Marshall University MS4 Annual Report 2014

Permit WVR030043

Brand Hechyles

Brandi Jacobs-Jones Sr. VP of Operations One John Marshall Drive Huntington, WV 25755 0/24/14

Date



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.

Α	bŁ	or	ev	ia	ti	0	n	S	

17.

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. Sı	mall MS4 Operator Information			
1.	Annual report reporting period: S	eptember 29, 2013 - September 28, 2014		
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 D	rive		
7.	City: Huntington	8. Zip code: 25755	9.	County: Cabell
10.	Telephone number: (304) 696-3032	n .		
11.	Email: Bailey53@marshall.edu			
25				
II. li	mpaired Waters Information			
12.	Does the MS4 discharge into impa	ired water bodies?		■ Yes ■ No

13.	Please provide a description of specific BMPs that were implemented to receiving waters and waters in which a TMDL has been developed. (WV MS					
Bac	teria and iron are the parameters of impairment.					
new	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.					
sites	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?		☐ Yes	■ No		
III. F	iscal Reporting					
15.	Include or attach a fiscal analysis of capital and operating expenditures to in	mplemer	nt the MCMs. Th	ne fiscal		
	analysis shall include only those expenditures by the locality seeking covera	ige unde	r the WV MS4 2	:009 General		
	Permit and not those for MCMs implemented by other entities. (WV MS4 2	009 Gen	eral Permit, p. 2	25, #13)		
16.	Please provide total capital expenditures for this reporting period.	\$ 200,000	0			

Please provide total operating expenditures for this reporting period.

\$ 58,300

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)						
	re is no current coordination of efforts. Marshall University is an MS4 within anoth luntington).	er MS4	(City			
	will attend the Stormwater Advisory Committee meetings organized by the City of both entities will attend trainings organized by the other entity for support.	Hunting	ton			
19. N/A	Please provide name and contact information for individual with overall program management a implementation responsibility, and if different, name and contact information of individuals responsibility minimum control measure. Please attach a table of organization.		or each			
	hanges to SWMP					
20.	Did any of your activities, BMPs, or measurable goals as outlined in your SWMP change during the reporting period?	■ Yes	□ No			
21.	Do you anticipate any planned activities, BMPs, or goals as outlined in your SWMP to change in the upcoming reporting period?	■ Yes	□ 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)						
MC						
to c stor	overall effect on your program. (WV MS4 2009 General Permit, p. 24, #6 and #7)	en to stu e pollutio . This	dents			
to con con par MC WV stor the	overall effect on your program. (WV MS4 2009 General Permit, p. 24, #6 and #7) M 2- The university was to hold two contests (page 14 of SWMP), the first was opereate catchy slogans/phrases to make people aware how their actions could cause mwater runoff. The second contest was to create posters for the winning slogans apponent (slogan and poster contest) of MCM 2 has and will be discontinued due to	en to stue pollution. This lack of y. The ty exposthis listir	dents on in eed to			

