



STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER AND WASTE MANAGEMENT

MS4 ANNUAL REPORT FORM

For Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

Please see instructions before completing this form. If you need more space than allowed, please attach a document.

Abbreviations

BMP = Best Management Practice

IDDE = Illicit Discharge Detection and Elimination

MCM = Minimum Control Measure

SWMP = Storm Water Management Program

TMDL = Total Maximum Daily Load

WV = West Virginia

I. Small MS4 Operator Information

1. Annual report reporting period:		
2. Name of MS4: West Virginia University	3. Registration number: WVR030042	
4. Primary contact: Brian M. Lemme	5. Title: Stormwater Specialist	
6. Mailing address: 975 Rawley Ave, P.O. Box 6551		
7. City: Morgantown, WV	8. Zip code: 26506	9. County: Monogalia
10. Telephone number: 293-8742		
11. Email: Brian.Lemme@mail.wvu.edu		

II. Impaired Waters Information

12. Does the MS4 discharge into impaired water bodies?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
13. Please provide a description of specific BMPs that were implemented to reduce pollutants of concern in impaired receiving waters and waters in which a TMDL has been developed. (WV MS4 2009 General Permit, p. 25, #12) Stormwater discharges to the Monongahela River, which is impaired for Fecal Coliform and PCBs. TMDLs have been developed for Deckers Creek, Hartman Run, Mon River, and West Run (Aluminum, Iron, Manganese, pH) If and once any TMDLs are developed they will be reviewed and implemented to the maximum extant practicable.		
14. Has a TMDL been developed since your plan was approved?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

III. Fiscal Reporting

15. Include or attach a fiscal analysis of capital and operating expenditures to implement the MCMs. The fiscal analysis shall include only those expenditures by the locality seeking coverage under the WV MS4 2009 General Permit and not those for MCMs implemented by other entities. (WV MS4 2009 General Permit, p. 25, #13)	
16. Please provide total capital expenditures for this reporting period.	\$
17. Please provide total operating expenditures for this reporting period.	\$

IV. Coordination Efforts and Organization

18. Please provide a description of the coordination efforts with other MS4s, county governments, transportation agencies, colleges, universities, correctional facilities, prisons, and any other entities regarding the implementation of the MCMs, including the status of any memoranda of understanding or other agreements executed between the permittee(s) and any other entity. (WV MS4 2009 General Permit, p. 24, #9)

WVU and MUB have been open about sharing information about mapping of the storm systems.

WVU has also been sharing information with MUB on current construction projects and post construction stormwater management systems for all projects located with the the ubanized area. WVU also complys with MUB's stormwater Ordinance 929.20, specifically section about controlling peak flow runoff from a 2, 10 and 50 year 24-hr storm event.

WVU has also been in contact with other MS4's state wide.

19. Please provide name and contact information for individual with overall program management and implementation responsibility, and if different, name and contact information of individuals responsible for each minimum control measure. Please attach a table of organization.

Brian M. Lemme, 975 Rawley Lane, P.O.Box 6551, Morgantown, WV 26506

See attached spreadsheet. MS4 Outline (BMPs to be implemented since last reporting period.)

V. Changes to SWMP

- | | | |
|--|---|-----------------------------|
| 20. Did any of your activities, BMPs, or measurable goals as outlined in your SWMP change during the reporting period? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
|--|---|-----------------------------|

- | | | |
|---|---|-----------------------------|
| 21. Do you anticipate any planned activities, BMPs, or goals as outlined in your SWMP to change in the upcoming reporting period? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
|---|---|-----------------------------|

22. If anything has changed, please indicate the MCM and performance measure and provide a brief description below, and attach detailed documentation of the changes, schedule of implementation, measurable goals, and overall effect on your program. (WV MS4 2009 General Permit, p. 24, #6 and #7)

MCM #3 IDDE, BMP 3-1 MS4 Mapping.

Milestone - Complete the outfall map for the remaining watersheds. WVU only falls into 3 watersheds. The SWMP was developed to assume each receiving stream as a watershed.

Several steps for implentanting the required BMPs of the SWMP have been identified to be unpractical. These orginal steps for each BMP were wrtten by an outside firm and were very complex. It was also difficult to implement several areas of the SWMP based on the original dates provided and the shortened time frame once the SWMP was approved by WVDEP.

Other areas of the SWMP have also been identified as being hard to implement from a University standpoint with limited enforcement capability.

