ACCOTINK CREEK SEDIMENT TMDL ACTION PLAN

(2018 - 2023 MS4 General Permit)

A Plan for Achieving Sediment Load Reductions to Meet NOVA's TMDL Wasteload Allocation

Permit #: VAR040095
Revised October 2022

This document addresses Part II B of the General Virginia Pollution Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4). This document serves as a NOVA-specific Total Maximum Daily Load (TMDL) Action Plan to identify the best management practices and other interim milestone activities to be implemented to address the sediment waste load allocation (WLA) assigned to NVCC's regulated MS4 area in the *"Volume II Sediment TMDLs for the Accotink Creek Watershed, Fairfax County, Virginia"* approved by the Environmental Protection Agency on May 23, 2018.

Northern Virginia Community College

Annandale Campus

Wetland Studies and Solutions, Inc.®
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EXECUTIVE SUMMARY

Northern Virginia Community College (NOVA) is authorized to discharge stormwater from its municipal separate storm sewer system (MS4) under the Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharge of Stormwater from Small MS4s (MS4 General Permit). To maintain permit compliance, NOVA implements an MS4 Program Plan that includes best management practices (BMPs) to address the six minimum control measures (MCMs) and special conditions for the "*Volume II Sediment TMDLs for the Accotink Creek Watershed, Fairfax County, Virginia*." The sediment TMDL for Accotink Creek, approved by the Environmental Protection Agency (EPA) on May 23, 2018, was required to be developed under the authority of the Clean Water Act (CWA) in response to the creek's listing as an impaired water by the Virginia Department of Environmental Quality (DEQ) for not meeting water quality standards.

The Environmental Protection Agency (EPA) describes a TMDL as a "pollution diet" that identifies the maximum amount of a pollutant that the waterway can receive and still meet water quality standards. In the case of Accotink Creek, sediment was identified as a pollutant of concern and MS4s within the watershed of the impaired stream were assigned a wasteload allocation (WLA). A WLA is the portion of the TMDL that is assigned to a specific source (e.g., an MS4), and it is used to determine the reduction in pollutant loadings required to meet water quality standards. For the Accotink Creek Sediment TMDL, the WLA assigns MS4s a 76% reduction in existing sediment loads from MS4 permitted areas. The MS4 General Permit serves as the regulatory mechanism for addressing the load reductions described in the TMDL, predominantly through the requirement of a TMDL Action Plan that identifies BMPs to be employed to achieve the desired WLA reduction.

Consistent with an approach taken by numerous MS4s throughout the country to achieve significant sediment load reductions, this Action Plan identifies street sweeping as an option to achieve the water quality standard described in the TMDL. NOVA has an existing street sweeping program and this action plan will evaluate modifications to the program necessary to achieve the targeted sediment reductions. Additional BMPs also will be evaluated.

Implementation of this Action Plan is consistent with the provisions of an iterative MS4 Program, which constitutes compliance with the MS4 General Permit requirements for reducing pollutants to the maximum extent practicable (MEP).

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ACRONYMS

BMP	Best Management Practice
CBP	Chesapeake Bay Program
CWA	Clean Water Act
DEQ	Virginia Department of Environmental Quality
EPA	United States Environmental Protection Agency
ESC	Erosion and Sediment Control
GP	General Permit
GWLF	Generalized Watershed Loading Function
LA	Load Allocation
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable
MOS	Margin of Safety
MS4	Municipal Separate Storm Sewer System
MS4 GP	General Permit for Discharge of Stormwater from Small MS4s
NPDES	National Pollutant Discharge Elimination System
PEOP	Public Education and Outreach Plan
POC	Pollutant of Concern
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TN	Total Nitrogen
TP	Total Phosphorus
TSS	Total Suspended Sediment
VAC	Virginia Administrative Code
VDOT	Virginia Department of Transportation
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program
VSCI	Virginia Stream Condition Index
WLA	Wasteload Allocation