IV. Coordination Efforts and Organization

	MCM 1: Public Education and Outreach (WV MS4 2009 General Permit, p. 9						_ (
24.	Did you complete all the proposed activities and performance meas	ures	for this MC	M for this	■ Yes	☐ No	,
	reporting period?	-					
25.	Contact: Travis M. Bailey	26.	Phone: (30	04) 696-3032			
	ormance Measure 1a: Program implementation						
27.	Were the proposed activities for developing a public education and	outre	each	■ Yes	☐ Partially	☐ No	,
	program implemented?						
28.	List and briefly describe each of the public education and outreach	_	am develop	ment activ	vities under	taken	- X
	during this reporting period. (WV MS4 2009 General Permit, p. 24, ‡						
	ormwater Webpage-MU created a webpage to provide information to stu					€	
	cts of stormwater run-off and what students, faculty, staff, and the public						
	ormwater Curriculum-MU incorporated stormwater pollution and its impa udent Organizations-MU staff has joined multiple student organizations (ے	
	inhouse Committee, Environmental Collaboration Committee, etc.) to imp						nd
	mpacts.				•		
	Campus Organizations/Meetings-City of Huntington Stormwater Advisor	у Соп	nmittee, WV	'MS4 Collal	boration, Sm	art	
	/th America		nor rogardi	na otormus	tor pollution		
	ublic Awareness-MU will encourage and support articles in the student ne ention, recycling, and sustainability.	swape	iper regardi	ng storriwa	iter, poliutioi	l	
	cit Discharges-MU will publicize the physical plant telephone number for	use b	y students a	and staff to	report suspe	ected	
illicit	discharges or other pollution concerns.						
6. Cc	ontract Work-Educate contractors by placing an "educational stormwater	page	" in the cont	ract docum	ent.		
29.	Did you achieve all the goals that you identified in your SWMP relat	ed to	developing	the			
	education and outreach program for this reporting period? (WV MS	4 200	9 General I	Permit, p.	Yes	☐ No	0
	24, #3)						
30.	If not, please describe the progress you did make towards achieving	your	goal(s), an	d any obst	acles and po	ossible	•
	solutions such as revised implementation schedules or revised measurements.						
	changes to your SWMP goals or schedule, please include them in Se	ction	V above.				
	(WV MS4 2009 General Permit, p. 24, #4)						
	χ, , , ,						

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?] Partially	☐ No
32. How did you evaluate the effectiveness of the public education and outreach program in this rep	orting per	iod?
(WV MS4 2009 General Permit, p. 24, #2)		
Marshall University evaluates the effectiveness of the program by the amount of:		
1. Visits to website-556		
2. Surveys taken-27		
3. Stormwater curriclum-14 students		
4. Meetings attended-18		
5. Articles distributed-9		
6. Illicit discharges discovered-0 but 2 reported		
7. Contract workers-2		
33. Regardless of your answer to the previous question, have you identified new or better ways to	_	_
evaluate the public's understanding of your program and water quality issues?	■ Yes	☐ No
34. If yes, please describe any changes you would like to consider to improve your evaluation of effective outreach.	ctiveness	of
As stated in the WVDEP inspection and discussed in the Environmental Collaboration	Commit	tee,
the university will begin using terminology directed less towards regulations and more		
community. This will make it easier for individuals to understand the impacts of storm	water. T	his
should increase the amount of visits on the website thus increasing the understanding	of storm	nwater
pollution.		

Performance Measure 1c: Documentation and tracking of public education and outreach efforts					
35. Did you track and keep records of your outreach activities?	Yes	☐ Partially	☐ 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 of publication? (WV MS4 2009 General Permit, p. 24, #1)	■ Vos	□ No	□ NA		
37. Are your records available upon request?	■ Yes	☐ No	■ NA		
38. For pamphlets, brochures, and other finite printed products, did you keep record 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)	of	□ No	□ NA		
39. Please describe any additional or alternative documentation and tracking of pub activities you are implementing.	lic education	and outreac	h		

