



Marshall University

MS4 Annual Report 2015

Permit WVR030043



Brandi Jacobs-Jones
Sr. VP of Operations
One John Marshall Drive
Huntington, WV 25755

9/23/15
Date





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: September 30, 2014 - September 29, 2015		
2. Name of MS4: Marshall University	3. Registration number: WVR030043	
4. Primary contact: Travis M. Bailey	5. Title: Environmental Specialist	
6. Mailing address: One John Marshall Drive		
7. City: Huntington	8. Zip code: 25755	9. County: Cabell
10. Telephone number: (304) 696-3032		
11. Email: Bailey53@marshall.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)		
Bacteria and iron are the parameters of impairment.		
Bacteria-The actions Marshall has taken to reduce this pollutant of concern are pet waste education newsletters, website information, and checking for illicit discharges to ensure no cross connections have occurred.		
Iron- An assessment has revealed the only source of iron on campus would be from construction sites and all procedures are followed that are required in the general construction stormwater permit and the WV Erosion & Sediment Control BMP Manual.		
14. Has a TMDL been developed since your plan was approved?	<input checked="" type="checkbox"/> Yes	<input 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.	\$ 0
17. Please provide total operating expenditures for this reporting period.	\$ 68,000

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)

There are no current coordination of efforts. Marshall University is an MS4 within another MS4 (City of Huntington).

Both entities will attend trainings organized by the other entity for support.

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.

N/A

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
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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
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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 2- The university was to hold two contests (page 14 of SWMP), the first was open to students to create catchy slogans/phrases to make people aware how their actions could cause pollution in stormwater runoff. The second contest was to create posters for the winning slogans. This component (slogan and poster contest) of MCM 2 has and will be discontinued due to lack of participation.

MCM 3- MU's SWMP notes conducting outfall/manhole reconnaissance twice/month in order to map the system for better validity and to observe any illicit discharges that may be occurring. This component of MCM 3 is unfeasible so reconnaissance was done once/month.

MCM 6- The university's SWMP notes all municipal facilities will be inspected quarterly. The WVDEP inspection report states "the facilities listed in the SWMP with industrial activity exposed to stormwater have no activities with stormwater exposure and should be removed from this listing in the SWMP." Upon this recommendation the quarterly inspections under MCM 6 has and will be discontinued.

23. Is additional documentation attached?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
25. Contact: Travis M. Bailey	26. Phone: (304) 696-3032	

Performance Measure 1a: Program implementation

27. Were the proposed activities for developing a public education and outreach program implemented?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
<p>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)</p> <ol style="list-style-type: none"> 1. Stormwater Webpage-MU created a webpage to provide information to students, faculty, staff, and the public on the impacts of stormwater run-off and what students, faculty, staff, and the public can do to reduce stormwater pollution. 2. Stormwater Curriculum-MU incorporated stormwater pollution and its impacts as part of the curriculum. 3. Student Organizations-MU staff has joined multiple student organizations (Greening Marshall, Earth Day Committee, Tree Committee, Green Trail Committee, Environmental Collaboration Committee, etc.) to improve the awareness of stormwater pollution and the impacts. Non-Campus Organizations/Meetings-WVMS4 Collaboration and Local MS4 Collaboration 4. Public Awareness-MU will encourage and support articles in the student newspaper regarding stormwater, pollution prevention, recycling, and sustainability. 5. Illicit Discharges-MU will publicize the physical plant telephone number for use by students and staff to report suspected illicit discharges or other pollution concerns. 6. Contract Work-Educate contractors by placing an "educational stormwater page" in the contract document. 			
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)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<p>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)</p> <p>No projects with earth disturbing requirements were started for this reporting so no contractors were educated on stormwater concerns.</p>			

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially <input type="checkbox"/> 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) Marshall University evaluates the effectiveness of the program by the amount of: <ol style="list-style-type: none"> 1. Visits to website-843 2. Surveys taken-15 3. Stormwater curriculum-51 students 4. Meetings attended-19 5. Articles distributed-7 6. Illicit discharges discovered-2 7. Contract workers-0 		
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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
34. If yes, please describe any changes you would like to consider to improve your evaluation of effectiveness of outreach. Marshall University created a new website (http://www.marshall.edu/greentrail/2015/06/08/green-trail/) that discusses all of the green initiatives that are being implemented across campus. This will make it easier for individuals to understand the impacts of stormwater. This should increase the amount of visits on the website thus increasing the understanding of stormwater pollution.		

