPs				
Permit Ref.	3.7.1: Municipal Facilities Operation and Maintenance Program Measures to manage facilities that are owned and operated by the permittee and have the potential for generating polluted stormwater runoff. The permittee shall maintain a current inventory of municipal facilities; perform facility inspections and routine maintenance; establish specific frequencies, schedules, and standard documentation; provide staff training on general stormwater awareness and pollution prevention and good housekeeping practices.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
30.	Inventory of University owned or operated facilities			
	Maintain current inventory of facilities and operations owned and operated by the University with the potential to generate potentially polluted runoff as part of the MS4 O&M Plan.	1. Update MS4 O&M Plan as needed	1. Annually	1. Total number of facilities
31.	Facility Inspections			
	Inspection of University facilities to confirm good housekeeping practices including vehicle and equipment	1. Annual facility inspections for high hazard facilities such as	1. Annually	1. Number inspected

	cleaning as specified in the MS4 O&M Plan.	pesticide storage facility and Fleet Services.		
	Inspection of University facilities to confirm good housekeeping practices including vehicle and equipment cleaning as specified in the MS4 O&M Plan.	1. Inspect low hazard facilities once per permit term	1. Once per permit term	1. Number inspected
32.	Staff Training			
	Develop or identify an online staff training program for general stormwater awareness and provide to University employees	1. Provide general stormwater awareness and IDDE training for all new employees	1. Annually	1. Number of employees who completed training
		2. Provide pollution prevention and good housekeeping training to employees with identified relevant job tasks	2. Permit Year 2, annually thereafter	2. Number of employees who completed training
Permit Ref.	3.7.2: Spill Response Program Measures for facilities and operations that store and/or use materials that have the potential to contaminate stormwater runoff if spilled. The permittee shall maintain written spill response procedures and train staff on spill response procedures.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
33.	SPCC Program			
	Continue to implement NC State University's SPCC plans across Campus	1. Review & update Plans as required	1. Annually	1. Yes/No
34.	SPCC Training			
	Continue to implement the SPCC training requirements across campus	1. Review SPCC program requirements with required personnel	1. Annually	1. Report number of employees trained
Permit Ref.	3.7.3: MS4 Operation and Maintenance Program Measures to minimize pollutants in the stormwater collection system. The permittee shall provide operation and maintenance staff training on stormwater awareness and pollution prevention, perform MS4 inspections, maintain the collection system including catch basins and conveyances; and establish specific frequencies, schedules, and standard documentation.			
BMP No.	A Description of BMP	B Measurable Goal(s)	C Schedule for Implementation	D Annual Reporting Metric
35.	MS4 System Inspections and Maintenance			
	MS4 system requiring regular inspection and maintenance as specified in the MS4 O&M Plan	1. Inspect 20% of catch basins/inlets each permit year	1. Permit Term	1. Contact hours
		2. Perform catch basin/inlet cleaning	2. Annually/as needed	2. # of basins cleaned

		3. Visual inspection (20%) of landscaping above the stormwater conveyance system for failures	3. Annually/as needed	3. Linear feet complete
		4. Scope conveyance system (if problem noted during catch basin or visual inspections)	4. As needed	4. Linear feet complete
		5. Verify, document, and prioritize maintenance activities identified	5. Continuously	5. Number of work orders completed
Permit Ref.	3.7.4: Municipal SCM Operation and Maintenance Program Measures to manage municipally-owned, operated, and/or maintained structural SCMs that are installed for compliance with the permittee's post-construction program. The permittee shall maintain a current inventory of SCMs, perform SCM inspections and maintenance, and shall establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
36.	SCM Inventory, Inspection, and Maintenance			
	Performance and documentation of regular inspection and maintenance of University owned regulated SCMs	1. Maintain SCM Inspection & Maintenance certifications for personnel	1. As Required	1. Number of Staff with certification/recertification
		2. Maintain O&M Plans for all SCMs by type	2. As Required	2. Yes/No
		3. Inspect regulated SCM using appropriate inspection forms	3. Annually	3. Number of SCMs inspected,
		4. Maintain NC State University's GIS map of SCMs	4. As required	4. Yes/No/
Permit Ref.	3.7.5: Pesticide, Herbicide and Fertilizer Management Program Measures to minimize water quality impacts from the use of landscape chemicals. The permittee shall provide routine pollution prevention and chemical use, storage and handling training, and shall ensure compliance with permits and applicator certifications.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
37.	Pesticide, Herbicide, and Fertilizer Management Applicator Training			
	Train personnel who apply pesticides, herbicides, and fertilizer to minimize water quality impacts	1. Maintain certifications for appropriate personnel	1. Annually	1. Certifications on file for appropriate personnel
		2. Annual pollution prevention, proper chemical handling, use, and storage training for appropriate personnel	2. Annually	2. Yes/No/Status

Permit Ref.	3.7.6: Vehicle and Equipment Maintenance Program Measures to prevent and minimize contamination of stormwater runoff from areas used for municipal vehicle and equipment maintenance and/or cleaning. The permittee shall ensure that municipal industrial facilities subject to NPDES industrial permitting comply with those permit requirements, provide routine pollution prevention training to staff, perform routine inspections, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
38.	Fleet Services			
	Fleet vehicles cleaned in an indoor wash bay	1. All vehicles washed in the indoor bay or appropriate designated washdown area.	1. As needed	1. Yes/No
39.	Fleet Maintenance			
	Routine maintenance of fleet vehicles	1. Ensure Fleet Staff follow Pollution Prevention & Good Housekeeping as outlined	1. As needed	1. Yes/No
Permit Ref.	3.7.7: Pavement Management Program Measures to reduce pollutants in stormwater runoff from municipally-owned streets, roads, and parking lots within the permittee's corporate limits. The permittee shall implement measures to control litter, leaves, debris, particulate and fluid pollutants associated with vehicles, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
40.	Leaf Collection			
	Scheduled pickup of leaf collection	1. Continue leaf collection procedures	1. Seasonal	1. Estimate cubic yards