

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)

See attached "Additional Documentation."

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.

Tim Ball, PE- General Manager, Morgantown Utility Board, 304-292-8443, tball@mub.org
 Doug Smith, PE- Asst. General Manager, Morgantown Utility Board, 304-292-8443, dsmith@mub.org
 Kenneth Hacker, PE- Staff Engineer, 304-292-8443, khacker@mub.org - Overall Program Management
 Kenneth Willis- Engineering Technician, kwillis@mub.org- BMPs 15.h.F, 17.i.D, 18.i.A, 18.i.B, 18.i.D, 19.k.B
 Chris Dale- Director of Communications, cdale@mub.org- BMPs 15.h.A-15.h.E, 15.h.G, 16.h.A-16.h.C, 17.i.B, 17.i.D-17.i.F, 18.i.E,
 Jim Turner- Construction Stormwater Inspector, jturner@mub.org- BMPs 18.i.C, 18.i.D

See attached table of organization

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

MUB's new Stormwater Management Plan was approved February 8, 2016. No changes in the SWMP are anticipated at this time.

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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
25. Contact: Kenneth Hacker	26. Phone: (304) 292-8443	

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
--	---	------------------------------------	-----------------------------

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 "Additional Documentation."

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
--	---	-----------------------------

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)

MUB achieved all the measurable goals for MCM 1 within this reporting period. However, MUB has noted that the online survey results are lacking with only 2 completed in this reporting period. MUB will continue to collect surveys at public events through 2017 and will explore new ways to get customers to complete the online survey.

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) The City of Morgantown's approved SWMP states that MUB will evaluate the effectiveness of public education and outreach efforts "via responses to surveys administered during public events, responses to the online surveys made available at mub.org, calls to the MUB stormwater hot line, and the number of visits to the MUB website." Responses to the surveys at 4 different public events are attached. The results show that we need to focus more efforts on directing people to the mub.org/stormwater site and to inform residents to contact MUB if they see a concern of a possible pollutant to one of the waterways. The results did show that MUB is doing a good job reaching pet owners on the importance of cleaning up after their pets. The online survey has proven not to be an effective tool this reporting period with only 2 surveys completed. MUB will explore new ways to get residents to complete the survey in 2017. The MUB Storm Department received 369 phone calls this reporting period. 19 of those calls were a comment/complaint on the storm system and or a comment/complaint on a construction site. The MUB shop received and responded to 129 storm complaints this reporting period. These numbers show that the program has been very effective in that residents know who to call about stormwater complaints. The MUB stormwater website had 3,896 visits this reporting period. This is a 208% increase compared to the previous year's number of 1265.			
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. Given that only 2 online surveys were completed this reporting period, MUB will consider omitting the use of this tool the next permit cycle. However, the surveys at the public events are proving to be a good way to get feedback from the public. Over the next reporting period, MUB will explore new ways in directing residents to the online survey.			

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. This reporting period we worked together with Friends of Deckers Creek to hold rain barrel giveaway classes. MUB provided some of the funding as well as the space and personnel to hold the classes. Two classes were held in 2016 with approximately 40 rain barrels given away. Rain barrel assembly instructions and stormwater education was provided at each class. Survey results are attached. All that was asked of the participants was a \$20 donation to the Friends of Deckers Creek to help offset the costs of the materials. 4 classes are already scheduled for 2017.			

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: Kenneth Hacker	42. Phone: (304) 292-8443	

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
---	---	-----------------------------

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
--	---	-----------------------------

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)
See attached "Additional Documentation."

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)
See attached "Additional Documentation."

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 MUB.org website provides the public with the opportunity to leave feedback on services or file complaints. The approved SWMP and annual reports have been made available on the website. The SWMP renewal was made available for public comment prior to finalizing the SWMP. Customers can reach MUB 24 hours a day, 7 days a week with complaints or emergencies through the stormwater hotline. Public Involvement and Participation activities will be completed each year as required by MUB's approved Stormwater Management Plan. See #46 for current list of activities and BMPs.

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) MUB has partnered with the Friends of Deckers Creek to start a rain barrel program. 2 rain barrel classes were completed this reporting period and 4 rain barrel classes have been scheduled for 2017. Chris Dale, MUB, is now serving on the Board of Directors for the Friends of Deckers Creek. Ken Hacker, MUB, is now serving on the Morgantown Tree Board. The MUB Stormwater Newsletter was distributed once this reporting period to the public group list compiled by MUB and is planned to be distributed quarterly throughout the next reporting period.			
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. The approved SWMP and annual reports are available at MUB's office located at 278 Greenbag Road and are available upon request. The SWMP and annual reports are also available on MUB's website mub.org/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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
56. Contact: Kenneth Hacker	57. Phone: (304) 292-8443	