	nvolvement and Participation (WV MS4 2009 General P				
	te all the proposed activities and performance mea	sures	for this MCM for this	■ Yes	□ No
reporting period		12	Phone: (304) 696-3032		1
41. Contact: Travis M	Balley	42.	Filone. (304) 030-0002		
D f	2. Omera, tries for according with lie involvement	-t -n-	I narticipation in the CM	/N/ID	
	re 2a: Opportunities for ongoing public involvemen			TIVIP	1
	or are you in the process of creating, ongoing oppose the development, implementation, and updating of y			Yes	□ No
maintaining on period? (WV M	e all the goals that you identified in your SWMP rela going opportunities for public involvement and part S4 2009 General Permit, p. 24, #3)	ticipa	tion for this reporting	■ Yes	□ No
solutions such a changes to you	escribe the progress you did make towards achievings revised implementation schedules or revised means of swifted and several	asura	ble goals. If you are pro	posing any	/
 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. 					
hearings, reque (WV MS4 2009) 1. The website and website for the 20 contest had minim 2. Marshall has mouse students as mouse	ou evaluated the effectiveness of your public particles of information on your SWMP, hotline activity, General Permit, p. 24, #2) of survey both have a counter on them so a tale 13-2014 year is 556. The total surveys taken all participation (3) but the awareness of stormet the one year time limit to implement the goluch as possible in the future.	, etc.) Ily ca for t nwat al bu	an be done. Total visi he past year is 27. T er concerns shown w t does have intention	ts for the he sloga vas encous s to cont	e n uraging.
additional prog opportunities. The website will b	eps taken to ensure that public participation oppor ram maintenance activities in future reporting peri (WV MS4 2009 General Permit, p. 24, #4) be updated and new surveys will be posted ly increase the amount of surveys taken an	ods to	o ensure continued part is will help with more	icipation e visits to	the

Dout	Command Managers 2h. Communications with community, watershed and anytherene	utal avaa-	dan Albana	-				
-	formance Measure 2b: Communications with community, watershed, and environments	entai orgar	lizations					
49.	Did you establish a program for routine communications with community based watershed groups or other organizations?	Yes	☐ Partially	□ No				
50.	Describe the steps taken to ensure that your programs for routine communications	with comr	nunity-base	d				
	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)							
Mac	etings are being attended to ensure routine communications are ongoing		ctor ovent	c cuch				
ı	i Water Festival for the fall semester and Earth Day Celebrations for the	-						
ı	ned.	spillig s	cilicolci a	116				
piai	meu.							
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?	Yes	☐ Partially	□ No				
	(WV MS4 2009 General Permit, p. 24, #3)							
52.	If not, please describe the progress you did make towards achieving your goal(s), an	d any obst	acles and po	ossible				
	solutions such as revised implementation schedules or revised measurable goals. If	ou are pr	oposing any					
	changes to your SWMP goals or schedule, please include them in Section V above.							
	(WV MS4 2009 General Permit, p. 24, #4)							
	ormance Measure 2c: Public availability of SWMP and annual report							
	Did you make your SWMP and annual report available to the public?		1.	☐ No				
54.	If yes, please indicate the web address, or if a physical location, please indicate when	re 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 Ge	neral Permit, p. 7-10	0)		
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			
Perf	formance Measure 3a: MS4 map				
58. Were your proposed activities for creating and annually updating your MS4 map for the reporting period implemented?] Partially	□ No
59.	List and briefly describe the activities undertaken to either develop (WV MS4 2009 General Permit, p. 24, #1)	or update your	MS4 map.		
for the of fl Add	has been conducting outfall/manhole reconnaissance twicetter validity and to observe any illicit discharges that mastructures are also being documented in addition to incorow. The information is then entered into the campus maplitional information entered into the mapping systems inclication, areas for potential green projects, stormwater contraction until the mapping has been completed.	ay be occurring ming pipes, siz oping system a udes all priorit	g. The cha e of pipes, and saved y areas, bo	racteristi and dire on a sen oundaries	cs of ection er. s, flow