- | | | |
|---|---|-----------------------------|
| 23. Is additional documentation attached? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
|---|---|-----------------------------|

VI. MCM 1: Public Education and Outreach (WV MS4 2009 General Permit, p. 5-6)

24. Did you complete all the proposed activities and performance measures for this MCM for this reporting period? ☐ Yes ☒ No

25. Contact: Brian Lemme

26. Phone: (304) 293-8742

Performance Measure 1a: Program implementation

27. Were the proposed activities for developing a public education and outreach program implemented? ☐ Yes ☒ Partially ☐ No

28. List and briefly describe each of the public education and outreach program development activities undertaken during this reporting period. (WV MS4 2009 General Permit, p. 24, #1)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

29. Did you achieve all the goals that you identified in your SWMP related to developing the education and outreach program for this reporting period? (WV MS4 2009 General Permit, p. 24, #3) ☐ Yes ☒ No

30. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

Performance Measure 1b: Evaluation of effectiveness of public education and outreach efforts

31. Did you evaluate the effectiveness of the public education and outreach program? ☐ Yes ☒ Partially ☐ No

32. How did you evaluate the effectiveness of the public education and outreach program in this reporting period?
(WV MS4 2009 General Permit, p. 24, #2)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

33. Regardless of your answer to the previous question, have you identified new or better ways to evaluate the public's understanding of your program and water quality issues? ☒ Yes ☐ No

34. If yes, please describe any changes you would like to consider to improve your evaluation of effectiveness of outreach.

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

Performance Measure 1c: Documentation and tracking of public education and outreach efforts			
35. Did you track and keep records of your outreach activities?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
36. For print, radio, and television media activities, did you keep records that include i) a description of the content or theme; ii) the date of completion of the materials; iii) the date of release or distribution, and iv) the duration of air time or publication? (WV MS4 2009 General Permit, p. 24, #1)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
37. Are your records available upon request?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
38. For pamphlets, brochures, and other finite printed products, did you keep records that include: i) a description of the content or theme; ii) the date of completion of the materials; iii) the date of release or distribution; iv) the location or placement of the materials; and v) date of follow up visits to replenish or transition to the next outreach product? (WV MS4 2009 General Permit, p. 24, #1)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
<p>39. Please describe any additional or alternative documentation and tracking of public education and outreach activities you are implementing.</p> <p>WVU is currently in the process of reviewing all the past tracking systems to better relay information to the general public.</p>			

VII. MCM 2: Public Involvement and Participation (WV MS4 2009 General Permit, p. 6-7)

40. Did you complete all the proposed activities and performance measures for this MCM for this reporting period? ☐ Yes ☒ No

41. Contact: Brian Lemme

42. Phone: (304) 293-8742

Performance Measure 2a: Opportunities for ongoing public involvement and participation in the SWMP

43. Did you create, or are you in the process of creating, ongoing opportunities for the public to participate in the development, implementation, and updating of your SWMP? ☒ Yes ☐ No

44. Did you achieve all the goals that you identified in your SWMP related to creating and maintaining ongoing opportunities for public involvement and participation for this reporting period? (WV MS4 2009 General Permit, p. 24, #3) ☐ Yes ☒ No

45. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above.
(WV MS4 2009 General Permit, p. 24, #4)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

46. List and briefly describe each of the activities undertaken during the reporting period to create ongoing opportunities for the public to participate in your SWMP. (WV MS4 2009 General Permit, p. 24, #1)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

47. Describe how you evaluated the effectiveness of your public participation efforts (citizen attendance at public hearings, requests for information on your SWMP, hotline activity, etc.).
(WV MS4 2009 General Permit, p. 24, #2)

This has not been evaluated at this time. When events are held sign sheets and other materials for tracking effectiveness will be used at that time.

48. Describe the steps taken to ensure that public participation opportunities are ongoing and, if necessary, additional program maintenance activities in future reporting periods to ensure continued participation opportunities. (WV MS4 2009 General Permit, p. 24, #4)

WVU has partner with MUB in two past events, KIDS DAY and HHW events. After review of these joint efforts it appears WVU can achieve better compliance and education through hosting private events for WVU employees and Students in the future as opposed hosting events with MUB for residents of Monongalia County and the City of Morgantown, which should be handled by MUB.

Performance Measure 2b: Communications with community, watershed, and environmental organizations

49. Did you establish a program for routine communications with community based watershed groups or other organizations? ☐ Yes ☒ Partially ☐ No

50. Describe the steps taken to ensure that your programs for routine communications with community-based watershed groups or other organizations are ongoing, or any additional program activities that you believe may be required to ensure continued communications. (WV MS4 2009 General Permit, p. 24, #4)

Formal meetings have not officially been scheduled with local watershed groups. An intern with the office of Sustainability was helping with this task, but was unable to develop a strong relation at this time.

51. Did you achieve all the goals that you identified in your SWMP related to creating and maintaining ongoing communications with community based watershed groups or other organizations for this reporting period? (WV MS4 2009 General Permit, p. 24, #3) ☐ Yes ☒ Partially ☐ No

52. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4)

Timing with being a newly permitted facility due to an outside firm writing the proposed time frames.

Performance Measure 2c: Public availability of SWMP and annual report

53. Did you make your SWMP and annual report available to the public? ☒ Yes ☐ No

54. If yes, please indicate the web address, or if a physical location, please indicate where it is and the process, if any, required for the public to access it.

The SWMP is available to the public on the EHS website.

<http://ehs.wvu.edu/environmental/water-management/storm-water>

The first and second annual reports have been made available at this time.

