

MCM 1: Public Education and Outreach

Permit Section	Permit Requirement	BMP Description	BMP Purpose	Goal/Expected Result of BMP	Responsible Permittee	Measureable Goals & Milestones by Permit Year					BMP Evaluation
						Permit Year 1 2021	Permit Year 2 2022	Permit Year 3 2023	Permit Year 4 2024	Permit Year 5 2025	
1.A.i	Identify target audiences.	List of target audiences shown in written portion of SWMP	Create and maintain a public that is conscientious of the impacts that their behaviors have on local watersheds in order to reduce pollution from residential and industrial activities.	Provide permittees with lists of target audiences. Can be used to facilitate education opportunities.	All	None	None	None	None	Review target audience list for upcoming SWMP	Maintained list in written portion of SWMP.
	Identify pollutants and/or sources of pollutants.	List of sources of pollution shown in written portion of SWMP	Identify pollutants in order to reduce their impact on the water quality.	Create list of pollutants. Can be used to facilitate/target education opportunities.	All	None	None	None	None	Review sources of pollution list for upcoming SWMP	Maintained list in written portion of SWMP.
1.A.ii	Distribute appropriate educational materials and/or media to the target audience(s) using methods and procedures determined by the MS4 Operators.	Create and distribute stormwater education materials <i>(This may include: brochures, stormwater newsletter, fact sheets, door hangers, press releases, stormwater signage)</i>	Educate the community about the impacts of stormwater runoff, permit and inspection requirements, and general watershed information.	Increased awareness and understanding of various stormwater topics. Potential to bring about positive behavior change.	All	Distribute stormwater education materials at a minimum of two public events	Distribute stormwater education materials at a minimum of two public events	Distribute stormwater education materials at a minimum of two public events	Distribute stormwater education materials at a minimum of two public events	Distribute stormwater education materials at a minimum of two public events	Tracked type and amount of material distributed at each event.
		Publish one stormwater-related article in the City's City Source Newsletter	Educate the community about the impacts of stormwater runoff, permit and inspection requirements, and general watershed information.	Increased awareness and understanding of various stormwater topics. Potential to bring about positive behavior change.	City	Publish one stormwater-related article in the City Source newsletter annually.	Publish one stormwater-related article in the City Source newsletter annually.	Publish one stormwater-related article in the City Source newsletter annually.	Publish one stormwater-related article in the City Source newsletter annually.	Publish one stormwater-related article in the City Source newsletter annually.	
		Maintain Hinkson Creek GIS Habitat viewer	Provide the public with information about Hinkson Creek.	Tool for public to increase understanding about stormwater.	County	Maintain GIS viewer; Review and update as needed					GIS map created and maintained for public to view.
1.A.iii	Create opportunities for residents to participate in the implementation of stormwater	Hold a minimum of ___ school presentations.	Increase citizen engagement regarding stormwater issues.	Increased awareness and understanding of various stormwater topics. Potential to bring about positive behavior change.	City, County						Successfully completed the goal of (#) events each year. An increasing trend in participation each year
		Hold a minimum of ___ Lunch & Learn training sessions.	Increase citizen engagement regarding stormwater issues.	Increased awareness and understanding of various stormwater topics. Potential to bring about positive behavior change.	County						

	controls.	Host educational stormwater events and volunteer opportunities for residents <i>(This may include: Lunch & Learns, webinars, trainings, workshops, conferences, school presentations, tours, stream cleanups)</i>	Increase citizen engagement regarding stormwater issues.	Increased awareness and understanding of various stormwater topics. Potential to bring about positive behavior change.	MU	Hold a minimum of ten public stormwater education events	Hold a minimum of ten public stormwater education events	Hold a minimum of ten public stormwater education events	Hold a minimum of ten public stormwater education events	Hold a minimum of ten public stormwater education events	in participation each year indicates a successful BMP.
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MCM 2: Public Involvement and Participation