Performance Measure 3b: Illicit Discharge Detection and Elimination (IDDE) ordinance development							
	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)?	■ Yes	□ No				
61.	If not, please describe the activities or progress made in adopting or updating an existing ordinan estimated date for adoption. (WV MS4 2009 General Permit, p. 24, #1)	nance and pr	rovide				
	ormance Measures 3c and 3e: IDDE program implementation and assessment, and program tr	acking					
62.	Is your IDDE program fully implemented, including visual inspections based on a system of prioritizing outfalls and procedures for characterizing discharges?	Yes	□ No				
	If no, please describe obstacles, if any, to implementation, and an estimate of when your programplemented.	ram will be i	uny				
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)	■ Yes	□ No				
65.	How many field assessments were conducted during the reporting period?	46					
	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.)? The first one reported was about a contracted concrete worker who was supposedly dumping their wash water down a storm drain. Upon investigation and interviewing the contractor the wash water was dumped onto the ground and all solids were collected the next day. No water went down the drain. The second illicit discharge reported was about a contractor pouring paint down a storm drain. Upon investigation and interviewing the contractor no paint was allowed down the drain. Although two incidences were reported there was no true illicit discharges but MU feels this shows the effectiveness of our IDDE Program and training procedures.							
68. NA	How would you characterize the type of pollutants discovered in illicit discharges (oil and greathlorine, paints, etc.)? Name the top five pollutants discovered or uncovered by your IDDE production.		form,				
			>				
	How many corrective actions were taken to remove illicit discharges?	0					
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?	☐ Yes	■ No				

Performance Measure 3d: Public education on hazards of illegal discharges and improper disposal of	f waste					
72. Did you conduct any activities for educating the public on hazards of illegal	☐ Partially	□ No				
discharges for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)		1				
73. List and briefly describe each of the education and outreach activities undertaken during this re (WV MS4 2009 General Permit, p. 24, #1)	porting pe	riod.				
 MU has developed a stormwater website that explains what an illicit discharge is and who should be contacted if one has been observed. MU has placed a page on the website discussing the negative impact pet waste has on stormwater. The Environmental Health & Safety (EHS) department attends regularly scheduled meetings to discuss contaminants in stormwater and its impact on the receiving body. EHS samples semi-annually for total nitrogen and phosphorous and posts the results in the annual report on the website. 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?	■ Yes	□ No				
 75. How did you evaluate the effectiveness of the activities described in the list above? (WV MS4 2009 General Permit, p. 24, #2) 1. There have been two (2) reports of alleged illicit discharges during this reporting period. 2. The website has a counter on it and within this reporting period there have been 556 visits. 3. The EHS department has attended 18 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)	■ Yes	□ No				
77. If not, please describe the progress you did make towards achieving your goal(s), and any obsta solutions such as revised implementation schedules or revised measurable goals. If you are procedunges 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 disch	arges
78. Have you developed a program to train municipal employees on illicit discharges?	P artially	☐ 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 every two weeks on different safety concerns. Stoled in the retation and has been performed during this reporting period. This training will continue		
added in the rotation and has been performed during this reporting period. This training will contin basis. The employees were informed that MU has received a MS4 permit and what that means to		
to their work habits. They were told the goals and requirements of the permit and how the university		
achieve those goals. Illicit discharges were stressed because the campus service workers are the	ones on ca	ampus
every day and need to know how to recognize and report illicit discharges if they should come upo		
have the responsibility to prevent them by altering their past practices and now making a consciou with any type of water flow on campus. They now have a better understanding of how MU's storm		
system and their actions have the potential to impact the Ohio River.	water conc	
81. How did you evaluate the effectiveness of the training activities? (WV MS4 2009 General Permi	n 24 #2\	
Effectiveness was evaluated by the questions asked at the end of the presentations a		1
of calls received from campus workers asking if their procedures were correct or if the		llouit
department would review the procedures to ensure everything was within compliance		
aoparanona no ara roman ara proceduros se cricario escarjum g mas mumi compriantes		
82. How many municipal employees were trained to identify and report illicit discharges?		
(WV MS4 2009 General Permit, p. 24, #2)		
106		
93. Did you achieve all the goals that you identified in your CMMD related to training municipal		
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?	■ Yes	□ No
(WV MS4 2009 General Permit, p. 24, #3)		
84. If not, please describe the progress you did make towards achieving your goal(s), and any obsta	cles and po	ssible
solutions such as revised implementation schedules or revised measurable goals. If you are pro		
changes to your SWMP goals or schedule, please include them in Section V above.		
(WV MS4 2009 General Permit, p. 24, #4)		