Performance Measure 3a: MS4 map

58. Were your proposed activities for creating and annually updating your MS4 map for the reporting period implemented?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> 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) BMP 17.i.A- Storm System Database and Storm System Mapping- 303d and TMDL receiving waters and TMDL study areas have been labeled on the MUB system mapping. Permanent stormwater management systems and system components installed this reporting period have been added to the MUB system mapping. BMP 17.i.B- Illicit Connection Detection Program- Burroughs Run was visually inspected this reporting period to inventory dry weather discharges. A field assessment followed the visual inspection after the discovery of a black oily discharge coming from a plaza area as a dry weather discharge. BMPs were put into place to prevent further contamination from entering the stream and the DEP was called. Following the recommendation of the DEP, the material and water was sampled. Test results showed the material to be contaminated with petroleum. MUB cleaned the system by removing the contaminated material via their vacuum truck. The material was then disposed of at Waste Management's facility in Bridgeport once MUB received a generator ID from WM. Follow up inspections have shown the substance to no longer be flowing from the system. It was believed to be spill from a neighboring gas station that went unreported. MUB dye tested 61 structures this reporting period. MUB sent 4 disconnect letters as a result of a failed dye test indicating an illicit discharge.			

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) The City of Morgantown's Article 929 serves as MUB's IDDE ordinance.		

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?	83	
66. How many illicit discharges were identified during the reporting period?	12	
67. How would you characterize the type of illicit discharges found (sewer cross connections, spills, illegal dumping, unaware residents, etc.)? 5 Sewer cross connections 2 Illegal dumping- restaurant dumping wash water down storm inlet 2 Spills- Broken sanitary sewer leaking into stream 1 Illegal dumping- contractor washing drywall tools into inlet 1 Spill- Found leaking equipment and equipment parts stored outdoors on ground 1 Spill- MUB had a backed up sanitary sewer main that caused sanitary to enter a stream		
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, used cooking oil, concrete truck washout 1) Fecal Coliform 2) Used cooking oil and kitchen degreasers 3) Petroleum 4) Construction materials 5) Sediment		
69. How many corrective actions were taken to remove illicit discharges?	12	
70. How many enforcement actions were initiated to eliminate illicit discharges into the storm sewer system?	6	
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) See attached "Additional Documentation."			
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) The City of Morgantown's approved SWMP states that MUB will evaluate the effectiveness of public participation efforts via "the public participation received during the storm drain stenciling project and during the annual Monongalia Household Hazardous Waste Collection Day. It will also be gauged by tracking the number of comments and the amount of public participation received during the course of the SWMP revision and through e-mail correspondence with public groups during event announcements." The storm drain stenciling project was very well received by Boy Scout Troop 52. In fact, this is the same group that completed the event with MUB the previous year. The troops were excited about the project and learning about the city's drainage system. They agreed to participate again in 2017. HHWCD had a record number of participants since MUB had taken over the organization and hosting of the event. Although no comments were received during the SWMP renewal process, the amount of overall knowledge the public has for the MS4 program appears to have increased with the survey results from the public events. The relationship with Friends of Deckers Creek has strengthened greatly over this reporting period. In fact, a MUB employee, Chris Dale, is now serving on the Board of Directors for the Friends of Deckers Creek. Ken Hacker is now setting on the Morgantown Tree Board to establish routine communication with the environmental group. Both organizations are on the e-mail list of groups for the MUB Stormwater Newsletter that MUB plans to deliver quarterly.			
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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> Partially	<input type="checkbox"/> No
79. Did you conduct any municipal employee training during this reporting period?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<p>80. List and briefly describe the training activities conducted during the reporting period. (WV MS4 2009 General Permit, p. 24, #1)</p> <p>October 5, 2016- City of Morgantown Street Department, BOPARC employees, MUB crews, WWTP employees, MUB supervisors, and MUB engineering staff were trained on the importance of reducing the amount of sediment allowed to enter the storm system, the Illicit Connection Program procedures and reporting procedures for suspect illicit discharges.</p> <p>October 18-20, 2016- City of Morgantown Fire Departments were trained on maintenance best management practices for the fire stations and illicit discharge recognition and reporting.</p>			
<p>81. How did you evaluate the effectiveness of the training activities? (WV MS4 2009 General Permit, p. 24, #2)</p> <p>This was the first year that stormwater training was presented specifically to the fire departments. This training took place over 3 separate days to accommodate all 3 stations of Morgantown. This training was received in a very positive manner. Questions were asked and discussions on stormwater and illicit discharges were active in all 3 training sessions. This appeared to be very effective for these new trainees.</p> <p>The number of municipal employees trained increased from 88 the previous reporting period to 143 this reporting period. This is a 63% increase in employees trained.</p>			
<p>82. How many municipal employees were trained to identify and report illicit discharges? (WV MS4 2009 General Permit, p. 24, #2)</p> <p>143</p>			
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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
<p>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)</p>			

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: Kenneth Hacker	87. Phone: (304) 292-8443	