Permit Section	Permit Requirement	BMP Description	Permit Requirement	Goal/Expected Result of BMP	Responsible Permittee	Measureable Goals & Milestones by Permit Year					BMP Evaluation
						Permit Year 1 2021	Permit Year 2 2022	Permit Year 3 2023	Permit Year 4 2024	Permit Year 5 2025	
2.A	Develop and implement a public participation program of the SWMP	Hold public hearings/stakeholder meetings for changes in zoning, platting and annexations	Allow citizens and civic groups to provide input concerning stormwater policies	To create participation opportunities to interested citizens about the SWMP	City, County	Meetings held as needed					Recorded all public comments.
		Annually publicize and present the Campus Master Plan	Allow citizens and civic groups to provide input concerning stormwater policies	To create participation opportunities to interested citizens about the SWMP	MU	Present Campus Master Plan	Present Campus Master Plan	Present Campus Master Plan	Present Campus Master Plan	Present Campus Master Plan	Recorded all public comments.
		City of Columbia Climate Action & Adaptation Plan (CAAP)	Allow citizens and civic groups to provide input concerning stormwater policies	To create participation opportunities to interested citizens about the SWMP	City						Recorded all public comments.
		Collaborative Adaptive Management (CAM)	Allow citizens and civic groups to provide input concerning stormwater policies	To create participation opportunities to interested citizens about the SWMP	All						Recorded all public comments.
		Our Columbia Waters Integrated Management Plan (IMP)	Allow citizens and civic groups to provide input concerning stormwater policies	To create participation opportunities to interested citizens about the SWMP	City						Recorded all public comments.
2.B	Observe all public notice requirements for the SWMP	Public Notice process	Allow citizen input concerning stormwater policies	To increase involvement of the general public regarding the SWMP.	All	None	Hold public notice period for SWMP review.	None	None	None	Recorded all public comments.
	2.B.i The draft Management Plan shall be posted to each MS4 Operators public website with a way to submit comments.	Provide dedicated MS4 partner Stormwater Websites for SWMP comments.	Provide citizen access to comment on the SWMP	To increase understanding on the part of the public about stormwater	Each	None	Record and review public comments.	None	None	None	Recorded all public comments.
2.C	The MS4 Operators shall hold a public information meeting to provide information on and describe the contents of the proposed Stormwater Management Program and Plan.	SWMP Public Information Meeting	Allow citizen input concerning stormwater policies	To increase involvement of the general public regarding the SWMP.	All	None	Advertise and hold SWMP public information meeting.	None	None	None	Recorded all public comments. Revised SWMP as necessary
2.D	The MS4 Operators shall each have publicly available mechanism to take public inquiries, concerns, or take information about stormwater and stormwater related topics.	Provide dedicated MS4 partner Stormwater Websites: www.como.gov/utilities/stormwater www.showmeboone.com/stormwater http://ehs.missouri.edu/ehs/env/stormwater	Allow a means for the general public to communicate stormwater inquiries with the MS4 permittees.	Greater ability on the part of the MS4 partners to respond to stormwater inquiries	Each	Maintain stormwater websites					Tracked comments and responses/actions

		City of Columbia Facebook pages, Boone County Stormwater Facebook page			City, County	Maintain facebook pages					
2.E	not applicable										
2.F	A representative of each MS4 Operator shall report to the designated entity of each MS4 Operator at a minimum annually.	Submit SWMP Annual Report to Boone County Board of Commissioners for review	Allow designated entity to provide input concerning the SWMP.	To gain entity input on SWMP.	County	Submit SWMP annual report. Respond to comments and make updates as needed.	Submit SWMP annual report	Recorded all public comments			
		Submit SWMP Annual Report to Columbia City Council for review	Allow designated entity to provide input concerning the SWMP.	To gain entity input on SWMP.	City						
		Submit SWMP Annual Report to MU Environmental Health & Safety for review	Allow designated entity to provide input concerning the SWMP.	To gain entity input on SWMP.	MU						

MCM 3: Illicit Discharge Detection & Elimination (IDDE)