VIII. MCM 3: Illicit Discharge Detection and Elimination (WV MS4 2009 General Permit, p. 7-10)

55. Did you complete all the proposed activities and performance measures for this MCM for this reporting period? ☒ Yes ☐ No

56. Contact: Brian Lemme

57. Phone: (304) 293-8742

Performance Measure 3a: MS4 map

58. Were your proposed activities for creating and annually updating your MS4 map for the reporting period implemented? ☒ Yes ☐ Partially ☐ No

59. List and briefly describe the activities undertaken to either develop or update your MS4 map.
(WV MS4 2009 General Permit, p. 24, #1)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

Performance Measure 3b: Illicit Discharge Detection and Elimination (IDDE) ordinance development		
60. Has your municipality adopted an IDDE ordinance in accordance with the requirements of the WV MS4 2009 General Permit (Part II Section C.b.3.b)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
61. If not, please describe the activities or progress made in adopting or updating an existing ordinance and provide an estimated date for adoption. (WV MS4 2009 General Permit, p. 24, #1) WVU does not have the authority to create and ordinance. The IDDE program will be handled in house for minor repairs and contracted out when needed. Education about IDDE will be the most beneficial part of this program, to prevent spills before they occur or become a large problem.		

Performance Measures 3c and 3e: IDDE program implementation and assessment, and program tracking		
62. Is your IDDE program fully implemented, including visual inspections based on a system of prioritizing outfalls and procedures for characterizing discharges?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
63. If no, please describe obstacles, if any, to implementation, and an estimate of when your program will be fully implemented.		
64. Were all your measurable goals met for implementing and evaluating an IDDE program during this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
65. How many field assessments were conducted during the reporting period?	Approx. 83	
66. How many illicit discharges were identified during the reporting period?	7	
67. How would you characterize the type of illicit discharges found (sewer cross connections, spills, illegal dumping, unaware residents, etc.)? -Sewer cross connections, existing problem. Also, WVU identified an IDDE in MUB system and reported the problem to them, which found a local business had an illegal cross connection.		
68. How would you characterize the type of pollutants discovered in illicit discharges (oil and grease, fecal coliform, chlorine, paints, etc.)? Name the top five pollutants discovered or uncovered by your IDDE program. Fecal Coliform.		
69. How many corrective actions were taken to remove illicit discharges?	6	
70. How many enforcement actions were initiated to eliminate illicit discharges into the storm sewer system?	0	
71. Have you attached additional documentation to better identify the nature and extent of the program activities and accomplishments?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

72. Did you conduct any activities for educating the public on hazards of illegal discharges for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> No
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See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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This has not been evaluated at this time.

☐ Yes ☒ No

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

Performance Measure 3f: Training for municipal staff on identification, reporting, and elimination of illicit discharges			
78. Have you developed a program to train municipal employees on illicit discharges?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> No
79. Did you conduct any municipal employee training during this reporting period?	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No
80. List and briefly describe the training activities conducted during the reporting period. (WV MS4 2009 General Permit, p. 24, #1) Not at this time.			
81. How did you evaluate the effectiveness of the training activities? (WV MS4 2009 General Permit, p. 24, #2) This has not been evaluated at this time. When events are held sign sheets and other materials for tracking effectiveness will be used at that time.			
82. How many municipal employees were trained to identify and report illicit discharges? (WV MS4 2009 General Permit, p. 24, #2) 0			
83. Did you achieve all the goals that you identified in your SWMP related to training municipal employees on IDDE procedures for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No
84. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4) No formal staff other than the field inspector (Brian Lemme) has received training at this time.			

IX. MCM 4: Construction Site Runoff Control (WV MS4 2009 General Permit, p. 10-12)

85. Did you complete all proposed activities and performance measures for this MCM for this reporting period? ☐ Yes ☒ No

86. Contact: Brian Lemme

87. Phone: (304) 293-8742

Performance Measures 4a and 4b: Develop and implement an ordinance to address stormwater runoff from construction sites one acre or greater

88. Has your municipality adopted a construction site runoff control ordinance in accordance with the requirements of the WV MS4 2009 General Permit (Part II Section C.b.4.a)? ☐ Yes ☒ Partially ☐ No

89. If a program ordinance has not been adopted, have the proposed activities for developing and implementing an ordinance to address stormwater runoff from construction sites been implemented? ☐ Yes ☒ Partially ☐ No

90. Please indicate the anticipated ordinance adoption schedule. (WV MS4 2009 General Permit, p. 24, #1)

Follow WVDEP standards. EHS is planning to develop a internal permitting process for projects less than 1 acre in size.