1.0 INTRODUCTION AND PURPOSE

Mandated by Congress under the Clean Water Act (CWA), the National Pollutant Discharge Elimination System (NPDES) stormwater program includes the Municipal Separate Storm Sewer System (MS4), Construction, and Industrial General Permits. In Virginia, the NPDES Program is administered by the Department of Environmental Quality (DEQ) through the Virginia Stormwater Management Program (VSMP) and the Virginia Pollutant Discharge Elimination System (VPDES) Program. Northern Virginia Community College (NOVA) is authorized to discharge stormwater from its MS4 under the General VPDES Permit for Discharges of Stormwater from Small MS4s (MS4 GP). As part of the permit authorization, NOVA has developed and currently implements an MS4 Program Plan that includes best management practices (BMPs) to address the six minimum control measures (MCMs) as well as special conditions for all applicable total maximum daily loads (TMDLs) outlined in the MS4 GP. Implementation of these BMPs is consistent with the provisions of an iterative MS4 Program, which constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable" (MEP).

1.1 Total Maximum Daily Loads (TMDL)

A TMDL is the amount of pollutant a water body can assimilate and still meet water quality standards for its designated use. Typically, TMDLs are represented numerically in three main components:

- WLA for point source contributions and MS4 Permit operators
- Load Allocations (LA) for non-point source contributions and natural background sources
- Margin of Safety (MOS)

Point source pollution is any single identifiable source from which pollutants are discharged. If point source discharges, including a permitted MS4, are present in the TMDL watershed, then any allocations assigned to that permittee must be in the form of a WLA. The NOVA Annandale Campus's MS4 outfalls are defined as point source discharges; and therefore, fall under this category in the TMDL. Pollution that is not from an identifiable source, such as a pipe or a ditch, but rather originates from multiple sources over a relatively large area, are considered to be non-point source pollution. These sources are typically categorized into agricultural, atmospheric, and non-regulated areas, with Load Allocations (LAs) assigned for each. The Margin of Safety (MOS) is a required component that accounts for the modeling uncertainty in the response of the waterbody to loading reductions and is implicitly incorporated into a TMDL computation. The TMDL is expressed in the following equation:

$$TMDL = \sum WLA + \sum LA + MOS$$

1.2 Accotink Creek Sediment TMDL

DEQ listed segments of the Accotink Creek on their biennial 303(d) list in 1996 due to benthic impairments. Subsequent to the initial listing, a TMDL for Accotink Creek, entitled *"Volume II Sediment TMDLs for Accotink Creek Watershed, Fairfax County, Virginia"* was developed. This document is referred to herein as the Accotink Creek TMDL. As part of the approved TMDL, NOVA's permitted MS4 (VAR040095) was assigned a WLA for sediment discharge to Accotink Creek.

The TMDL study area includes upper and lower sections of the Accotink Creek as well as Long Branch, a tributary to the Accotink Creek. In total, the watershed is approximately 52 square miles. The upper section begins at the river headwaters in the City of Fairfax and flows to the lower section which begins at Lake Accotink. Long Branch (central) is a tributary which flows into Accotink Creek within the upper Accotink Creek boundary. Figure 1 depicts the study areas, as indicated in the TMDL as well as NOVA's Annandale Campus which lies completely within the upper Accotink Creek watershed.