IX. N	ICM 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	or this	■ Yes	☐ No
	reporting period?		- les	
86.	Contact: Travis M. Bailey 87. Phone: (3	04) 696-3032		
	ormance Measures 4a and 4b: Develop and implement an ordinance to address stor	mwater ru	noff from	
	truction sites one acre or greater			
88.	Has your municipality adopted a construction site runoff control ordinance in	.	PP	.
	accordance with the requirements of the WV MS4 2009 General Permit (Part II	■ Yes	Partially	☐ No
00	Section C.b.4.a)?			-
89.	If a program ordinance has not been adopted, have the proposed activities for	□ Vos	□ Dowtielle	□ No
	developing and implementing an ordinance to address stormwater runoff from construction sites been implemented?	Yes	☐ Partially	П мо
90	Please indicate the anticipated ordinance adoption schedule. (WV MS4 2009 General	l Permit n	2/1 #1\	
90.	Please indicate the anticipated of dinance adoption schedule. (WV W34 2003 Genera	aireinni, p	ο. 24, π±j	
91.	Has your construction site ordinance been reviewed and/or updated to include			- · ·
	any new criteria during the reporting period?	■ Yes	☐ Partially	□ No
92.	Is your construction site program being fully implemented to include provisions			
	for: i) plan review, ii) routine site inspections, iii) enforcement, and iv) record	Tes Yes	Partially	□ No
	keeping and reporting?			
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 per	iod.	122	
95.	Please indicate the number of enforcement actions during the reporting period (car	attach	0	
	document).		10	
96.	Are enforcement records maintained and available upon request?	■ Yes	☐ Partially	☐ No
97.	Is there adequate funding to fulfill the program implementation requirements	☐ Yes	■ Partially	□ No
	required by the WV MS4 2009 General Permit?			
98.	Briefly list and describe any activities outlined in your SWMP completed during the			
	construction site operator and/or permittee site inspector training. (WV MS4 2009 0			#1)
	rify that each construction project disturbing one (1) acre of land has an approved site registration prior t ruction.	o the comme	ncement of	
2. ML	I will review WVDEP stormwater requirements with contractors at the beginning of projects and perform	a follow-up re	eview will be c	onducted
on a y	/early basis. I will prepare language for the contract documents describing the stormwater management responsibiliti	as that the cr	ontractor must	ahide hv
4. ML	I will train staff on site review, inspection, and enforcement procedures.			
	I will develop lines of communication with contractors in case of spills or releases. MU will aid the contrain in the spills or releases.	actor with res	ources needed	d to
	<u> </u>			
99.	Did you achieve all the goals that you identified in your SWMP related to developing		E vaa	E No
	implementation and assessment of a construction site runoff control program for the reporting period? (WV MS4 2009 General Permit, p. 24, #3)	115	Yes	☐ No
100	If not, please describe the progress you did make towards achieving your goal(s), ar	d any obst	acles and no	nssible
100	solutions such as revised implementation schedules or revised measurable goals. If			
	changes to your SWMP goals or schedule, please include them in Section V above.	you are pro	pposing arry	
	(WV MS4 2009 General Permit, p. 24, #4)			
	(177 MS 1 2005 General 1 chind) pr 2 1, m 1,			

