

# **PA DEP MS4 Program Updates**

## **Westmoreland Conservation District Engineer's Workshop**

**Mike Fifth, P.E. and Lauren Nolfi, E.I.T.**

**March 21-22, 2024**

Josh Shapiro, Governor

Jessica Shirley, Interim Acting Secretary

# MS4 Updates

## Municipal Separate Storm Sewer System (MS4)

# ▶ MS4 General Permit (PAG-13 Extension)

- Current PAG-13 MS4 permits are administratively extended through March 15, 2025
  - Deadlines for Pollutant Reduction Plan and Pollutant Control Measure implementation have not been extended.
- MS4 Permittees should continue to submit Annual Reports during the extension period.

# 2018 PAG-13 Requirements

## All Permittees

- 6 Minimum Control Measures (MCMs)
- 2022 Model Stormwater Ordinance

## Permittees that discharge to waters impaired for metals, pathogens, or priority organics (PCBs)

- Pollutant control measures (PCMs)

## Permittees that discharge to waters impaired for sediment and/or nutrients (including the Ches. Bay)

- Pollutant Reduction Plan (PRP) or Total Maximum Daily Load (TMDL) Plans

# 2018 PAG-13 Requirements

## MCM Implementation

- Reported in MS4 Annual Status Reports
- Due September 30<sup>th</sup> of each year of permit coverage

## PCMs

- Attached to MS4 Annual reports
  - Mapping (2019)
  - Suspected source inventory (2020)
  - Source investigation (2022)

# PRP and TMDL Plans Final Reports

## PRP or TMDL Plan Implementation

- Pollutant Reduction Plans (PRP) and Total Maximum Daily Load (TMDL) Plans required pollutant load reductions within 5 years following DEP's approval of permit coverage.
- Report demonstrating compliance with the required pollutant load reductions must be submitted as an attachment to the first Annual MS4 Status Report due following completion of the 5th year of permit coverage.
- PRP or TMDL Final Reports Due September 30, 2024
  - If the PRP approval date + 5 years falls between July 1, 2023 and June 30, 2024, the PRP Final Report is due as an attachment to the annual report due this year.

# PRP/ TMDL Plan Final Report Template

- Posted to eLibrary
- Use of the template is not required but is encouraged.
- If the template is not used, the final report should include all the information requested in the template, at a minimum, to be considered complete.
- Instructions for completing the PRP/TMDL Plan Final Report are included within the Annual MS4 Status Report Instructions also posted to eLibrary.

The image displays three overlapping forms related to the PRP/TMDL Plan Final Report. The top form is 'ATTACHMENT A - INFILTRATION BMPs', which includes sections for General Information (Permit No., Latitude, Longitude, County), Construction Completion (Construction of the BMP in Complete, Photographs, Drawings, and O&M Plan attached), BMP Effectiveness (Type of BMP, BMP Effectiveness Values, Effectiveness Values Source), BMP Construction (Ponding Depth, Media Depth, Media Description, Loading Rate, TSS Load Delivered to BMP, TSS Load Delivered to BMP - Simplified Method, TSS Load Delivered to BMP - Land Cover Based Calculation Method, TSS Load Delivered to BMP), and TSS Load Reduction Credits. The middle form is 'COMPLIANCE DETERMINATION', which asks if the pollutant load reduction requirements of the permit were met and provides a table for Required Load Reduction Remaining (TSS, TN, TP) in lbs/yr and as a percentage of the total required load reduction. The bottom form is 'POLLUTANT REDUCTION PLAN (PRP) / TMDL PLAN FINAL REPORT', which includes sections for Pollutant Reduction Plan Summary (Pollutant, TSS, TN, TP), BMP Implementation (BMP Type, Structural, Non-Structural, Total), and Pollutant Load Reductions (Attachment A - Infiltration BMPs, Attachment B - Best Management Practices, Attachment C - Stormwater Infiltration Practices, Attachment D - Riparian Buffers, Attachment E - Filter Strips, Attachment F - Tree Planting, Attachment G - Non-structural Annual Control). The forms are dated 10/18/04 and 10/18/05.