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 checked="" 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 type="checkbox"/> Yes	<input checked="" 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.	94		
94. Please indicate the number of construction site inspections during the reporting period.	885		
95. Please indicate the number of enforcement actions during the reporting period (can attach document).	2		
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 checked="" type="checkbox"/> Yes	<input 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) BMP 18.i.D- Contractor/Engineer/Site Manager Education - MUB has compiled Morgantown specific stormwater management material into a stormwater training packet. MUB distributed a MUB Stormwater Training Packet to 12 individuals/companies this reporting period. A total of 82 individuals/companies have received the training packet since MUB began distributing them in August 2014. A verification sheet has been signed and returned for each of the training packets. This information is kept on file in the MUB stormwater department.			
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: Kenneth Hacker	103. Phone: (304) 292-8443	

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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> Partially	<input type="checkbox"/> 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) MUB currently has a stormwater management ordinance in place. The ordinance was reviewed in October 2016 and will be updated to reference the MUB Stormwater Design Manual by February 8 2018 as required by the 2014 SWMP approval.			
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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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)?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
109. How many projects were reviewed during the reporting period?	94		
110. What types of projects were reviewed (residential, commercial, industrial, etc.)? (WV MS4 2009 General Permit, p. 18, #2) MUB approved 79 residential projects this reporting period. MUB approved 15 commercial projects this reporting period.			
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) Impervious Surface Disconnection- Eight (8) projects utilized underground retention systems to achieve flow reduction and infiltration. They were comprised of four (4) commercial projects and four (4) residential projects.			

<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>Four (4) commercial projects qualified for the "Redevelopment" incentive reduction of 0.2" as stated in the General Permit.</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>No projects qualified for offsite mitigation or payment in lieu of stormwater management for this reporting period.</p> <p>MUB is currently starting to develop an offsite mitigation or payment in lieu program.</p>		
<p>114. How many maintenance agreements were approved during the reporting period? (WV MS4 2009 General Permit, p. 18, #4)</p>	<p>2</p>	
<p>115. Were any maintenance agreements recorded at the county courthouse?</p>	<input checked="" type="checkbox"/> Yes	<input 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>MUB's stormwater department has completed 52 permanent BMP inspections this reporting period. Of the systems inspected, 26 required maintenance to be completed. To date, MUB has sent out 145 letters to owners of private stormwater management systems. MUB has received a response from approximately 1/3 of the owners. Within the next permit cycle, MUB will complete a second inspection of all permanent facilities and work on contacting owners.</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> <p>The requirements within the first year of the SWMP renewal were met and achieved. The MUB Stormwater Design Manual will be completed by August 2017 as required by MUB's approved SWMP dated February 8, 2016. The Morgantown city code will be amended to reference the design manual within by February 8, 2018 as required by MUB's approved SWMP dated February 8, 2016.</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.	Morgantown Stormwater Ordinance- Article 929- Stormwater rates are based on SQFT of impervious surface		
122. Preserve, protect, create, and restore ecologically sensitive areas.	MUB SWMP dated February 8, 2016- BMP 19.k.A- Restore and Protect Ecologically Sensitive Areas		
123. Implement practices that prevent or reduce thermal impacts to streams.	Morgantown Stormwater Ordinance- Requires all new and redevelopment projects to implement stormwater management BMPs		
124. Seek to avoid or prevent hydromodification of water bodies caused by development.	Morgantown Stormwater Ordinance- Requires all new and redevelopment projects to implement stormwater management BMPs		
125. Minimize impacts to existing vegetation (especially trees).	MUB SWMP dated February 8, 2016- 19.j.5- MUB will communicate with the Morgantown City Tree Board		
126. Minimize impacts to native undisturbed soils.	MUB SWMP dated February 8, 2016- BMP 19.k.A- Restore and Protect Ecologically Sensitive Areas		
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) The watershed protection elements not addressed by Morgantown City Code have been addressed in the SWMP approval dated February 8, 2016.			

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: Kenneth Hacker	132. Phone: (304) 292-8443	

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> <p>BMP 20.i.A- Municipal Facilities Stormwater Pollution Prevention Plans (SWPPPs)- MUB has maintained SWPPPs for each municipal facility. Annual training involved discussing respective SWPPPs for each facility. Annual inspections of each facility were completed this reporting period and documented. Sampling points for the WWTP and WTP were added to each respective SWPPP.</p> <p>BMP 20.i.B- Employee Training for Municipal Employees- Annual stormwater training was held on October 5, 2016 for the City of Morgantown Street Department, BOPARC employees, MUB crews, WWTP employees, MUB supervisors, Morgantown Airport and MUB engineering staff on the importance of reducing the amount of sediment allowed to enter the storm system, the Illicit Connection Program procedures and reporting procedures for suspect illicit discharges. Training was held on October 18-20, 2016 for the City of Morgantown Fire Departments on maintenance best management practices for the fire stations and illicit discharge recognition and reporting.</p>			
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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
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).			
139. How many inspections were conducted at each municipal facility during the reporting period?	1		
<p>140. List the top three problems that you have found while conducting inspections at municipal facilities.</p> <p>Upon completion of the inspections for the municipal facilities, the top three problems were;</p> <p>1) General housekeeping</p> <p>2) Washing equipment outdoors over drain to storm</p> <p>3) Improper storage of containers exposed to stormwater</p>			
141. Were these problems corrected? (WV MS4 2009 General Permit, p. 24, #1)	<input checked="" 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)	143		
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	
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>Deficiencies noted during inspections of the municipal facilities were very minimal. Issues noted in the previous inspections were corrected. Employees were more familiar the SWPPPs for their facilities. No severe issues were noted in the inspections. With these results, MUB considers the training provided effective.</p> <p>MUB Stormwater Department employees also attended additional training. April 20, 2016- Ken Hacker attended the MS4 Compliance and Best Practices workshop held by the WV MWQA at the Waterfront Hotel in Morgantown. October 11, 2016- Ken Hacker, Ken Willis, and Jim Turner completed the Construction Stormwater Training in Fairmont held by the WV Environmental Training Center. September 28, 2016- Ken Hacker attended the WV Snow and Ice Control Workshop in Bridgeport held by WV LTAP. Stormwater training was added to the MUB "New Hire" training packet. 11 new employees were trained on stormwater this reporting period.</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)			