91. Has your construction site ordinance been reviewed and/or updated to include any new criteria during the reporting period? ☐ Yes ☒ Partially ☐ No

92. Is your construction site program being fully implemented to include provisions for: i) plan review, ii) routine site inspections, iii) enforcement, and iv) record keeping and reporting? ☐ Yes ☒ Partially ☐ No

93. Please indicate the number of plan approvals during the reporting period. 6

94. Please indicate the number of construction site inspections during the reporting period. 139

95. Please indicate the number of enforcement actions during the reporting period (can attach document). 0

96. Are enforcement records maintained and available upon request? ☐ Yes ☐ Partially ☒ No

97. Is there adequate funding to fulfill the program implementation requirements required by the WV MS4 2009 General Permit? ☐ Yes ☐ Partially ☒ No

98. Briefly list and describe any activities outlined in your SWMP completed during the past permit year related to construction site operator and/or permittee site inspector training. (WV MS4 2009 General Permit, p. 24, #1)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

99. Did you achieve all the goals that you identified in your SWMP related to developing or implementation and assessment of a construction site runoff control program for this reporting period? (WV MS4 2009 General Permit, p. 24, #3) ☐ Yes ☒ No

100. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above.
(WV MS4 2009 General Permit, p. 24, #4)

Additional meetings and coordination with MUB and WVU staff from Design and Construction office.

X. MCM 5: Controlling Runoff from New Development and Redevelopment (WV MS4 2009 General Permit, p. 12-19)

101. Did you complete all proposed activities and performance measures for this MCM for this reporting period? ☐ Yes ☒ No

102. Contact: Brian Lemme

103. Phone: (304) 293-8742

Performance Measure 5a: Develop, implement, and enforce a program to protect water resources by addressing stormwater discharges from regulated new and redevelopment projects

104. Has your municipality adopted a stormwater management ordinance in accordance with WV MS4 2009 General Permit (Part II Section C.5.a.ii.A)? ☒ Yes ☐ Partially ☐ No

105. If your ordinance has not been adopted, please describe the progress made towards final ordinance adoption during this reporting period, and expected date of final adoption. (WV MS4 2009 General Permit, p. 24, #1)

WVU does not have the authority to create and ordinance. WVU will follow the requirements of the MS4 for capturing the first 1 inch of runoff and managing a 50yr 24-hr storm by MUB.

106. Does your (proposed) ordinance include language incorporating the development incentives described in the WV MS4 2009 General Permit (Part II Section C.5.a.ii.A.3)? ☐ Yes ☒ No

107. Does your (proposed) ordinance include language incorporating the off-site mitigation or fee-in lieu alternatives to on-site BMP implementation as described in the WV MS4 2009 General Permit (Part II Section C.5.a.ii.A.4)? ☐ Yes ☒ No

108. Have you developed a process for reviewing and updating your ordinance and program implementation to address the adequacy of provisions for: i) requiring runoff volume reduction on new and redevelopment sites, ii) plan review, iii) BMP construction and maintenance inspections, iv) enforcement, v) inventory and tracking, and vi) record keeping and reporting? ☒ Yes ☐ No

109. How many projects were reviewed during the reporting period? 6

110. What types of projects were reviewed (residential, commercial, industrial, etc.)?
(WV MS4 2009 General Permit, p. 18, #2)

Commercial

111. Provide a summary of the number and types of stormwater BMPs approved in new and redevelopment projects during the reporting period. Please list the BMPs according to the BMP specification number from the WV Stormwater Management Manual (2012). (WV MS4 2009 General Permit, p. 18, #3)

BioCell and green roof and Law center
6 BioCells at CPASS/SH
WVU Hospital has adopted WVU's SWMP for the first 1" with 4 new projects
CAC parking area will have 3 new BioCells
College Park Apts will have an underground system with pretreatment devices.
University Park Apts will have several BioCells
University Place Apts will have two BioCells and an underground systems
AgSci will Have a BioCell
New AERB will have BioCell
New parking lot Evansdale roadway will have rain garden and BioCell
New Evansdale Connector building will have two BioCells
New Art Museum will have two BioCells

112. Provide a summary of the number and type of projects that qualified for each of the development incentives described in the WV MS4 2009 General Permit (Part II Section C.5.a.ii.A.3) during the reporting period. Please indicate if you have attached additional documentation. (WV MS4 2009 General Permit, p. 18, #3)

None

113. Provide a summary of the number of projects that qualified for any offsite mitigation or payment in lieu options described in the WV MS4 2009 General Permit (Part II, Section C.b.5.a.ii.A.4) during the reporting period. Please indicate if you attach additional documentation. (WV MS4 2009 General Permit, p. 18, #3)

None

114. How many maintenance agreements were approved during the reporting period?
(WV MS4 2009 General Permit, p. 18, #4)

0

115. Were any maintenance agreements recorded at the county courthouse?

☐ Yes

☒ No

116. Provide a summary of the number and type of stormwater BMP inspections conducted by MS4 personnel or contracted agents (construction as-built, ongoing operation and maintenance audits, complaint driven, etc.). Include (or attach) a summary of: i) the type and number of BMPs requiring maintenance or repair, ii) the number brought into compliance, and iii) the number of enforcement actions taken.
(WV MS4 2009 General Permit, p. 18, #5)

MCM 5, BMP 5-5, this does not occur until 30 months after approval.