# PRP/ TMDL Plan Final Report Template

Summary of PRP or TMDL Plan requirements

BMPs implemented and the load reductions achieved

Attachments with documentation showing BMP crediting

3800-FM-BCW0014 Rev. 2/2024  
PRP/TMDL Plan Final Report

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF CLEAN WATER

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## POLLUTANT REDUCTION PLAN (PRP) / TMDL PLAN FINAL REPORT

Before completing this report please review the instructions, which are located within the Annual MS4 Status Report Instructions (3800-FM-BCW0491)

### PRP / TMDL PLAN SUMMARY

Permittee Name: \_\_\_\_\_ Permit No.: PA

PRP  TMDL Plan  Combined PRP / TMDL Plan

Plan Approval Date: \_\_\_\_\_ Required Completion Date: \_\_\_\_\_

Joint Plan?  Yes  No *If Yes, identify all participating permittees as an attachment to this report*

Surface Waters Addressed by Plan: \_\_\_\_\_

Permittee's Planning Area (acres): \_\_\_\_\_ Total Planning Area (Joint Plans): \_\_\_\_\_ acres

Pollutant Load Reduction Calculation Methodology:  
 Simplified Method  Mapshed  ModelMyWatershed  Other:

	TSS	TN	TP
Baseline Pollutant Load – Planning Area	lbs/yr	lbs/yr	lbs/yr
Pollutant Load Reduction Requirement (%)	%	%	%
Pollutant Load Reduction Requirement (lbs/yr)	lbs/yr	lbs/yr	lbs/yr
WLA Reduction Requirement (TMDL Plan only)	lbs/yr	lbs/yr	lbs/yr

### BMP IMPLEMENTATION

BMP Type	No. of BMPs	Pollutant Load Reductions Achieved (Credit)		
		TSS	TN	TP
Structural BMPs		lbs/yr	lbs/yr	lbs/yr
Non-Structural BMPs		lbs/yr	lbs/yr	lbs/yr
Total		lbs/yr	lbs/yr	lbs/yr

**Pollutant Load Reductions are documented on the following attachments:**

Attachment A – Infiltration BMPs No.: \_\_\_\_\_

Attachment B – BMP Retrofits No.: \_\_\_\_\_

Attachment C – Stream and/or Floodplain Restoration No.: \_\_\_\_\_

Attachment D – Street Sweeping or Storm Drain Solids Removal No.: \_\_\_\_\_

Attachment E – Riparian Buffers No.: \_\_\_\_\_

Attachment F – Tree Planting No.: \_\_\_\_\_

Attachment G – Non-structural (Annual Practice) BMPs No.: \_\_\_\_\_

BMP(s) have been implemented for which there are no attachments (*attach calculations*)

- 1 -



# PRP and TMDL Final Reports

- Different Attachments for each BMP Type
- All final reports must include documentation sufficient to support the load reduction(s) being claimed for each BMP.
- For example, a permittee implementing a rain garden would complete Attachment A and provide the required attachments (sites photos, as-built drawings, O&M Plan)

3800-FM-BCW0014 Rev. 2/2024  
Final PRP/TMDL Plan Report

### ATTACHMENT A – INFILTRATION BMPs

#### GENERAL INFORMATION

Permittee Name: \_\_\_\_\_ Permit No.: \_\_\_\_\_  
 BMP Name: \_\_\_\_\_ Latitude: \_\_\_\_\_  
 Surface Waters: \_\_\_\_\_ Longitude: \_\_\_\_\_  
 Municipality: \_\_\_\_\_ County: \_\_\_\_\_

Construction of the BMP is Complete. Date Construction Completed: \_\_\_\_\_  
 Photographs, Drawings, and O&M Plan are attached. Inspection/Monitoring Frequency: \_\_\_\_\_  
 Permits or Approvals Obtained: \_\_\_\_\_  
 Party Responsible for Long-Term O&M:  Permittee  Other: \_\_\_\_\_  
 Joint BMP?  Yes  No *If Yes, attach a list of other permittees sharing credit for the BMP*  
 Type of BMP (see instructions): \_\_\_\_\_  
 BMP Effectiveness Values: TSS: \_\_\_\_\_ % TN: \_\_\_\_\_ % TP: \_\_\_\_\_ %  
 Effectiveness Values Source:  DEP  CB Expert Panel Report  Other: \_\_\_\_\_

#### BMP CONSTRUCTION

BMP Infiltrating Surface Area (ft<sup>2</sup>): \_\_\_\_\_ Ponding Depth (ft): \_\_\_\_\_  Underdrain  
 Media Description: \_\_\_\_\_ Media Depth (ft): \_\_\_\_\_  
 Vegetated Loading Ratio (see instructions): \_\_\_\_\_ WQ Storage Volume (ft<sup>3</sup>): \_\_\_\_\_