Morgantown Utility Board

Additional Documentation

(Number corresponds to question number on MS4 Annual Report Form)

13. Provide a description of specific BMP that were implemented to reduce pollutants of concern in impaired receiving waters and waters in which a TMDL has been developed.

Likely sources of fecal coliform discharges within the MS4 are from pet waste, undomesticated wildlife, and cross connections between sanitary and storm sewers. The following BMPs were implemented to help control the fecal coliform polluted discharges within the MS4.

BMP 15.h.A- Participation at Public Events- This BMP is expected to help address fecal coliform polluted discharges by educating the public on the effects that polluted runoff can have on surface waters. It will stress the importance of pet owners picking up after their pets.

BMP 15.h.B- Participate in City Technical Review Committee Meetings- This BMP is intended to help address fecal coliform polluted discharges by involving MUB in the early stages of any project planning to ensure that all storm and sanitary sewer connections are properly separated.

BMP 15.h.C- MUB Internet Website- This BMP is intended to help address fecal coliform polluted discharges by serving as a resource available to anyone with internet access to provide stormwater educational materials for homeowners, businesses, engineers, contractors and developers.

BMP 17.i.B- Illicit Connection Detection Program- This BMP is intended to help address fecal coliform polluted discharges by completing actions to find and correct illicit connections to the storm sewer system.

BMP 17.i.C- Annual Staff Training- This BMP is intended to help address fecal coliform polluted discharges by providing training to municipal staff on recognizing and reporting illicit discharges in the MS4.

BMP 17.i.D- Publicize telephone number and email address for public to use to report spills and suspected illicit discharges- This BMP is intended to help address fecal coliform polluted discharges by providing a means for the public to report any discharges in the MS4 that may look irregular.

BMP 18.i.A- Stormwater Permitting Process- This BMP is intended to help address fecal coliform polluted discharges by reviewing and approving all installed stormwater system installations and taps into the storm sewer system.

BMP 18.i.C- Construction Site Inspections- This BMP is intended to help address fecal coliform polluted discharges by regulating the installation of stormwater management systems and taps into the storm sewer system.

Likely sources of iron discharges within the MS4 are sediment polluted runoff from construction sites. The following BMPs were implemented to help address sediment polluted runoff from construction sites within the MS4.

BMP 15.h.B- Participate in City Technical Review Committee Meetings- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by providing educational packets including erosion and sediment control BMPs and the MUB Stormwater Design Manual to those contractors, engineers, and site managers attending the meeting.

BMP 15.h.C- MUB Internet Website- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by providing stormwater educational materials for engineers, contractors, and developers as well as the MUB Stormwater Design Manual.

BMP 17.i.D- Publicize telephone number and email address for the public to use to report spills and illicit discharges- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by providing and encouraging a means for the public to report any issues that they may have with a construction site.

BMP 18.i.B- Site Plan Review- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by allowing MUB to review, comment on and approve the Erosion and Sediment Control plans for sites within the MS4.

BMP 18.i.C- Construction Site Inspections- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by completing routine inspections of active construction sites and encouraging each site to maintain their approved Erosion and Sediment Control plans.

BMP 18.i.D- Contractor/Engineer/Site Manager Education- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by educating contractors, engineers, and site managers on the MUB MS4 Program and the requirements of Stormwater Article 929 and the MUB Stormwater Design Manual.

BMP 19.k.B- MUB Stormwater Management Design Standards- This BMP is intended to help address sediment polluted runoff from construction sites within the MS4 by providing design standards specifically for the MS4 area for Erosion and Sediment Control plans for construction sites.

BMP 20.i.B- Employee Training for Municipal Employees- This BMP is intended to train employees on water quality protection.

Additionally, MUB reached out to the US Army Corps of Engineers to consider a recent stream inventoried for bank erosion for a future bank stabilization project.