117. Did you achieve all the goals that you identified in your SWMP related to developing and/or implementing and assessing a stormwater management program for this reporting period?
(WV MS4 2009 General Permit, p. 24, #3)

☒ Yes

☐ No

118. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above.
(WV MS4 2009 General Permit, p. 24, #4)

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

Performance Measure 5b: Long-term watershed protection elements			
119. Does a local ordinance or equivalent document incorporate the watershed protection elements described in WV MS4 2009 General Permit (Part II Section C.5.a.i.A)?		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially <input type="checkbox"/> No
120. If yes, please describe how the permittee's legal authority addresses the following watershed protection elements: (WV MS4 2009 General Permit, p. 18, #1)			
121. Minimize impervious cover.		Looking into using permeable pavers, and pavements.	
122. Preserve, protect, create, and restore ecologically sensitive areas.			
123. Implement practices that prevent or reduce thermal impacts to streams.		Planting of trees within parking lot area. Capturing the first 1 inch of runoff.	
124. Seek to avoid or prevent hydromodification of water bodies caused by development.		Capturing the first 1 inch of runoff.	
125. Minimize impacts to existing vegetation (especially trees).		Several trees are to be removed to allow for construction, but will be replaced during final land scaping of area.	
126. Minimize impacts to native undisturbed soils.			
127. If the watershed protection elements have not yet been incorporated into a planning document or ordinance, please describe the actions to be taken to incorporate these elements. (WV MS4 2009 General Permit, p. 24, #1)			

Performance Measure 5c: Street and parking design assessments		
128. Were the proposed activities for assessing the current street design guidelines and parking requirements implemented?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
129. If this is your third-year report, please attach your report assessing the current street and parking design requirements, and recommendations and proposed schedules for incorporating policies and standards to maximize vegetation and minimize impervious cover where possible. (WV MS4 2009 General Permit, p. 24, #8)		

XI. MCM 6: Pollution Prevention & Good Housekeeping for Municipal Operations (WV MS4 2009 General Permit, p. 19-21)

130. Did you complete all the required performance measures for this MCM for this reporting period?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
131. Contact: Brian Lemme	132. Phone: (304) 293-8742	

Performance Measures 6a and 6b: Develop and implement an operation and maintenance program for all municipal facilities that includes prevents or reduces the discharge of polluted runoff

133. Were the proposed activities for developing a pollution prevention and good housekeeping program for municipal operations implemented?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> No
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134. List and briefly describe the activities outlined in your SWMP for the development of a pollution prevention and good housekeeping program for municipal operations undertaken during this reporting period.

See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.

135. Do you have a pollution prevention plan for each of your municipal facilities as required by the WV MS4 2009 General Permit (Part II Section C.b.6.a)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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136. Do you have an inspection schedule for conducting inspections at your municipal facilities as required by the WV MS4 2009 General Permit (Part II Section C.b.6.a)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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137. Are you tracking and maintaining records of inspection and maintenance activities for each municipal facility as required by the WV MS4 2009 General Permit (Part II Section C.b.6.a)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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138. If you answered no to any of the previous three questions, please indicate your proposed schedule for implementing the requirements of the WV MS4 2009 General Permit (Part II Section C.b.6.a).

See attached MS4 outline BMP starting with 6 and completion dates associated with each BMP.

139. How many inspections were conducted at each municipal facility during the reporting period?	0
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140. List the top three problems that you have found while conducting inspections at municipal facilities.

No inspections were conducted during this reporting permit due to focus on other programs and areas. A major IDDE was discovered and eliminated. One of the made problems appears to be a lack of SOPs and O&Ms for specific duties at the facilities. This will be address with the new SWMP to better develop a more self sustaining monitoring program for each facility.

141. Were these problems corrected? (WV MS4 2009 General Permit, p. 24, #1)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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142. Did you achieve all the goals that you identified in your SWMP related to developing a pollution prevention and good housekeeping program for municipal operations for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
143. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4) See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.		

Performance Measure 6c: Municipal employee good housekeeping training			
144. Were the proposed activities for developing a pollution prevention and good housekeeping training program for municipal employees implemented as described in the WV MS4 2009 General Permit (Part II, Section C.b.6.c)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> No
145. Were the proposed activities for implementing a pollution prevention and good housekeeping training program for municipal employees implemented as described in the WV MS4 2009 General Permit (Part II, Section C.b.6.c)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> No
146. Did municipal employees receive training in accordance with the guidelines described in the WV MS4 2009 General Permit (Part II, Section C.b.6.c)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> No
147. How many employees received training during the reporting period? (WV MS4 2009 General Permit, p. 24, #1)	0		
148. Are you maintaining records of all municipal training activities (including training agendas, learning objectives, instructor qualifications, sign in sheets, etc.)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
149. Explain how the effectiveness of the training activities was evaluated (number of employees trained and/or certified in specific good housekeeping skills, measurable improvements in cost or performance of facility maintenance activities, or as outlined in your SWMP). (WV MS4 2009 General Permit, p. 24, #2) Unknown at this time.			
150. Did you achieve all the goals that you identified in your SWMP related to training municipal employees on pollution prevention and good housekeeping for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
151. If not, please describe the progress you did make towards achieving your goal(s), and any obstacles and possible solutions such as revised implementation schedules or revised measurable goals. If you are proposing any changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4) See attached narrative report for implementation of BMPs, milestones and goals for the current reporting period.			