#### TSS LOAD DELIVERED TO BMP

Total Drainage Area Treated by BMP: \_\_\_\_\_ acres (Treatment Area)

**TSS Load Delivered to BMP – Simplified Method**  Calculations attached

Pollutant	Land Cover	Area (acres)	Loading Rate (lbs/ac/yr)	Delivered Load (lbs/yr)
TSS	Impervious			
	Pervious			
Total TSS Load Delivered to BMP (lbs/yr) =				

**TSS Load Delivered to BMP – Land Cover-Based Calculation Method**  Calculations attached

Pollutant	Land Cover	Area (acres)	Loading Rate (lbs/ac/yr)	Delivered Load (lbs/yr)
TSS				
Total TSS Load Delivered to BMP (lbs/yr) =				

#### TSS LOAD REDUCTION CREDIT

TSS Load Delivered to BMP ( \_\_\_\_\_ lbs/yr) x TSS Effectiveness Value ( \_\_\_\_\_ %) = \_\_\_\_\_ lbs/yr TSS Credit  
 Permittee Credit for Joint BMPs (if applicable): \_\_\_\_\_ % or \_\_\_\_\_ lbs/yr TSS Credit

**\* See Annual MS4 Status Report Instructions (3800.FM BCW0491) for additional required attachments.**

- 3 -

# PRP and TMDL Final Reports

- Compliance Determination
  - If sufficient BMPs were implemented to provide the required load reduction, check yes and leave the compliance table blank.
  - If the required load reduction was not met, check no and attach an explanation and provide a schedule for completing implementation of the PRP or TMDL Plan.
- Certification

3800-FM-BCW0014 Rev. 2/202  
Final PRP/TMDL Plan Report

COMPLIANCE DETERMINATION			
Were the pollutant load reduction requirements of the permit met? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If the pollutant load reduction requirements of the permit were <b>not met</b> , report the required load reductions remaining in lbs/yr and as a percentage of the total required load reduction.			
	<b>TSS</b>	<b>TN</b>	<b>TP</b>
Load Reduction Remaining	lbs/yr	lbs/yr	lbs/yr
Percent of Required Load Reduction Remaining	%	%	%
<i>If the pollutant load reduction requirements of the permit were not met, attach an explanation and provide a schedule for completing implementation of the PRP or TMDL Plan, including interim milestones.</i>			
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 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 knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).			
Responsible Official Name		Official Title	
Signature		Date Signed	

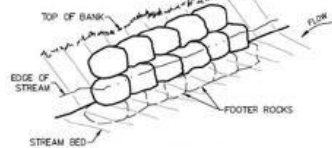
- 2 -

# Final Reports - BMP Red Flags

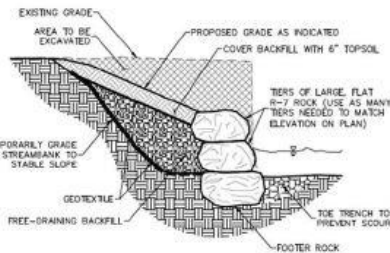
## Hard Armoring – Not Creditable



- BOULDER WALL INSTALLATION:**
1. TEMPORARILY GRADE STREAMBANK TO A STABLE SLOPE AS SITE CONDITIONS ALLOW.
  2. DIG TRENCH ALONG TOE OF SLOPE FOR FOOTER ROCKS.
  3. INSTALL GEOTEXTILE ALONG TEMPORARY SLOPE.
  4. INSTALL FOOTER ROCKS WITHIN TRENCH.
  5. INSTALL ONE TIER OF ROCK ON TOP OF FOOTER ROCKS NEATLY WITH STAGGERED JOINTS. ROCKS SHOULD OVERLAP EACH OTHER NO LESS THAN TWO-THIRDS OF ITS WIDTH.
  6. FILL ANY REMAINING VOID IN TOE TRENCH WITH R-1 PER-RAP.
  7. PLACE FREE-DRAINING BACKFILL CONCURRENTLY WITH EACH TIER OF ROCK. ALLOW FOR 6" OF TOPSOIL BEHIND WALL ON TOP OF BACKFILL.
  8. INSTALL TIERS OF ROCK AND BACKFILL TO DESIRED HEIGHT (6" MAXIMUM).