A likely source of chloride discharge within the MS4 is from deicing actions completed in the winter months on roads and parking lots within the MS4. These areas are comprised of; private property, City of Morgantown property and public rights-of-way, West Virginia DOT property and public rights-of-way, and West Virginia University property. The following BMPs were implemented to help control the deicing practices on Morgantown city streets, parking lots and salt storage areas within the MS4.

BMP 15.h.C- MUB Internet Website- This BMP is intended to help address stormwater runoff polluted with chlorides by providing education to the general public on the correct applications of road salts and the importance of doing so in a limited and environmentally conscious manner.

BMP 20.i.B- Employee Training for Municipal Employees- This BMP is intended to help address stormwater runoff polluted with chlorides by providing education to municipal employees on the correct applications of road salts and the importance of doing so in a limited and environmentally conscious manner.

Additionally, MUB reached out via letter to the WV DOH, WVU, and City of Morgantown in an effort to have deicing practices evaluated for effectiveness and environmental impacts.

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 permittee(s) and any other entity.

WVU and MUB are working on a means to provide one another with needed information on interconnecting MS4s and for MUB to provide WVU with routine maintenance of their stormwater facilities as needed.

MUB attends Technical Review meetings with Morgantown City Planning and Engineering on proposed developments.

MUB is a member of the Municipal Water Quality Association which meets quarterly.

MUB hosted and sponsored the 2016 Monongalia County Household Hazardous Waste Collection Day held August 6, 2016 in conjunction with the Monongalia County Solid Waste Authority and MECCA 911.

MUB has assisted the Friends of Deckers Creek in starting a Rain Barrel workshop program. Two workshops were held in 2016 and 4 have been scheduled for 2017.

MUB has been attending the quarterly MS4 meetings hosted via video conference at Steptoe and Johnson's office in Morgantown.

MUB has worked closely with the City of Fairmont and the WVDEP through the SWMP reapplication process.

MUB shared information and worked with the City of Huntington as they move to set up impervious area billing for their MS4.

MUB has worked with DOH in addressing issues within the MS4 that are of interest to MUB. MUB completed a 500 LF, 48 inch storm sewer extension for the WV DOH on Van Voorhis Road to accommodate future upgrades to the roadway. MUB has also provided the DOH with estimates to repair and install storm sewer facilities for Valley View Road in Morgantown, WV.

MUB was selected as one of 22 members from across the nation to serve on an EPA Science Advisory Board led by the Colorado School of Mines, UC Berkley, The Nature Conservancy, and the South Dakota School of Mines to assist in developing an Integrated Decision Support Tool for MS4s across the nation. This will be a 4 year process. Ken Hacker attended the first meeting held in Golden Colorado in November 2016 on the Colorado School of Mines campus.

28. List and briefly describe each of the public education and outreach program development activities undertaken during this reporting period.

BMP 15.h.A- Public Events

April 1, 2016- MUB participated in a stream cleanup project of a branch of Hartman Run alongside the Friends of Deckers Creek, WV DEP, and the Monongalia County Solid Waste Authority to remove nearly 4 tons of garbage, 152 tires and nearly a dozen household appliances from the stream.

April 13, 2016- MUB presented and distributed stormwater educational material at the Monongalia County 8th grade career day. Approximately 800 stormwater educational handouts were given out to students.

May 21, 2016- MUB worked with Friends of Deckers Creek to hold second rain barrel giveaway workshop. 20 customers attended and 15 barrels were given away. Surveys were completed and results are attached.

July 16, 2016- MUB presented and distributed stormwater educational materials at the 2016 Kids Day held on High Street in Morgantown. 247 educational handouts were given out. 167 surveys were completed and the results are attached.

August 28, 2016- MUB sponsored and distributed stormwater educational materials at the 2016 Dog Splash Day. 300 educational handouts were distributed and 51 surveys were completed. Results to the survey are attached.

December 2016- MUB purchased ad space on the 3000 printed MHS basketball schedules and ran a "Pick up after your pets" ad.

December 2016- MUB purchased a full page ad in the Monongalia Chamber of Commerce Publication. The publication was printed 28,000 times and has a readership of 84,000 plus.

BMP 15.h.B- Tech Review Meetings

MUB attended 8 Tech Review meetings from May 2016 through December 2016.

BMP 15.h.C- MUB Website

Stormwater educational materials for homeowners, businesses, engineers, contractors, and developers have been made available on mub.org/stormwater. A calendar of public events has been made available on the website. A map showing the educational kiosks and pet waste stations within the MS4 has been made available on the website. MUB's approved SWMP and Annual Reports are available for download on the website. MUB has a online stormwater survey available on the website. Only 2 surveys were completed in this reporting period. There were 3,896 visits to the website this 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.

BMP 16.h.A.- Storm Drain Stenciling- The storm drain marking event was held on April 23, 2016 with Local Boy Scout Troop 52 in the Southpark area. During the event, approximately 88 storm drains were stenciled.