Permit Section	Permit Requirement	BMP Description	BMP Purpose	Goal/Expected Result of BMP	Responsible Permittee	Measureable Goals & Milestones by Permit Year					BMP Evaluation
						Permit Year 1 2021	Permit Year 2 2022	Permit Year 3 2023	Permit Year 4 2024	Permit Year 5 2025	
3.A	Develop, implement, and enforce a program to detect and eliminate illicit discharges	Review and evaluate occasional non-stormwater discharges	Detect and eliminate illicit discharges	To reduce illicit discharges	All						
3.B	Maintain storm sewer system map	Maintain Boone County Storm Sewer Map	View outfalls and watersheds within MS4 plan area	Permit compliance	County	Review map annually	Review map annually	Review map annually	Review map annually	Review map annually	
		City			Review map annually	Review map annually	Review map annually	Review map annually	Review map annually		
		MU			Review map annually	Review map annually	Review map annually	Review map annually	Review map annually		
3.C	The MS4 Operators shall effectively prohibit non-stormwater discharges in to the permittee's storm sewer system and implement appropriate enforcement procedures and actions. The prohibition shall be through ordinance or other regulatory mechanism, to the extent allowable under State or local law.	Boone County Zoning Regulations, Section 28.7	Ordinance/policy provides the permittees with legal authority to address illicit discharges	Permit compliance	County	Enforce IDDE ordinance					Ordinance/policy enforced. Tracked number of enforcement actions.
		City of Columbia Code of Ordinances, Chapter 12A, Article IX			City	Enforce IDDE ordinance					
		MU Stormwater Master Plan			MU	Enforce policy					
		Each entity to inspect all MS4 outfalls within permit cycle	Implement plan to detect and address non-stormwater discharges.	To provide the tools and procedures necessary to identify illicit discharges and take action as necessary.	All	Inspect 20% of MS4 outfalls annually	Inspect 20% of MS4 outfalls annually	Inspect 20% of MS4 outfalls annually	Inspect 20% of MS4 outfalls annually	Inspect 20% of MS4 outfalls annually	Tracked number of illicit discharges and their resolutions.
		Address occasional incidental non-stormwater discharges			All	Correct problems as needed					
		Maintain plan to detect non-stormwater discharges (<i>This may include on-site inspections, smoke or dye testing, or CCTV inspections</i>)			All	Correct problems as needed					
3.D	The MS4 Operators shall inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	Distribute communication to target audiences regarding the hazards associated with illicit discharges.	Educate the general public and about the hazards associated with illicit discharges	To increase public understanding about the hazards of illicit discharges	All	Review and update materials annually	Review and update materials annually	Review and update materials annually	Review and update materials annually	Review and update materials annually	Tracked number of trainings, meetings, mailings, etc. related to IDDE
	Hold area-wide Household Hazardous Waste (HHW) Disposal Opportunities	Hold a City-wide HHW Collection	Provide the public with the safe and proper disposal opportunities to minimize the presence of contaminants in local waterways	To prevent the disposal of waste in waterways.	City	Hold twice-monthly HHW collection (Apr-Nov)	Hold twice-monthly HHW collection (Apr-Nov)	Hold twice-monthly HHW collection (Apr-Nov)	Hold twice-monthly HHW collection (Apr-Nov)	Hold twice-monthly HHW collection (Apr-Nov)	Tracked the amount and type of waste collected and number of volunteers.
		Hold an County-wide HHW Collection			All		Hold annual HHW collection				

MCM 4: Construction Site Stormwater Runoff Control

Permit Section	Permit Requirement	BMP Description	BMP Purpose	Goal/Expected Result of BMP	Responsible Permittee	Measureable Goals & Milestones by Permit Year					BMP Evaluation
						Permit Year 1 2021	Permit Year 2 2022	Permit Year 3 2023	Permit Year 4 2024	Permit Year 5 2025	
4.A	Enforce a program to reduce pollutants in any stormwater runoff to their small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activities disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.	Boone County Zoning and Regulations, Section 28.5	Ensure permittees' land disturbance programs are implemented and proper disposal mechanisms are utilized.	To reduce pollution caused by construction activities.	County	Enforce Land Disturbance ordinance					Tracked the number of land disturbance permits issued each year.
		City of Columbia Code of Ordinances, Chapter 12A, Article II			City	Enforce Land Disturbance ordinance					
		MU Stormwater Master Plan			MU	Enforce policy					
4.B.i	An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law.	Boone County Zoning Regulations, Section 28	Ensure permittees' land disturbance programs are implemented and enforced.	To prevent land disturbance waste from leaving the disturbed area	County	Enforce Erosion Control ordinance					Tracked inspection records and enforcement actions
		City of Columbia Code of Ordinances, Chapter 12A, Article IV			City	Enforce Erosion Control ordinance					
		MU Business Policy and Procedure Manual Chapter 7			MU	Enforce policy					
4.B.ii	Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.	Boone County Stormwater Design Manual	Minimize soil erosion and sedimentation due to construction activities	To reduce in sediment loss from construction site activities	County	Review manual once per permit cycle					Ensured appropriate ESC measures are being utilized
		City of Columbia Erosion and Sediment Control Manual			City	Review manual once per permit cycle					
		MU Erosion and Sediment Control Design Requirements; MU Sustainable Design Policy			MU	Review manual once per permit cycle					
4.B.iii	Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, an sanitary waste at the construction site that may cause adverse impacts to water quality.	Boone County Zoning Regulations, Section 28	Prevent adverse impacts to water quality through a Stormwater Pollution Prevention Plan (SWPPP)	To contain waste on-site through BMPs	County	Enforce ordinance					Confirmed SWPPP is being followed
		City of Columbia Code of Ordinances, Chapter 12A, Article V			City	Enforce ordinance					
		MU Stormwater Master Plan			MU	Enforce policy					
		Boone County Zoning Regulations, Section 28.3			County	Enforce ordinance					