X. MCM 5: Controlling Runoff from New Development and Redevelopm	ent (WV MS4 2009	9 General Perm	nit, p. 12-19)			
101. Did you complete all proposed activities and performance measures reporting period?	for this MCM fo	or this	Yes	□ No		
102. Contact: Travis M. Bailey	103. Phone: (3	04) 696-3032				
Performance Measure 5a: Develop, implement, and enforce a program to	o protect water	resources b	y addressi	ng		
stormwater discharges from regulated new and redevelopment projects						
104. Has your municipality adopted a stormwater management ordinance	e in	■ Yes	☐ Partially	□ No		
accordance with WV MS4 2009 General Permit (Part II Section C.5.a.	ii.A)?	e res	_ Partially	□ MO		
105. If your ordinance has not been adopted, please describe the progres	s made towards	s final ordina	ance adopt	tion		
during this reporting period, and expected date of final adoption. (W	/V MS4 2009 Ge	neral Permi	t, p. 24, #1	.)		
106. Does your (proposed) ordinance include language incorporating the described in the WV MS4 2009 General Permit (Part II Section C.5.a.i	•	centives	Yes	■ No		
107. Does your (proposed) ordinance include language incorporating the in lieu alternatives to on-site BMP implementation as described in the Permit (Part II Section C.5.a.ii.A.4)?	_		☐ Yes	■ No		
108. Have you developed a process for reviewing and updating your ording implementation to address the adequacy of provisions for: i) requiring reduction on new and redevelopment sites, ii) plan review, iii) BMP of maintenance inspections, iv) enforcement, v) inventory and tracking and reporting?	ng runoff volum construction and	e d	■ Yes	□ No		
109. How many projects were reviewed during the reporting period?			0			
110. What types of projects were reviewed (residential, commercial, indu	strial, etc.)?					
(WV MS4 2009 General Permit, p. 18, #2)						
N/A						
111. Provide a summary of the number and types of stormwater BMPs appearing the reporting period. Please list the BMPs according to the BM Stormwater Management Manual (2012). (WV MS4 2009 General Period)	MP specification	number fro		- 1		

112.	Provide a summary of the number and type of projects that qualified for each of the developmed described in the WV MS4 2009 General Permit (Part II Section C.5.a.ii.A.3) during the reporting prindicate if you have attached additional documentation. (WV MS4 2009 General Permit, p. 18, #.	eriod. Ple	
NA	Provide a summary of the number of projects that qualified for any offsite mitigation or paymen described in the WV MS4 2009 General Permit (Part II, Section C.b.5.a.ii.A.4) during the reporting indicate if you attach additional documentation. (WV MS4 2009 General Permit, p. 18, #3)	_	
114.	How many maintenance agreements were approved during the reporting period? (WV MS4 2009 General Permit, p. 18, #4)	0	
115.	Were any maintenance agreements recorded at the county courthouse?	Yes	■ No
0	Provide a summary of the number and type of stormwater BMP inspections conducted by MS4 prontracted agents (construction as-built, ongoing operation and maintenance audits, complaint Include (or attach) a summary of: i) the type and number of BMPs requiring maintenance or repulsive into compliance, and iii) the number of enforcement actions taken. (WV MS4 2009 General Permit, p. 18, #5)	driven, etc	c.).
117.	Did you achieve all the goals that you identified in your SWMP related to developing and/or implementing and assessing a stormwater management program for this reporting period? (WV MS4 2009 General Permit, p. 24, #3)	■ Yes	□ No
118.	If not, please describe the progress you did make towards achieving your goal(s), and any obstact solutions such as revised implementation schedules or revised measurable goals. If you are proportion changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4)		ossible