BMP 16.h.B.- Monongalia County Household Hazardous Waste Collections Day- August 6, 2016 from 8 am to 11 am, MUB collected 23,500 pounds of household hazardous waste from 418 different cars. MUB provided \$10,079.69 of the \$22,579.69 total cost for the event and disposal fees. MUB secured more sponsorships this year than the previous showing a growing support for the event across the community. There were 341 participant surveys completed at the 2016 event compared to the 244 completed in the previous event.

BMP 16.h.C.- Opportunity for Public to Comment on Changes to SWMP- Prior to the final approval of the SWMP renewal application, MUB ran 2 public notice ads that the renewal application was available for review and comment in the Dominion Post on December 17, 2015 and again on December 24, 2015. A draft copy of the renewal application was also made available mub.org/stormwater during this time for the public to review and comment on. No comments were received.

BMP 16.h.D.- Public Group Notifications- MUB has compiled a list of 42 groups, organizations, and/or interested parties. MUB has begun a "MUB Stormwater Newsletter" that it plans to send out quarterly to this list of groups. The first edition of the newsletter was sent out December 1, 2016. MUB has also been working closely over this reporting period with the environmental group Friends of Deckers Creek to host rain barrel workshops at MUB's facility on Greenbag Road. An employee of MUB, Chris Dale, is now serving on the Board of Directors for the Friends of Deckers Creek. Ken Hacker is now serving on the Morgantown Tree Board as well. MUB has also agreed to partner with WVRI in an Urban Waters Grant Application to help facilitate community workshops and participate in stormwater runoff reduction planning meetings.

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.)

The City of Morgantown's approved SWMP states that MUB will evaluate the effectiveness of public participation efforts via "the public participation received during the storm drain stenciling project and during the annual Monongalia Household Hazardous Waste Collection Day. It will also be gauged by tracking the number of comments and the amount of public participation received during the course of the SWMP revision and through email correspondence with public groups during event announcements."

The storm drain stenciling project was very well received by Boy Scout Troop 52. In fact, this is the same group that completed the event with MUB the previous year. The troops were excited about the project and learning about the city's drainage system. They agreed to participate again in 2017.

HHWCD had a record number of participants since MUB had taken over the organization and hosting of the event.

Although no comments were received during the SWMP renewal process, the amount of overall knowledge the public has for the MS4 program appears to have increased with the survey results from the public events.

The relationship with the public groups, the Friends of Decker's Creek and the Morgantown Tree Board, has strengthened greatly over this reporting period. In fact, MUB's Director of Communications, Chris Dale, is now serving on the Board of Directors for the Friends of Decker's Creek. Ken Hacker, MUB staff engineer, is now setting on the Morgantown Tree Board to establish routine communication with the environmental group. Both organizations are on the e-mail list of groups for the MUB Stormwater Newsletter that MUB plans to deliver quarterly.

73. List and briefly describe each of the education and outreach activities undertaken during this reporting period.

April 1, 2016- MUB participated in a stream cleanup project of a branch of Hartman Run alongside the Friends of Deckers Creek, WV DEP, and the Monongalia County Solid Waste Authority to remove nearly 4 tons of garbage, 152 tires and nearly a dozen household appliances from the stream.

April 13, 2016- MUB presented and distributed stormwater educational material at the Monongalia County 8th grade career day. Approximately 800 stormwater educational handouts were given out to students.

May 21, 2016- MUB worked with Friends of Decker's Creek to hold second rain barrel giveaway workshop. 20 customers attended and 15 barrels were given away. Surveys were completed and results are attached.

July 16, 2016- MUB presented and distributed stormwater educational materials at the 2016 Kids Day held on High Street in Morgantown. 247 educational handouts were given out. 167 surveys were completed and the results are attached.

August 28, 2016- MUB sponsored and distributed stormwater educational materials at the 2016 Dog Splash Day. 300 educational handouts were distributed and 51 surveys were completed. Results to the survey are attached.

December 2016- MUB purchased ad space on the 3000 printed MHS basketball schedules and ran a "Pick up after pets" ad.

December 2016- MUB purchased a full page add in the Monongalia Chamber of Commerce Publication. The publication was printed 28,000 times and has a readership of 84,000 plus.

BMP 15.h.B- Tech Review Meetings

MUB attended 8 Tech Review meetings from May 2016 through December 2016.