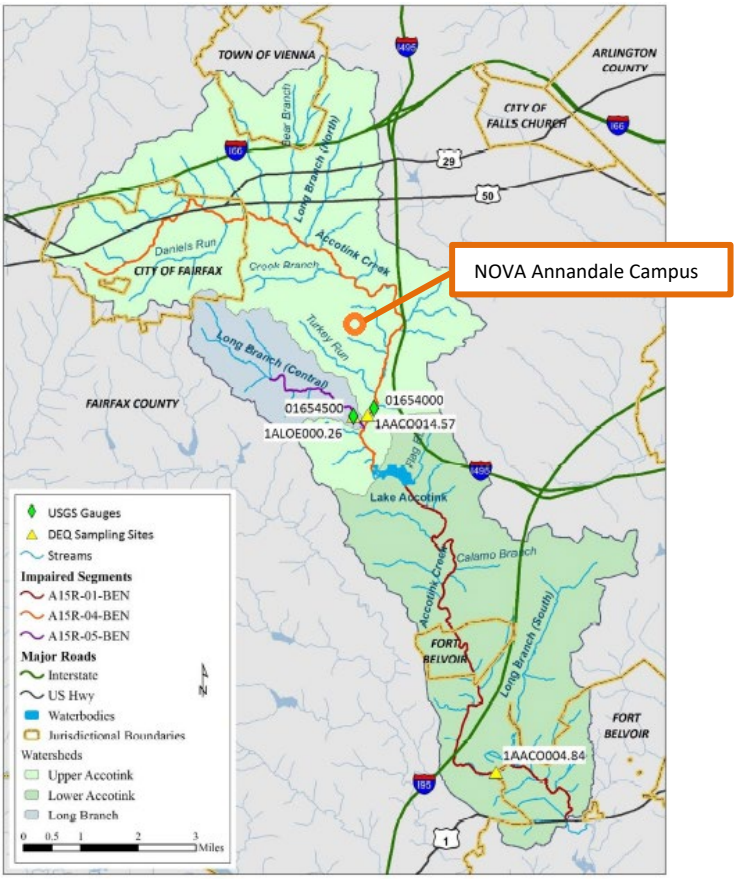


Figure 1: Accotink Creek Watershed Subbasins Map
(base map taken from Volume III TMDL)

> "Accotink Creek drains 52 square miles of Northern Virginia before entering first Accotink Bay, then Gunston Cove, an embayment of the tidal Potomac River."
>
> *- Volume II Sediment TMDLs for the Accotink Creek Watershed, Fairfax County, Virginia*

For the Accotink Creek TMDL, an explicit MOS of 10% of the calculated TMDL pollutant load is used to reflect uncertainty in representative modeling computations. In this context, MS4 permittees are assigned a WLA representing the annual loading of the pollutant of concern (POC) that can be discharged from its regulated MS4 area.

The Accotink Creek TMDL assigns an aggregated WLA for permitted MS4s within the watershed that includes MS4 discharges from regulated lands. The TMDL presents the WLA as an annual sediment load resulting from a "percent reduction" of the existing load from the MS4s to meet water quality standards for the watershed. The percent reduction from the aggregated MS4 load is a 76% reduction of sediment, the POC.

1.3 TMDL Special Conditions

The special conditions of the MS4 GP are triggered where a permittee has been assigned a WLA under the TMDL. Since the Accotink Creek TMDL assigned a WLA to NOVA's MS4, per Part II.B of the MS4 GP, NOVA is required to develop a local TMDL action plan designed to reduce loadings for pollutants of concern (Part II.B.1) and to complete implementation of the TMDL action plans as soon as practicable. 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 (Part II.B.2).
Per Part II.B.3 of the MS4 GP, 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 and that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants 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 Parts II B 4, B 5, and B 6;
f. Any calculations required in accordance with Part II B 4, B 5, or B 6;
g. For action plans developed in accordance with Part II B 4 and B 5, 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."

Additionally, per Part II.B.5 of the MS4 GP, the following items specific to local sediment, phosphorus, and/or nitrogen TMDLs are required:

a. The permittee shall reduce the loads associated with sediment, phosphorus, or nitrogen through implementation of one or more of the following:
   - 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;
   - One or more BMPs approved by the Chesapeake Bay Program; or
   - Land disturbance thresholds lower than Virginia's regulatory requirements for erosion and sediment control and post development stormwater management.

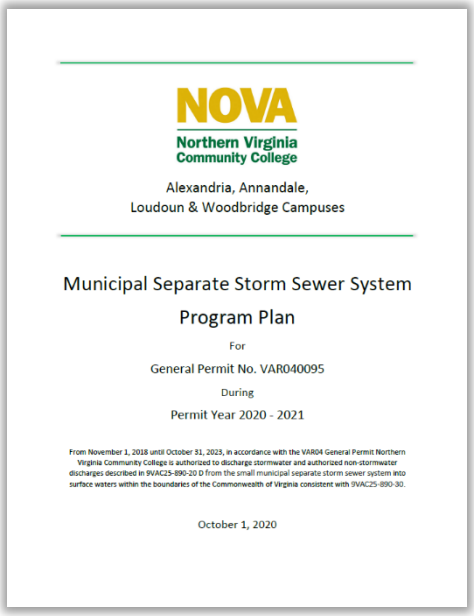
b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented to meet the requirements of the Chesapeake Bay TMDL in Part II A as long as the BMPs are implemented in the watershed for which local water quality is impaired.