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
39. Please describe any additional or alternative documentation and tracking of public education and outreach activities you are implementing. The Environmental Health and Safety department purchased carabiners and flashlights to distribute during public participation. The department purchased 500 of each and distributed 250 of each during the 2014-2015 reporting period.			

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
41. Contact: Travis M. Bailey	42. Phone: (304) 696-3032	

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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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)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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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)

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)

1. The SWMP is posted to the webpage along with a comment section for individuals to add their input and a survey to be completed.
2. Students will be used as time and opportunity allows. Marshall has previously used students to assist in developing the inventory of campus' stormwater system.
3. Marshall will track the slogans and artwork from the contests to see how they are used in other outreach opportunities, such as flyers and website pages.

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)

1. The website and survey both have a counter on them so a tally can be done. Total visits for the website for the 2014-2015 year is 843. The total surveys taken for the past year is 15.
2. Marshall has met the one year time limit to implement the goal but does have intentions to continue to use students as much as possible in the future. One student has been used for this reporting period.
3. The slogan and poster contest was not performed so tracking and observations could not be done.

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)

The website will be updated and new surveys will be posted. This will help with more visits to the site and potentially increase the amount of surveys taken and comments left on the site. The Earth Day and Water Festival events will continue to take place on campus.

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> 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) Meetings are being attended to ensure routine communications are ongoing. Semester events such as a Water Festival for the fall semester and Earth Day Celebrations for the spring semester are planned.			
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)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> 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)			

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

53. Did you make your SWMP and annual report available to the public?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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. http://www.marshall.edu/stormwater/		

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: Travis M. Bailey

57. Phone: (304) 696-3032

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)

MU has been conducting outfall/manhole reconnaissance once/month in order to map the system for better validity and to observe any illicit discharges that may be occurring. The characteristics of the structures are also being documented in addition to incoming pipes, size of pipes, and direction of flow. The information is then entered into the campus mapping system and saved on a server. Additional information entered into the mapping systems includes all priority areas, boundaries, flow direction, areas for potential green projects, stormwater controls, and good housekeeping sites. MU will continue until the mapping has been completed.

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 checked="" type="checkbox"/> Yes	<input 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)		

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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
65. How many field assessments were conducted during the reporting period?	31	
66. How many illicit discharges were identified during the reporting period?	2	
67. How would you characterize the type of illicit discharges found (sewer cross connections, spills, illegal dumping, unaware residents, etc.)? <p>The first one reported was about used clay from the art warehouse that had been discarded outside. Rain fell over the clay which caused the clay sediment to run into a storm drain. The problem was recognized and fixed within the same rain event.</p> <p>The second illicit discharge reported was a contract garbage truck puncturing its fuel tank and discharging approximately 30 gallons of diesel into the storm drain that drains to the combined sewer system. The Huntington Sanitary Board and HFD responded to the spill. All three entities worked together to capture as much diesel as possible. The event occurred on a dry day so the diesel drained to the WWTP for treatment. No diesel entered the Ohio River.</p>		
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. Clay sediment and diesel		
69. How many corrective actions were taken to remove illicit discharges?	2	
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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Performance Measure 3d: Public education on hazards of illegal discharges and improper disposal of waste		
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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially <input type="checkbox"/> No
73. List and briefly describe each of the education and outreach activities undertaken during this reporting period. (WV MS4 2009 General Permit, p. 24, #1) <ol style="list-style-type: none"> 1. MU has developed a stormwater website that explains what an illicit discharge is and who should be contacted if one has been observed. 2. MU has placed a page on the website discussing the negative impact pet waste has on stormwater. 3. The Environmental Health & Safety (EHS) department attends regularly scheduled meetings to discuss contaminants in stormwater and its impact on the receiving body. 4. EHS samples semi-annually for total nitrogen and phosphorous and posts the results in the annual report on the website. 5. EHS performs annual training to staff to ensure everyone is familiar with the appropriate reporting procedure for illicit discharges. 		
74. Were any of these activities included in the public education and outreach efforts described in MCM 1?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
75. How did you evaluate the effectiveness of the activities described in the list above? (WV MS4 2009 General Permit, p. 24, #2) <ol style="list-style-type: none"> 1. There have been two (2) illicit discharges during this reporting period. 2. The website has a counter on it and within this reporting period there have been 843 visits. 3. The EHS department has attended 19 meetings within this reporting period. 4. The results of the samplings are posted on the website with a comments section and no comments have been received concerning the analysis. 		
76. Did you achieve all the goals that you identified in your SWMP related to educating the public on hazards of illegal discharges for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
77. 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)		