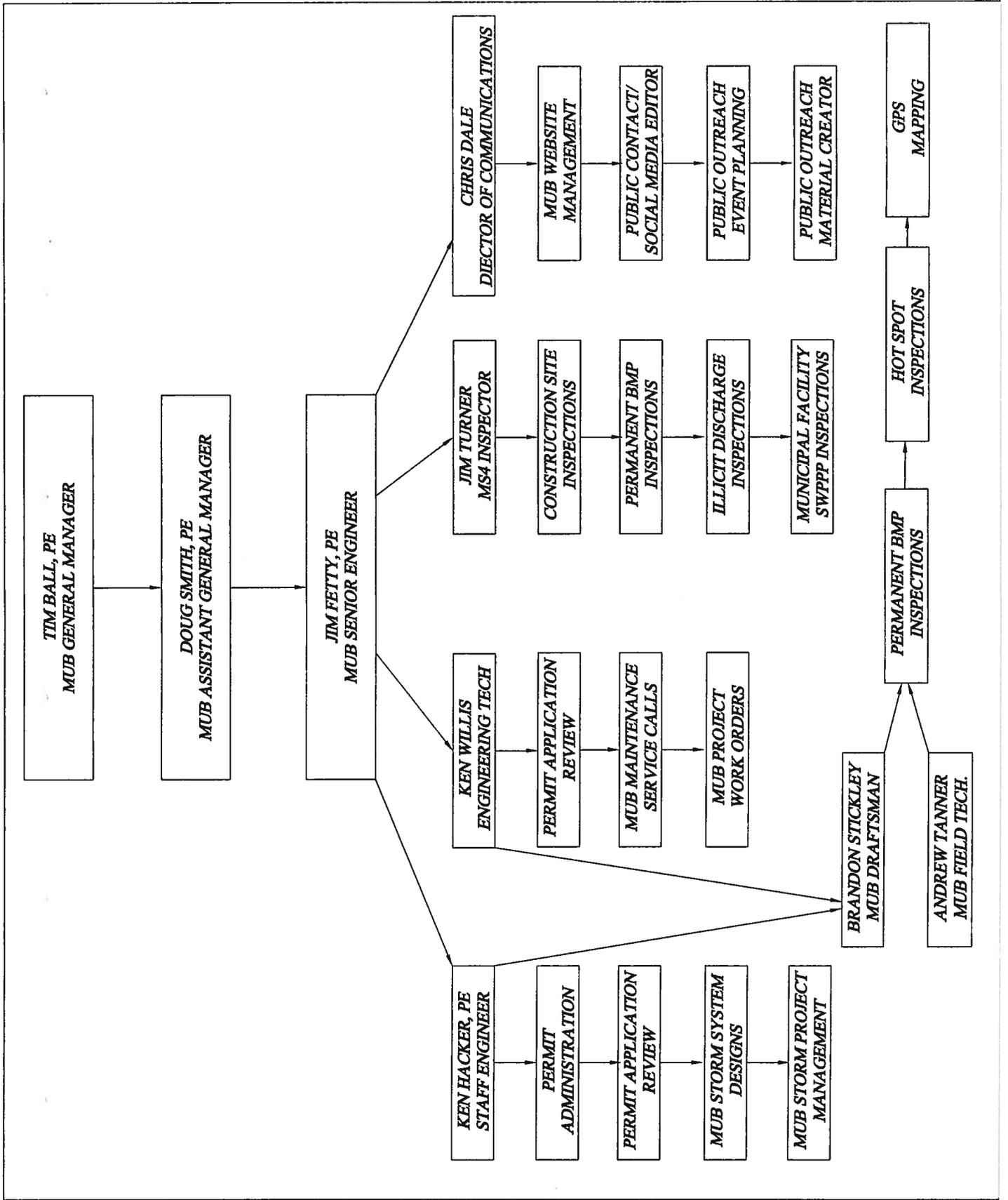
BMP 15.h.C- MUB Website

Stormwater educational materials for homeowners, businesses, engineers, contractors, and developers have been made available on mub.org/stormwater. A calendar of public events has been made available on the website. A map showing the educational kiosks and pet waste stations within the MS4 has been made available on the website. MUB's approved SWMP and Annual Reports are available for download on the website. MUB has a online stormwater survey available on the website. 2 online surveys were completed in this reporting period. There were 3,896 visits to the website this reporting period.

BMP 16.h.A.- Storm Drain Stenciling- The storm drain marking event was held on April 23, 2016 with Local Boy Scout Troop 52 in the Southpark area. During the event, approximately 88 storm drains were stenciled.

BMP 16.h.B.- Monongalia County Household Hazardous Waste Collections Day- August 6, 2016 from 8 am to 11 am, MUB collected 23,500 pounds of household hazardous waste from 418 different cars. MUB provided \$10,079.69 of the \$22,579.69 total cost for the event and disposal fees. MUB secured more sponsorships this year than the previous showing a growing support for the event across the community. There were 341 participant surveys completed at the 2016 event compared to the 244 completed in the previous event.

MUB STORMWATER DEPARTMENT TABLE OF ORGANIZATION





Dog Splash Day Survey

- 1) Did you know that all 8 streams within the Morgantown watershed and the Monongahela River have a fecal coliform impairment?

82% responded YES

- 2) Did you know that as a resident who owns a pet, it is very important that you pick up your pet's waste to avoid polluting rivers and streams?

92% responded YES

- 3) Did you know that you can report problems with our local streams or pollution concerns that you may have to the Morgantown Utility Board by email at stormwater@mub.org?

64% responded YES

- 4) Did you know that MUB has an entire department dedicated to protecting our streams and rivers?

62% responded YES

- 5) Have you ever visited our website mub.org/stormwater? (If not, please do!)