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 3 f.

d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department the anticipated end dates by which the permittee will meet each WLA for sediment, phosphorus, or nitrogen."

NOVA submits reporting on the implementation of the MS4 program annually to the Virginia DEQ. The TMDL Action Plan was submitted by May 1, 2021 and in subsequent years when any significant modifications occur. Implementation will be reported annually as described in **Section°5.3**.

2.0 MS4 PROGRAM ASSESSMENT


NOVA
Northern Virginia Community College
Alexandria, Annandale, Loudoun & Woodbridge Campuses
Municipal Separate Storm Sewer System Program Plan
For
General Permit No. VAR040095
During
Permit Year 2020 - 2021
From November 1, 2018 until October 31, 2023, in accordance with the VAR04 General Permit Northern Virginia Community College is authorized to discharge stormwater and authorized non-stormwater discharges described in 9VAC25-890-20 D from the small municipal separate storm sewer system into surface waters within the boundaries of the Commonwealth of Virginia consistent with 9VAC25-890-30.
October 1, 2020

NOVA maintains compliance with the MS4 GP through implementation of BMPs defined in the *NOVA MS4 Program Plan*. The majority of the BMPs in the Program Plan are nonstructural rather than structural BMPs. Structural BMPs, such as stormwater retention ponds, capture pollutants after they have washed off the ground surface and been conveyed to the BMP through stormwater runoff. Nonstructural BMPs can be considered as "source controls", where the POC is either prevented from accumulating or collected from the ground surface prior to exposure to precipitation that would convey the pollutant downstream. Source controls are typically implemented at some defined frequency to minimize pollutant build-up and downstream conveyance during a rainfall event. Examples of nonstructural BMPs include community education programs, staff training, good housekeeping and pollution prevention procedures, catch basin cleanout, and street sweeping. There is limited data available for quantifying the pollutant removal efficiencies of nonstructural BMPs. However, the limited research indicates significant reductions are achieved with a higher degree of cost effectiveness than with structural practices. Removal efficiency estimates for total suspended solids (TSS) are estimated to range from 30 – 70%.

Consistent with the special conditions described in **Section 1.3**, the following sub-sections characterize NOVA's existing MS4 program in context of the Accotink Creek TMDL POC, sediment.

2.1 MS4 General Permit Minimum Control Measures

NOVA maintains compliance with the MS4 GP through implementation of their MS4 Program that addresses the minimum control measures (MCMs) outlined in the permit. Inherently, most are applicable to addressing reduction or elimination of sediment. The applicability of each MCM is summarized as:

- MCM 1: NOVA has incorporated information regarding TMDL POCs into the relevant message of the high-priority water quality issue #2 in their Public Education and Outreach Plan (PEOP). As such, the public education and outreach program incorporates sediment concerns related to water quality in outreach to the general public.
- MCM 2: Public participation events are developed in conjunction with the PEOP and incorporate sediment as a water quality issue.

- MCM 3: NOVA maintains an accurate MS4 map and information table of outfalls, point discharges, drainage areas, receiving waters, and other information pertinent to the management and maintenance of NOVA's MS4 permitted area. NOVA conducts dry-weather outfall screenings annually for non-stormwater discharges, including sediment, and implements written procedures for detecting and eliminating identified discharges. A prohibition of illicit discharges in NOVA's facilities is established in NOVA's Pollution Prevention Policy, the Standards of Conduct for Employees, and the Student Handbook for Students, each of which provide methods and procedures for reporting and corrective disciplinary action.
- MCM 4: Regulated land disturbance projects on campus are required to be consistent with the latest edition of the DEQ approved Virginia Community College System's (VCCS) "Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management", which require approved plans that minimize sediment discharge from construction activities during and after construction. Inspections are required to be performed throughout the construction activity and on any post-construction facilities built to address stormwater management.
- MCM5: NOVA's ESC and SWM programs require regulated land disturbance projects to address post-construction water quality. The MCM also requires a long-term inspection and maintenance program for stormwater management facilities to ensure functionality. NOVA maintains an electronic database of all known NOVA-owned stormwater management facilities that discharge into the MS4 and uses this database to track regular inspections of all facilities.
- MCM 6: NOVA developed and implements good housekeeping procedures that are incorporated into staff training, along with campus specific SWPPP documents, training documentation, and nutrient management plans. The potential for discharge of sediment was also included in NOVA's assessment used to identify high priority facilities that will be targeted for site-specific SWPPPs. NOVA also requires that contractors engaging in activities with potential pollutant discharges use appropriate control measures through contract language, training, and other appropriate means.