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? Yes Partially No

79. Did you conduct any municipal employee training during this reporting period? Yes No

80. List and briefly describe the training activities conducted during the reporting period.
 (WV MS4 2009 General Permit, p. 24, #1)

The EHS department performs safety trainings on different safety concerns. Stormwater has been added in the rotation and has been performed during this reporting period. This training will continue on an annual basis. The employees were informed that MU has received a MS4 permit and what that means to the university and to their work habits. They were told the goals and requirements of the permit and how the university was working to achieve those goals. Illicit discharges were stressed because the campus service workers are the ones on campus every day and need to know how to recognize and report illicit discharges if they should come upon one. Also, they have the responsibility to prevent them by altering their past practices and now making a conscious effort to deal with any type of water flow on campus. They now have a better understanding of how MU's stormwater collection system and their actions have the potential to impact the Ohio River.

81. How did you evaluate the effectiveness of the training activities? (WV MS4 2009 General Permit, p. 24, #2)

Effectiveness was evaluated by the questions asked at the end of the presentations and the amount of calls received from campus workers asking if their procedures were correct or if the EHS department would review the procedures to ensure everything was within compliance.

82. How many municipal employees were trained to identify and report illicit discharges?
 (WV MS4 2009 General Permit, p. 24, #2)

110

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) Yes 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)

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
86. Contact: Travis M. Bailey	87. Phone: (304) 696-3032	

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)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
90. Please indicate the anticipated ordinance adoption schedule. (WV MS4 2009 General Permit, p. 24, #1)			
91. Has your construction site ordinance been reviewed and/or updated to include any new criteria during the reporting period?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> 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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
93. Please indicate the number of plan approvals during the reporting period.	0		
94. Please indicate the number of construction site inspections during the reporting period.	108		
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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
97. Is there adequate funding to fulfill the program implementation requirements required by the WV MS4 2009 General Permit?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> 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)			
<p>1. Verify that each construction project disturbing one (1) acre of land has an approved site registration prior to the commencement of construction.</p> <p>2. MU will review WVDEP stormwater requirements with contractors at the beginning of projects and perform a follow-up review will be conducted on a yearly basis.</p> <p>3. MU will prepare language for the contract documents describing the stormwater management responsibilities that the contractor must abide by.</p> <p>4. MU will train staff on site review, inspection, and enforcement procedures.</p> <p>5. MU will develop lines of communication with contractors in case of spills or releases. MU will aid the contractor with resources needed to contain the spills or releases.</p>			
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)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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)			

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
102. Contact: Travis M. Bailey	103. Phone: (304) 696-3032	

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)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
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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)

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)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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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)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
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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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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109. How many projects were reviewed during the reporting period?	0
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110. What types of projects were reviewed (residential, commercial, industrial, etc.)? (WV MS4 2009 General Permit, p. 18, #2)

N/A

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)

N/A

<p>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)</p> <p>NA</p>		
<p>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)</p> <p>NA</p>		
<p>114. How many maintenance agreements were approved during the reporting period? (WV MS4 2009 General Permit, p. 18, #4)</p>	<p>0</p>	
<p>115. Were any maintenance agreements recorded at the county courthouse?</p>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<p>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)</p> <p>0</p>		
<p>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)</p>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
<p>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)</p>		

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 checked="" type="checkbox"/> Yes	<input 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.	The contractor will be told to cease their activities until they come into compliance with MU's Watershed Protection Elements Program.		
122. Preserve, protect, create, and restore ecologically sensitive areas.	The contractor will be told to cease their activities until they come into compliance with MU's Watershed Protection Elements Program.		
123. Implement practices that prevent or reduce thermal impacts to streams.	The contractor will be told to cease their activities until they come into compliance with MU's Watershed Protection Elements Program.		
124. Seek to avoid or prevent hydromodification of water bodies caused by development.	The contractor will be told to cease their activities until they come into compliance with MU's Watershed Protection Elements Program.		
125. Minimize impacts to existing vegetation (especially trees).	The contractor will be told to cease their activities until they come into compliance with MU's Watershed Protection Elements Program.		
126. Minimize impacts to native undisturbed soils.	The contractor will be told to cease their activities until they come into compliance with MU's Watershed Protection Elements Program.		
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) MU has implemented a Watershed Protection Element Program but has little legal authority. MU does have the ability to tell a contractor to comply with the program or be dismissed from their duties.			