ISOMETRIC VIEW



SECTION VIEW

BOULDER WALL DETAIL

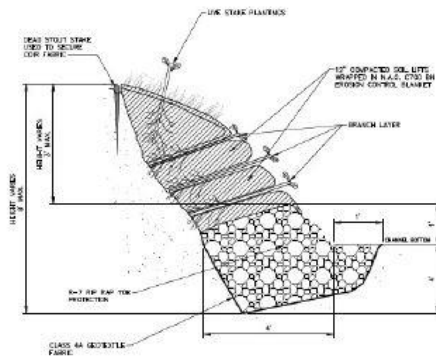
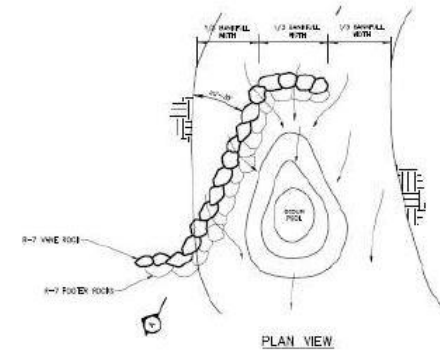
NOT TO SCALE



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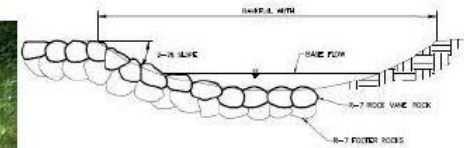
# Final Reports - BMP Red Flags

**Creditable with Limits – Allowable up to 30% of Banks**



**FABRIC ENCAPSULATED SOIL WITH BRANCHPACKING BANK STABILIZATION DETAIL**

NOT TO SCALE



**J-HOOK VANE DETAIL**

NOT TO SCALE



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# Compliance Determination

- The information provided in the Compliance Determination section will be used to determine what steps will be necessary to bring the permittee into compliance.

## Examples



If lack of funding was the reason a PRP was not fully implemented, provide information on what funding sources were evaluated, including grants and loans that were applied for.



If permitting delays impacted the project completion timeline, list when the permit was applied for, what caused the permitting delay, when was the permit received.



If unforeseen construction delays impacted project completion, explain the cause of the delay and provide a timeline for when the BMPs will be completed.

# BMP Project Funding



The Pennsylvania Infrastructure Investment Authority provides construction and related funding for BMPs for the following categories:

- **Urban Stormwater BMPs**
- Agricultural BMPs
- Abandoned Mine Drainage BMPs
- Brownfields BMPs

\* Funding terms vary depending on the affordability of the project to the applicant.

[www.pennvest.pa.gov](http://www.pennvest.pa.gov)

[PENNVEST@pa.gov](mailto:PENNVEST@pa.gov)



## Growing Greener

Growing Greener is an investment of state funds to address critical environmental concerns. Grants are provided for the following categories:

- **Watershed restoration and protection**
- Abandoned mine reclamation;
- Abandoned oil and gas well plugging projects.

[www.dep.pa.gov/Citizens/GrantsLoansRebates/Growing-Greener](http://www.dep.pa.gov/Citizens/GrantsLoansRebates/Growing-Greener)

[RA-GrantsCenter@pa.gov](mailto:RA-GrantsCenter@pa.gov)

# MS4 Annual Status Report Submission

## Option 1 - Greenport MS4 eReporting Application

- In 2023, the MS4 eReporting application was in the final phase of testing and its use was limited to permittees from select counties. For 2024, use of the eReporting application is being made available to all MS4 permittees.
- Sign up for Greenport Account and request access to the MS4 eReporting Application.
- Step-by-step guidance on setting up your account and completing an electronic annual report is posted to Clean Water Academy.

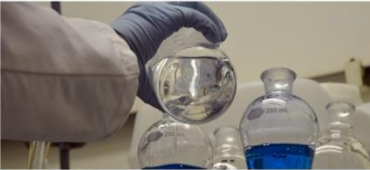
# MS4 Annual Status Report Submission

## Option 2 – Electronic Submission (Public Upload)

- OnBase is no longer available
- Clicking on “Electronic Submissions” on DEP’s main page will take you to the public upload website.
- Filter Submission Type by Program: Annual Municipal Separate Storm Sewer System (MS4) Status Report Form 3800-FM-BCW0491
- DEP Program Area: Clean Water
- Request Type: Other

## Option 3 – Hard Copy Submission





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# Questions?

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