For further detail on the PEOP, NOVA's MS4 Program Plan and Annual Report are available at https://www.nvcc.edu/stormwater/.

2.2 Additional Applicable Practices

NOVA's efforts to reduce sediment loads to Accotink Creek go beyond the requirements of the MCMs in the MS4 GP. The additional efforts incorporated into the current MS4 program that are applicable to the reduction of sediment discharges from the MS4 include:

- Contract language that requires contractors to use appropriate control measures and allows the college to stop work, address the problem, and recoup cost for the remedy from the contractor should an illicit discharge be identified at a construction site, including sediment discharges outside of the construction project.

2.3 Facilities Assessments

NOVA has performed a facility-wide evaluation to identify areas that are potential sources of pollutant discharge(s) to stormwater runoff. The evaluation was consistent with the MS4 GP Special Condition Part II.B.3. NOVA has also identified high priority areas as part of their MS4 Program consistent with Part I.E.6 (c) of the current MS4 GP. The identified facilities are considered to have a high potential to discharge pollutants and site-specific Stormwater Pollution Prevention Plans (SWPPPs) have been developed to minimize potential pollutant discharges. The following NOVA-owned and operated facilities were identified:

- Loudon Campus
- Annandale Campus – within the Accotink Creek watershed
- Alexandria Campus
- Woodbridge Campus

Stormwater Pollution Prevention Plans (SWPPPs) have been developed to minimize pollutant discharges consistent with the schedule requirements of the MS4 GP and the NOVA MS4 Program Plan.

3.0 ACCOTINK CREEK TMDL WLA

The Accotink Creek TMDL wasteload allocation for MS4s is based on land use and applies to all MS4s in the TMDL watershed, including NOVA, Fairfax County, Fairfax County Public Schools, and the Virginia Department of Transportation (VDOT). The TMDL directs that the WLA be achieved with a "Percent Reduction Method" that compares water quality data to applicable water quality criteria. It identifies a percent reduction of the current sediment load required to meet water quality standards for the watershed.

3.1 TMDL Model Approach

The computer model used in the TMDL study to simulate the impaired watershed was the Generalized Watershed Loading Function (GWLF), which is a lumped parameter model. To develop the target for the TMDL reductions, the Accotink Creek TMDL used what is referred to as the "AllForX Regression". This involved modeling a group of watersheds meeting the benthic water quality standard in addition to the impaired watersheds, both as their current conditions and as all-forested hypothetical scenarios. The current loads were divided by the all-forest loads to generate multipliers (AllForX) that represent the amount by which the current pollutant loads are above an all-forested condition. A linear regression was generated based on the plotted pairs of Virginia Stream Condition Index (VSCI) scores, a multimetric index of the biological integrity of the benthic community, and AllForX values and used to determine the threshold AllForX value. "The threshold AllForX multiplier is the multiplier that is projected to achieve a VSCI score of 60, and thus meet Virginia's water quality standards for supporting aquatic life."

After accounting for the other permitted WLAs and a MOS, the reduction required on remaining sources, including MS4s, was calculated and the WLA for each combined service area aggregate of MS4s was developed on an area-weighted basis. The aggregate WLA specific to the upper Accotink Creek watershed for MS4s within Fairfax County's jurisdiction, including NOVA's Annandale Campus, is 1,282 tons/year, which is equivalent to a 76% reduction in the existing loads computed at the time of the TMDL development. The same 76% reduction was applied to aggregate MS4s represented by City of Fairfax and Town of Vienna jurisdictions.