BMP 1-7 Transportation and Parking. Distribute information about vehicle maintenance and impervious cover impacts on water resources through West Virginia University (WVU)'s Parking Management Office's permit applications and parking lot maps.

1. **Milestone - Conduct an inventory, analysis, and selection of the communications tools available through Parking Management to distribute stormwater management concepts to contractors, faculty, staff, students, and campus visitors.**

Communication tools through Parking Management Office (PM) can be used to distribute stormwater information to the general public when new parking permits are sent out. This part of implementing the Best Management Practice (BMP) was achieved by simply looking at what communication tools are available for education. This year the parking permits were mailed with a fold out pamphlet. After review of the material, a brief section about stormwater could be added if the parking permits will be mailed using the same format next year. The director of parking will be contacted to determine if a section can be added to the informational packet. This will be fully addressed in the new SWMP.

2. **Milestone - Conduct the development of those communications tools determined to be the most effective at communicating stormwater management concepts, especially vehicle maintenance and impervious cover impacts on water resources.**

This year the parking permits were mailed with a fold out pamphlet. After reviewing the pamphlet material, a brief section about stormwater could be added if the parking permits will be mailed using the same format next year. The director of PM will be contacted to determine if a section can be added to the informational packet. This will be fully addressed in the new SWMP. Additional topics and informational packets have been developed, but the process for proper and effective distribution is still being worked on.

3. **Distribute permit applications, parking lot maps, and other Parking Management publications that include stormwater management concepts.**

The requirements of this section for implementation of the BMP do not apply to this office. West Virginia Environmental Health and Safety (EHS) is not tasked with distributing permits applications, parking maps, or other publications. However, topics about stormwater and where to direct the public for more information will be provided within the print media. All materials will be handed out by PM office as seen fit.

This BMP was partly achieved and will be reapplied during next permit cycle.

BMP1-8 Vendor Education. Raise the level of awareness of stormwater management concepts for vendors and contractors that work on WVU's Morgantown campuses.

1. **Milestone - Determine the stormwater management concepts and establish standards that vendors and contractors should understand and implement based on their job functions.**

The concepts for the vendor, as for any other group, are similar. After much thought and review, it appears the best approach would be to create a single page information sheet that can be distributed to multiple groups. All the previously developed educational

material on stormwater management and pollution prevention will be reviewed and combined into a simple single use document.

This existing BMP will be restricted and combined with similar topics on stormwater education next permit cycle.

2. Create a list of the educational materials and training sessions contractors must complete before working on WVU campus.

It is unmanageable to track a list of contractors and vendors that conduct business at WVU. WVU does not have a central tracking system or office to handle this task. It is more reasonable to develop a section within the Terms and Conditions (T&Cs) contracts for vendors and contractor, which briefly educates about stormwater management and directs them to resources if additional education or information is needed. These T&Cs have been identified and reviewed with potential areas to add material on stormwater management. However, it may take several months to develop, present and have the required changes to the T&Cs made.

This BMP was partly achieved and will be reapplied during next permit cycle.

BMP 1-9 Vendor Contracts. Prepare standards to include language in contracts and/or the procurement process that describe vendor and contractor stormwater management responsibilities that need to be adhered to while working on campus.

1. Milestone - Conduct research of existing contract templates to determine how best to apply stormwater management responsibilities to vendors and contractors.

See summary above for BMP 1-8.

2. Develop language for contracts and/or the procurement process for proper management of stormwater and sources of pollutants and work with WVU Purchasing and Procurement to implement use of the terms.

See summary above for BMP 1-8.

This BMP and all subparts are in line with the previous BMP 1-8. Both BMPs (1-8 and 1-9) will be combined and implemented during the next permit cycle.

BMP 2-6 Stream Sampling. Partner with existing stream sampling programs to monitor water quality.

1. Post results of water quality monitoring on the WVU SWMP website.

The original BMP required coordination with WVU faculty that monitor water quality. Faculty was contacted as required with the previous steps to implement this BMP, but no return info was provided. It would be better for personnel to conduct background sampling of the receiving streams located within the MS4 boundary. This data could then be posted to the EHS website/stormwater section. The data would also provide a comparison and baseline for Total Mass Daily Loads (TMDLs) that are developed for the WVU area. This BMP would have been more effective if it required the posting of sample results from the facilities outfalls. This data will be posted along with any new data in the next permit cycle.

This BMP was partially achieved through the previous requirements. The final step of posting results for stream sampling was not achieved due to having no data to post.