Performance Measure 5b: Long-term v	vatershed 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	Yes [] Partially	■ No	
C.5.a.i.A)?					
	rmittee's legal authority addresses the following wa	itershed pr	rotection		
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 will	h MU's Walershe	d Protection Elem-	ents Program,	
122. Preserve, protect, create, and	The contractor will be told to cease their act	tivities un	til thev co	ome	
restore ecologically sensitive	into compliance with MU's Watershed Prote		•		
areas.				- 3	
123. Implement practices that	The contractor will be told to cease their act	ivities un	til they co	ome	
prevent or reduce thermal	into compliance with MU's Watershed Prote	ction Ele	ments Pr	ogram.	
impacts to streams. 124. Seek to avoid or prevent					
hydromodification of water	The contractor will be told to cease their act		•		
bodies caused by development.	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	n MU's Watershed	Protection Eleme	nls Program.	
126. Minimize impacts to native					
undisturbed soils.	The contractor will be told to cease their activities until they come into compliance with	n MU's Watershed	Protection Eleme	inls Program.	
·	ents have not yet been incorporated into a planning aken to incorporate these elements. (WV MS4 2009				
,	d Protection Element Program but has little		• •		
-	ractor to comply with the program or be dis	-	-	710	
duties.	ractor to comply with the program of be dis	IIII33CU II			
danes.					
Performance Measure 5c: Street and p	arking design assessments				
128. Were the proposed activities for assessing the current street design guidelines and parking					
requirements implemented?	and pure server server accion Baracimes and pu		T Yes	□ 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 Generations)	ral Permit, p.	19-21)
130. Did you complete all the required performance measures for this MCM for this reporting period?	■ Yes	□ No
131. Contact: Travis M. Bailey 132. Phone: (304) 696-3032		
Performance Measures 6a and 6b: Develop and implement an operation and maintenance program facilities that includes prevents or reduces the discharge of polluted runoff	for all mui	nicipal
nousekeeping program for municipal operations implemented?] Partially	□ No:
 134. List and briefly describe the activities outlined in your SWMP for the development of a pollution good housekeeping program for municipal operations undertaken during this reporting period. Review current activities performed by maintenance crews and the materials and methods utilized to idecampus with the potential to cause pollution of surface water. Review existing policies and guidelines needed to ensure compliance. Educate and train employees on policies. Prioritize and/or develop new guidelines where needed, update guidelines and procedures as necessary. Currently annual stormwater management training is provided to all trade supervisors and employees. A and medical students are given training specifically addressing proper disposal methods and management 	entify opera /. All lab pers	tions on
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)?	Yes	□ 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)?	■ Yes	□ 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)?	Yes	□ No
138. If you answered no to any of the previous three questions, please indicate your proposed sched implementing the requirements of the WV MS4 2009 General Permit (Part II Section C.b.6.a).	ule for	
139. How many inspections were conducted at each municipal facility during the reporting period?	4	
140. List the top three problems that you have found while conducting inspections at municipal facility. No problems were found.	ties.	

142. Did you achieve all the goals that you identified in your SWMP related to developing pollution prevention and good housekeeping program for municipal operations for t reporting period? (WV MS4 2009 General Permit, p. 24, #3)	this	■ Yes	□ No
143. If not, please describe the progress you did make towards achieving your goal(s), an solutions such as revised implementation schedules or revised measurable goals. If y 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)?	• Yes] Partially	□ 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)?	■ Yes] Partially	□ 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)?	• Yes] Partially	□ No
147. How many employees received training during the reporting period? (WV MS4 2009 General Permit, p. 24, #1)		106	
148. Are you maintaining records of all municipal training activities (including training age learning objectives, instructor qualifications, sign in sheets, etc.)?	endas,	■ Yes	□ No
149. Explain how the effectiveness of the training activities was evaluated (number of emcertified in specific good housekeeping skills, measurable improvements in cost or promaintenance activities, or as outlined in your SWMP). (WV MS4 2009 General Permi Effectiveness was evaluated by the questions asked at the end of the prese of calls received from campus workers asking if their procedures were corredepartment would review the procedures to ensure everything was within containing the content of the procedures of the procedures to ensure everything was within content of the procedures to ensure everything was within content of the procedures.	erformance t, p. 24, #2) entations a ect or if the	of facility and the a EHS	
150. Did you achieve all the goals that you identified in your SWMP related to training mu employees on pollution prevention and good housekeeping for this reporting period (WV MS4 2009 General Permit, p. 24, #3)	•	■ Yes	□ No
151. If not, please describe the progress you did make towards achieving your goal(s), and solutions such as revised implementation schedules or revised measurable goals. If you changes to your SWMP goals or schedule, please include them in Section V above. (WV MS4 2009 General Permit, p. 24, #4)	-	_	ossible



MARSHALL UNIVERSITY



STREET /PARKING DESIGN ASSESSMENT

August 2014

SECTION 1. PURPOSE/INTENT.