3.2 Quantification of Required Reductions

The aggregate MS4 load and reduction applied in the TMDL for the Fairfax County jurisdiction in the upper Accotink Creek watershed included MS4 permits for NOVA as well as Fairfax County, Fairfax County Public Schools, and VDOT. To determine the appropriate portion of the 5,394 tons/year baseline load and 1,282 tons/year WLA for NOVA, an area-weighted division was applied.

NOVA's MS4 area of 75.74 acres represents 1.12% of the total 6,793-acre aggregate MS4 area in the Fairfax County jurisdiction for the upper Accotink TMDL according to model documentation provided by DEQ. Thus, applying this 1.12% ratio to the total aggregate WLA for the Fairfax County jurisdiction MS4s will give an area-weighted estimate of NOVA's WLA and baseline load.

$$NOVA's\ portion\ of\ Fairfax\ County\ aggregate\ MS4\ WLA = 1{,}282\ \frac{tons}{year} * 0.0112$$
$$= 14\ \frac{tons}{year}$$

$$NOVA's\ portion\ of\ Fairfax\ County\ aggregate\ MS4\ baseline = 5{,}394\ \frac{tons}{year} * 0.0112$$
$$= 60\ \frac{tons}{year}$$

$$Required\ Sediment\ Reduction\ from\ NOVA's\ MS4 = 60\ \frac{tons}{year} - 14\ \frac{tons}{year} = 46\ \frac{tons}{year}$$

This maintains the 76% reduction in sediment loads called for in the TMDL.

NOVA reserves the right to modify the characterization of sediment loadings from its MS4 in the future and modify this Action Plan if a different method of determining NOVA's portion of the Baseline Load and WLA becomes available. Any modifications will be based on refined data inputs and the measures of effectiveness obtained by the means and methods to achieve the WLA, as described in **Section 4.0**.

4.0 METHODS TO ACHIEVE THE WLA

In addition to the practices described in **Section 2.0** that are beyond those required by the MCMs, NOVA assessed the impacts of and interactions between this Action Plan and their Chesapeake Bay TMDL Action Plan. Applicable reductions associated with implementation of this Action Plan will also be applied to NOVA's Chesapeake Bay TMDL WLA reduction requirement. NOVA will continue to implement an iterative approach to meeting their TMDL WLAs to the MEP. Several methods for achieving MEP for the WLA are discussed below.

4.1 Sediment Reductions

Source controls remove sediment from the land surface prior to the sediment being exposed to runoff and conveyed downstream. A source control such as street sweeping can be more cost-effective at a watershed scale than structural controls, such as a detention pond, since larger surface (drainage) areas can be addressed by this type of practice.

NOVA has evaluated the existing street sweeping program to determine the feasibility of utilizing it to satisfy the POC reductions identified in this section based on the recently DEQ approved guidance memo for street sweeping, (GM20-2003). This memo phases out the previous "mass-loading approach" of calculating sediment reduction from street sweeping in favor of the "reduction per lane miles swept" approach. As such, NOVA has refined their street sweeping plans and protocols accordingly.

NOVA will continue to implement street sweeping towards the required POC reductions for this TMDL Action Plan in accordance with DEQ's Guidance Memo No. 20-2003. The "revised street cleaning module," as described in the Guidance Memo was used to determine the extent of street sweeping efforts to be implemented. Table 1 within Appendix V.G – Street Cleaning Section of the Guidance Memo reflects the module's preferences to use regenerative air sweepers and sweeping frequency to increase sediment reduction rates. Sediment reductions are provided for various street sweeping practices (SCP). NOVA will apply the revised street cleaning module to its required TSS reduction for this Action Plan.

Using the standard street cleaning unit of one mile of curb miles swept on one-side and one acre equivalent for parking lots to one curb lane mile swept, It was calculated that the Annandale Campus has a total of **31.67 curb lane miles** on the property. Using the sediment loading rates for urban impervious cover for the Potomac River provided in the 2018 – 2023 MS4 General Permit (9VAC25-890-40), the required sediment reductions were calculated. NOVA selected **SCP-3: 1 Pass Per 2 Weeks** to implement towards MEP for the required sediment reductions.