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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
131. Contact: Travis M. Bailey	132. Phone: (304) 696-3032	

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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
<p>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.</p> <ol style="list-style-type: none"> 1. Review current activities performed by maintenance crews and the materials and methods utilized to identify operations on campus with the potential to cause pollution of surface water. 2. Review existing policies and guidelines needed to ensure compliance. 3. Educate and train employees on policies. 4. Prioritize and/or develop new guidelines where needed, update guidelines and procedures as necessary. 5. Currently annual stormwater management training is provided to all trade supervisors and employees. All lab personnel and medical students are given training specifically addressing proper disposal methods and management of chemicals. 			
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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
<p>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).</p> <p>No inspections have been done at this time due to construction just ending. Inspections will begin in the 2015-2016 reporting period</p>			
139. How many inspections were conducted at each municipal facility during the reporting period?	0		
<p>140. List the top three problems that you have found while conducting inspections at municipal facilities.</p> <p>No inspections occurred.</p>			
141. Were these problems corrected? (WV MS4 2009 General Permit, p. 24, #1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

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 checked="" type="checkbox"/> Yes	<input 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)		

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 checked="" type="checkbox"/> Yes	<input 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 checked="" type="checkbox"/> Yes	<input 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 checked="" type="checkbox"/> Yes	<input 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)	110		
148. Are you maintaining records of all municipal training activities (including training agendas, learning objectives, instructor qualifications, sign in sheets, etc.)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<p>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)</p> <p>EHS provided training to various trades throughout the year. The effectiveness of the training was evident by the number of employees contacting EHS following the training to ensure they were following proper protocol when performing job duties that may impact stormwater. Example questions: what to do with mop water or cleaning products? This raised awareness that there was confusion between sanitary drains and storm drains so further discussion was necessary and performed.</p>			
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 checked="" type="checkbox"/> Yes	<input 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)			

Marshall University

MONITORING RESULTS

October 2014-March 2015

Date	Permit Requirements	Analyses	Results (mg/L)	Method	Reporting Results (mg/L)
3/4/15	Total Nitrogen	Nitrate	0.18	E300.0	0.93
		Nitrite	ND	E300.0	
		TKN	0.75	E351.2	
3/4/15	Total Phosphorous	Phosphorous	0.19	E365.4	0.19

April 2015-September 2015

Date	Permit Requirements	Analyses	Results (mg/L)	Method	Reporting Results (mg/L)
8/10/15	Total Nitrogen	Nitrate	0.27	E300.0	0.81
		Nitrite	ND	E300.0	
		TKN	0.54	E351.2	
8/10/15	Total Phosphorous	Phosphorous	0.04	E365.4	0.04

Marshall University

2014-2015 RECYCLING VS WASTE COMPARISON

	2014			2015		
	Waste	Recycling	Percentage	Waste	Recycling	Percentage
January	55.5	5.7	9.3%	32.16	6.96	17.8%
February	18.78	6.78	26.5%	39.3	3.735	8.7%
March	35.5	6.58	15.6%	36.71	8.485	18.8%
April	48.78	19.27	28.3%	49.43	15.868	24.3%
May	7.28	6.79	48.3%	25.09	5.8445	18.9%
June	15.53	8.7	35.9%	22.2	8.301	27.2%
July	45.15	12.7	22.0%	8.08	3.758	31.7%
August	28.53	6.42	18.4%	31.35	17.02	35.2%
September	53.41	7.89	12.9%			
October	62.57	9.76	13.5%			
November	22.82	6.855	23.1%			
December	40.25	5.91	12.8%			
1st Quarter	109.78	19.06	14.8%	108.17	19.18	15.1%
2nd Quarter	71.59	34.76	32.7%	96.72	30.0135	23.7%
3rd Quarter	127.09	27.01	17.5%	39.43	20.778	34.5%
4th Quarter	125.64	22.525	15.2%	0	0	
Total	434.1	103.355	19.2%	244.32	69.9715	22.3%