The purpose of this assessment is to provide recommendations and a proposed schedule for incorporating standards into relevant documents and procedures to maximize vegetation and to minimize impervious cover attributable to parking and street designs.

SECTION 2. DEFINITIONS.

For the purposes of this assessment, the following shall mean:

<u>Best Management Practices (BMPs)</u>. Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

<u>Clean Water Act</u>. The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

<u>Construction Activity</u>. Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

<u>Hazardous Materials</u>. Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

<u>Municipal Separate Storm Sewer System (MS4)</u>. The system of conveyances (including sidewalks, roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) owned and operated by Marshall University and designed or used for collecting or conveying storm water, and that is not used for collecting or conveying sewage.

National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit. Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC § 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

<u>Non-Storm Water Discharge</u>. Any discharge to the storm drain system that is not composed entirely of storm water.

Person. Any individual, contractor, student, staff, or faculty.

<u>Pollutant</u>. Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables;

pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

<u>Premises</u>. Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

<u>Storm Drainage System</u>. Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

<u>Storm Water</u>. Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

Storm Water Management Plan. A document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to Storm Water, Storm Water Conveyance Systems, and/or Receiving Waters to the Maximum Extent Practicable.

<u>Wastewater</u>. Any water or other liquid, other than uncontaminated storm water, discharged from a facility.

SECTION 3. APPLICABILITY.

This assessment shall apply to all new, modified, or reconstructed parking areas greater than 5000 square feet but less than one acre within the permitted area.

SECTION 4. RESPONSIBILITY FOR ADMINISTRATION.

Marshall University shall administer, implement, and enforce the provisions of this assessment.

SECTION 5. ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated in this assessment are minimum standards: therefore this assessment does not intend or imply that compliance will ensure that there will be no contamination, pollution, or unauthorized discharge of pollutants.

SECTION 6. PARKING.

6.1. Requirements.

Marshall University has and will continue to expand and improve parking lots and roadways under its jurisdiction. Marshall University generally will acquire property, demolish existing structures, (if necessary), and create a parking lot. All such activity will have to retain the first one inch of rain from a 24-hour storm preceded by 48 hours of no measurable precipitation. Runoff volume reduction can be achieved through on site utilization of practices to include dry swales, bioretention, rain tanks and

cisterns, soil amendments, roof top disconnections, permeable pavement, porous concrete, permeable pavers, reforestation, grass channels, green roofs and other practices that alone or combined will capture the first one inch of rainfall runoff volume. Extended filtration practices that are designed to capture and retain up to one inch of rainfall may discharge volume in excess of the first inch through an under drain system.

6.2. Public Safety and Athletics Department.

The Public Safety and Athletics department have jurisdiction over this type of activity. They are to be trained and knowledgeable of the practices required in this assessment.

6.2. Schedule.

October 2014-Implementation of retention requirements

June 2018-Evaluation of incorporating the assessment into the new Paving Contract.

MONITORING RESULTS

October 2013-March 2014

Date	Permit	Analyses	Results	Method	Reporting
	Requirements		(mg/L)		Results
	_				(mg/L)
		Nitrate	0.04	E300.0	
12/5/13	Total	Nitrite	ND	E300.0	0.67
	Nitrogen	TKN	0.63	E351.2	
12/5/13	Total Phosphorous	Phosphorous	0.3	E365.4	0.3

April 2014-September 2014

Date	Permit Requirements	Analyses	Results (mg/L)	Method	Reporting Results (mg/L)
		Nitrate	0.24	E300.0	
4/28/14	Total	Nitrite	ND	E300.0	1.13
	Nitrogen	TKN	0.89	E351.2	
4/28/14	Total Phosphorous	Phosphorous	0.11	E365.4	0.11