NOVA has purchased three street sweeping vehicles that are shared between the six campuses. However, NOVA may consider purchasing more street sweeping vehicles in order for the Annandale campus to have its own street sweeping vehicle. NOVA will evaluate further, based on the frequency required, whether additional employees are needed. Costs are anticipated to increase due to the increased frequency required. Continual costs associated with implementation of street sweeping will accrue from manhours, vehicle fuel, and vehicle maintenance.

5.0 ACTION PLAN

It may be possible to modify the existing street sweeping program towards achieving MEP for the WLA; however, budgetary and staffing constraints will need to be evaluated to determine if the required frequency of street sweeping can be accomplished. Described below are the actions to be taken to evaluate NOVA's progress in achieving the required reduction to the MEP. For planning purposes, an estimated "end date" for achieving the WLA will be June 30, 2037.

5.1 Implementation of BMPs towards meeting the WLA to the MEP

Sediment reduction efforts will take the following action steps:

1. Determine the potential number of lane miles that can be swept at NOVA's Annandale campus and use it to select a practice (sweeping frequency) to implement.
2. Evaluate current equipment & staff availability.
3. Evaluate budget to determine how much street sweeping can be accomplished.
4. Develop street sweeping training materials and implement training.
5. Assess numerical progress towards meeting the WLA by the end date.
6. Explore options for additional BMPs.
7. Evaluate additional BMP options.
8. Implement additional BMPs, if feasible.
9. Demonstrate progress towards meeting the WLA to the MEP.

The action steps identified above are intended to serve as a defined method that inherently works as an adaptive, iterative approach to achieve the WLA.

5.2 Continued MS4 Program Plan Implementation

NOVA will continue to implement its MS4 Program Plan.

5.3 Progress Reporting

Progress will be reported through explicit accounting of sediment reductions using appropriate methods. NOVA's Annual Report will serve as the annual documentation for tracking progress.

5.4 Implementation Schedule

NOVA has existing programmatic BMPs and a street sweeping program which provide reduction of sediment loads from its MS4. These reductions are demonstrated qualitatively in the MS4 Program assessment described in **Section 2.0**. Additional reductions will be quantified from street sweeping efforts as described in **Section 5.1. Table 1** summarizes the schedule for the implementation of the Action Plan's next steps.

Table 1: Schedule for NOVA's TMDL Action Plan

Step	General Description	Measurable Goal	Completion Date
1	Develop Action Plan	Action Plan submitted to DEQ with public comment period.	May 1, 2021
2	Evaluate the potential for addressing the WLA by modifying the current Street Sweeping Program.	• Determine the potential number of lane miles that can be swept. • Incorporate guidance from DEQ GM20-2003 & develop tracking document. • Consider Chesapeake Bay TMDL Action Plan WLA in conjunction with this Action Plan.	June 30, 2022
3	Evaluate the potential for addressing the WLA by modifying the current Street Sweeping Program.	• Evaluate current equipment & staff availability. • Evaluate budget to determine how much street sweeping can be accomplished.	June 30, 2023
4	Evaluate the potential for addressing the WLA by modifying the current Street Sweeping Program.	• If necessary, plan to purchase dedicated sweeper. • If necessary, hire additional staff to adequately address staffing needs to address the WLA.	June 30, 2024
5	Implement the Street Sweeping Program and evaluate progress in meeting WLA.	• Begin staff training & modified street sweeping program. • Explore options for additional BMPs as necessary.	June 30,2025
6	Implement the Street Sweeping Program and evaluate progress in meeting WLA.	• Continued staff training & modify street sweeping program as necessary. • If required, evaluate options for additional BMPs as necessary.	June 30, 2026
7	Implement the Street Sweeping Program and evaluate progress in meeting WLA.	• Continued staff training & modify street sweeping program as necessary. • If required, implement options for additional BMPs as necessary and feasible.	June 30, 2027-June 30, 2037