BMP 2-7 Stormwater Involvement and Participation Information. Provide and distribute printed educational material (see BMP 1-3).

1. Milestone –Create information for distribution at EHS display.

Multiple forms of educational material, PowerPoints, handouts and other media have been developed and distributed during several events. The most recent event was the 1st Water Festival in Morgantown, WV.

This BMP was achieved through the previous requirements and in conjunction with several other BMPs over the first few years of the SWMP.

BMP 2-8 BMP Tour. Develop a tour of campus stormwater management BMPs and demonstration projects (i.e.g green roof, rain garden, underground retention, vegetated basin, riparian buffer) (BMP 1-6).

1. Milestone - Develop an inventory of all potential BMP tour sites on campus.

All existing BMPs have been identified, that could be used for a stormwater tour. The list of facilities is continually growing with the addition of several new buildings and other developments.

2. Milestone - Select the sites to include in the stormwater tour, create a map, and develop a script of talking points.

Several sites have been selected to include in the tour. After reviewing this BMP, it would appear best to develop two different tours: 1. Downtown Campus 2. Evansdale Campus. This BMP will be revisited and finalized during the next permit cycle to develop a better product for communicating stormwater management topics.

3. Milestone - Promote the tour by posting the map on the WVU stormwater website and through appropriate academic courses.

A beta test tour has been developed and used during several guest lectures with different engineering classes. The first tour included visiting a BioRetention Cell (BioCell), viewing a construction site with E&S controls, a regional stormwater detention pond, and a BioRetention Swale. This BMP also works in conjunction with BMP1-6 (Interpretative Signage). Quotes have been received for creating and posting information signs at the selected BMPs and all BMPs that will not be on the tour. This will work in conjunction with creating an identification systems for the location of each BMP and will also allow for tracking of inspections and maintenance for the BMP.

This BMP was partly achieved and will be reapplied during next permit cycle and combined with several other existing BMPs to create a better educational device.

BMP 3-1 MS4 Mapping. Create and maintain a map of the MS4 that includes all outfalls, receiving waters, structural BMPs, stormwater conveyances, combined sewers, and geographic areas that discharge to the MS4 (§3.a).

1. Milestone - Complete the outfall map for the remaining watersheds.

This BMP was originally written incorrectly. This requirement was met when the third waster shed was mapped. Two maps have been developed for verification purposes at this time for the Evansdale Campus and Downtown Campus. The maps will be updated annually and after any new building, parking lot or other construction is completed that affects the stormwater system.

This BMP was achieved.

BMP 4-2 Develop Procedures. Develop Construction Site Run-off Control procedures for erosion and sediment control plan review, site inspection, and enforcement at construction sites with land disturbance activities (§4.b. i – iii, v).

1. Complete the Construction Site Runoff Control Program procedures, including the creation of a checklist with necessary steps to take a project from initial concept through to site stabilization.

At this time an official program has not been developed in writing at this time. The main driving force for ensuring compliance of this BMP is governed by the enforcements factors of the NPDES general permit for construction activities. After review of the SWMP, it is foreseen that development of an internal EHS permitting process for on campus earthwork of less than 1 acre is necessary. A full document outlining all the necessary steps for an effective program will be developed during the next permit cycle.

2. Incorporate elements of the Construction Site Run-off Control Program into the Design Guidelines and Construction Standards where applicable.

Elements have been added to the Guidelines to direct any earthwork being performed that is greater than 1 acre. New elements will be amended to the guidelines after the development and approval of the new internal permitting system for small earthwork projects.

3. Implement completed procedures.

This is currently being implemented for large earthwork projects that require an NPDES permit. All other procedures will be developed and implemented during the next permit cycle.

This BMP was partly achieved and will be reapplied during next permit cycle.

BMP 4-3 Train Staff. Train staff on site review, inspection, and enforcement procedures (§4.b.iv) (BMP 1-2).

1. Complete training of staff that will perform review, inspections, and enforcement at construction sites.

Currently there is no stormwater group within the EHS department or support staff to train for these actions. Site review and inspection is handled by the MS4 coordinator. Also WVU does not have any enforcement ability at this time. If the stormwater department would grow, proper training would be provided to staff performing these duties. Current goals for next permit cycle include a combination of all required training over several MCMs to be provided to employee, staff, students, vendors, and contractors. This will also be in line with requirement for BMPs with MCM1.

This BMP was achieved based on the requirements that the person conducting the actions required was previously well trained in stormwater.

BMP 4-4 Contractor Education. Provide educational and training measures for construction site operators (§4.a.ix and 4.b.iv) (BMP 1-8).

1. Create and provide a list of the educational materials and training sessions contractors must complete on their own before working on WVU campus.

This will be addressed next permit cycle as previous stated above in BMP 4-3, along with other training requirements of the permit. However, specific educational materials have been developed (i.e. concrete washout) and have been relayed to contractor and vendors on a need to know basis.

This BMP was partly achieved and will be reapplied during next permit cycle.