70% responded YES

RESULTS

We are doing a good job of reaching out to pet owners on the importance of properly disposing of pet waste. We've concentrated on this over the last few years and the results demonstrate it. The goal now should be to shift toward finding new ways to reach out to pet owners to supplement current efforts.

Rain Barrel Survey Results

Pre-Test versus Post-Test

- The pre-test demonstrated that 28.57% of participants have utilized our stormwater website
- Knowledge that “runoff from parking lots, roads, roofs, etc” was a significant stormwater pollutant increased from 7.14% to 57.14%
- Knowledge that many of our storm drains release flows “directly to local rivers and streams untreated” increased from 50% to 92.86%
- Knowing to contact MUB “If you witnessed a threat to our local water environment” increased from 64.29% to 100%
- Knowledge of “where the majority of our local drinking water comes from” increased from 50% to 92.86%
- Awareness of our stormwater website increased from 28% to 71.43%
- From the comments portion of the survey, we need to focus more on...
 - Include the mub.org/stormwater link in future communications
 - Provide information about threats to rain water such as the implications of various roofing materials
 - Increase public awareness of who to call if pollution is spotted
 - Instruct participants on what they can do to help spread the word

Rain Barrel Workshop #2 Survey Results

Pre-Test

- The workshop was very diverse in age, with the youngest 21 and the oldest 70 plus (2 participants)
- The workshop was split 50/50 female/male
- One third of the class believed the greatest threat to our water was fracking. Half the class listed fracking or household hazardous waste as primary threats
- 78% of the class believed stormwater is sent directly to local streams and rivers untreated
- 61% said they knew to call MUB if they saw a threat to our water
- 67% said they have witnessed our local water being polluted
- 60% said our water is being protected average to very well (only 6% said 'poorly')
- 78% report having washed their car in a driveway or on a road
- 56% have used fertilizer on their yards or gardens
- Two-thirds own a cat or dog
- 11% have visited mub.org/stormwater

Post-Test

- 89% recognized that protecting our water resources is everyone's responsibility
- 89% recognized that stormwater runoff posed the greatest threat
- 94% recognized that stormwater flows directly to local rivers and streams
- 100% knew to call MUB if they saw a threat to our water resources
- 100% recognized that mub.org/stormwater was resource for additional information
- 78% were aware that the majority of our water came from the Mon River

Overall

- The results indicate three things...
 - We need to better educate the public about mub.org/stormwater
 - We are doing a good job of reaching residents with our stormwater message
 - The workshops are a terrific way of getting people focused on stormwater issues and educating them on those issues



Kids Day Stormwater Survey Results

1. What is your age? _____
85% of all respondents were aged 26 plus. (Parents)
2. Were you aware before today that stormwater can impact your drinking water? Yes No
78% responded YES
3. Did you know that your drinking water comes from local rivers or streams? Yes No
88% responded YES
4. Did you know that preventing pollution to stormwater protects local streams? Yes No
89% responded YES
5. Do you own a pet that spends time outdoors? Yes No
51% responded YES
If yes, do you clean up after your pet? Yes No
87% responded YES
Did you know that pet waste stations are provided at public parks? Yes No
(A map of these locations is available at MUB.org/stormwater)
68% responded YES
6. Did you know that you can report pollution to the MUB Storm Department? Yes No
56%

RESULTS

- We've done a good job of reaching out to people and informing them of the importance of protecting our water resources
- We need to increase awareness of...
 - How stormwater impacts your drinking water
 - Knowledge of pet waste stations
 - To contact MUB to report pollution concerns

Household Hazardous Waste Collection Day 2016

The final report on HHWCD 2016 is below. I'll share some of this info on social media and our website. Overall, it was an extremely successful day and a great example of cooperation across MUB!

Results

- Event hours: 8 a.m. to 11 a.m.
- 418 vehicles (record attendance)
 - 8 a.m. to 9 a.m.: 157 vehicles
 - 9 a.m. to 10 a.m.: 120 vehicles
 - 10 a.m. to 11 a.m.: 141 vehicles
- Pounds of materials collected: 23,500
 - Average per vehicle: 42 pounds (Maximum allowed = 50 pounds)
 - Total Cost (to date): \$22,579.69 (\$4,829.14 associated costs and \$17,750.55 from vendor)
 - Sponsorships received: \$12,500
 - Cost to MUB: \$10,079.69
 - Cost per vehicle: \$54
 - Cost to dispose of waste per pound: 96 cents

Participant Survey Results- 341 Completed

- 55% of participants report they learned about the event via newspaper. 16% report via Facebook with 10% via radio. 12% report they learned of HHWCD via family, friend or 'other'.
- The most common item participants brought to dispose of at HHWCD was paint at 46% of all participants. Batteries and oil tied for second at 32% each. 25% of all participants brought pesticide.
- 81% of participants would like to see the event held more than once per year while 86% reported they would utilize a permanent site.
- Half of all participants have never attended an HHWCD event before and 99% said the location was easy to find and 99% reported the location as being convenient.