BMP 4-5 Contracts. Prepare language for the procurement process that describe contractor stormwater management responsibilities. (BMP 1-9).

1. Develop language that specifies contractor responsibilities for proper management of construction site runoff. Within the Project Scope, contractors will be required to provide education on Construction Site Run-off Control to on-site employees.

This BMP will be combined and redeveloped next permit cycle as previously stated in this report for BMPs 1-8 and 1-9.

This BMP was partly achieved and will be reapplied during next permit cycle.

BMP 5-3 Design Guidelines. Develop design guidelines and construction standards for new development and redevelopment, including the requirement to develop maintenance plans for new BMPs (§5.a.ii.A.1 and C).

1. Milestone - Identify sections of the Design Guidelines and Construction Standards and other planning documents that address Post-Construction Stormwater Management.

The Design Guidelines and Construction Standards were updated within the first year of the permit. Changes included capture of the first 1 inch of runoff and showing how peak flow runoff reduction will meet MUB standards of a 2, 10, and 50 year 24 hour storm. This is mainly being achieved through use of LID green infrastructure (BioCells, BioSwale, Rain gardens, Green roofs). Where green infrastructure can't be used, traditional detentions system with pretreatment devices are being implemented to remove pollutants prior to entering the system.

This BMP was achieved.

BMP 5-5 BMP Operation and Maintenance Programs. Develop operations and maintenance plans for each of the structural BMPs on campus.

1. Milestone - Identify the structural stormwater BMPs on campus.

All existing BMPs from the first SWMP have been identified. Within the past 3 years, approximately 15 or more new BMPs have installed at various properties owned or leased by WVU in conjunction with several new projects. The current list of BMPs will be reviewed and updated as needed once any new BMPs are installed and functional. This action will take place during the next permit cycle.

2. Milestone – Develop a schedule to develop an operation and maintenance program for each structural stormwater BMP on campus.

O&M programs have not yet fully been developed for each BMP at this time. The addition of 15 new BMPs brings the total to 30+ facilities. There also are several issues with the newly installed BMPs that must be corrected prior to developing an effective O&M program to preserve the longevity and functionality of the BMP.

This BMP was partly achieved and will be reapplied during next permit cycle.

BMP 5-6 Tracking and Inspections. Establish a BMP tracking and inspection program (§5.a.ii.D and E) (BMP 3-3 and BMP 6-3).

1. Create a database to track and store information on source control practices, treatment control practices, photographs, maintenance requirements, and inspection activities.

This activity and BMP is very similar to BMP 5-5 and will be combined to eliminate overlap of specific requirements while still meeting all the needed implementation items.

This BMP will be reevaluated and reapplied during next permit cycle.

BMP 5-7 Street Design. Assess street design guidelines and parking requirements (§5.b).

1. Milestone - Identify all design guidelines and planning documents that describe standards for streets and parking areas.

The only documents related to this item are in reference to the type of asphalt used, thickness, and line painting for parking space widths, etc. These standards have little weight in managing stormwater runoff. This BMP should have been combined with BMP 5-3. WVU has taken a protective approach for all new or redevelopment projects over 3000 SF to manage and treat the first 1 inch of runoff. By using a single standard, it eliminates some confusion when a project is being designed. Having one blanket standard is better than 2 or 3 based on the type of project you are completing.

This BMP will be reevaluated and reapplied to better fit the needs of a University rather than a City during next permit cycle.

BMP 5-8 Staff Training. Train staff on Post Construction Stormwater Management concepts and Plan of Action (BMP 1-2).

1. Milestone - Identify the staff and their roles participating in the Post-Construction Stormwater Management Program.

This BMP is in line with MCM1 education. The main role of the SWMP is handled by the WVU EHS Stormwater Specialist.

2. Milestone - Develop training programs for the different staff functions in the Post-Construction Stormwater Management Program.

Again, this BMP is in line with education.

This BMP was achieved based on the requirements that the person conducting the actions required was previously well trained in stormwater. This BMP will be reevaluated and reapplied during next permit cycle.

Summary

Several key factors must be taken into account with the SWMP for WVU. The general permit cycle was from 2009-2014. WVU was a newly permitted MS4 and required to submit a Notice of Intent (NOI) in 2009. Once approved, WVU had 1 year to submit and have approved a SWMP. The SWMP outlined specific milestones and goals to achieve compliance with the NPDES general permit and SWMP. WVU's SWMP was approved and effective September 29, 2011. Several goals and milestone were achieved prior to the SWMP being approved. WVU has implemented to the maximum extent practical the first 3 years of the SWMP and continues to review and implement the current SWMP. With limited resources to developed specific details for each BMP, it is currently more beneficial to focus on the overall implementation of the SWMP and determine which BMP areas are strong and weak. The new general permit has already been issued and a new NOI filed with West Virginia Department of Environmental Protection (WVDEP). Once approved, WVU will rewrite the SWMP using several BMPs from the previous plan to better develop a more reasonable and practical SWMP for the University.