4.B.iv	Procedures for site plan review which incorporate consideration of potential water quality impacts.	City of Columbia Code of Ordinances, Section 12A, Article IV	Ensure BMPs are properly installed and maintained throughout construction	To reduce in adverse water quality impacts	City	Enforce ordinance	Reviewed site plans to ensure they meet requirements
		MU Stormwater Master Plan			MU	Enforce policy	
4.B.v	Procedures for receipt and considerations of information submitted by the public.	Maintain stormwater websites	Allow the general public a method for submitting comments/complaints.	To provide timely response to comments/complaints	All	Respond to comments as needed	Tracked land disturbance comments/complaints
		Maintain hotline phone numbers to report stormwater issues			All	Respond to comments as needed	
4.B.vi	Procedures for site-inspection and enforcement of control measures.	Conduct site inspections of erosion & sediment control BMPs	Ensure appropriate erosion and sediment control BMPs are being used	To ensure proper use of construction site BMPs	All	Inspect 100% of locally permitted sites	Tracked site inspection violations

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

Permit Section	Permit Requirement	BMP Description	BMP Purpose	Goal/Expected Result of BMP	Responsible Permittee	Measureable Goals & Milestones by Permit Year					BMP Evaluation
						Permit Year 1 2021	Permit Year 2 2022	Permit Year 3 2023	Permit Year 4 2024	Permit Year 5 2025	
5.A.i	Strategies which include a combination of structural and/or non-structural best management practices appropriate for the MS4 community.	Track permits for installation of private BMPs in development and redevelopment projects	Develop a set of practices that are practical and effective	To reduce post-construction stormwater site runoff	All	Ongoing as needed					Added new BMPs to entity tracking lists for annual inspections (see MCM 5.A.iii)
		Maintain Stormwater Design Manuals and/or Water Quality Manual	Develop a set of practices that are practical and effective at reducing stormwater pollution	To reduce post-construction stormwater site runoff	Each	Review manuals once per permit cycle					Reviewed manuals once per permit cycle.
		Maintain LEED building standards	Develop a set of practices that are practical and effective	To reduce post-construction stormwater site runoff	MU	MU pursues LEED certification on all New Construction or Major Renovation eligible projects					Number of projects tracked.
5.A.ii	An ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State or local law.	City of Columbia Code of Ordinances, Chapter 12A	Protect stormwater from construction site runoff	To reduce post-construction stormwater site runoff	City	Enforce ordinance					Recorded ordinance/policy violations. Addressed violations as needed.
		Boone County Zoning and Regulations, Section 28	Protect stormwater from construction site runoff	To reduce post-construction stormwater site runoff	County	Enforce ordinance					
		MU Stormwater Master Plan	Protect stormwater from construction site runoff	To reduce post-construction stormwater site runoff	MU	Enforce policy					
		City of Columbia Code of Ordinances, Chapter 12A, Article X	Restrict/limit construction activities within stream corridor	To reduce potential for erosion and sedimentation	City	Enforce stream buffer ordinance					
		Boone County Zoning and Regulations, Section 26	Restrict/limit construction activities within stream corridor	To reduce potential for erosion and sedimentation	County	Enforce stream buffer ordinance					
		MU Stormwater Master Plan	Restrict/limit construction activities within stream corridor	To reduce potential for erosion and sedimentation	MU	Enforce policy					
5.A.iii	Ensure adequate long-term operating and maintenance of BMPs owned or operated by the MS4 Operators and, to the extent possible, privately owned BMPs.	City BMP inspections	Maintain inventory, maintenance and inspection schedules of BMPs	To prolong the usefulness of installed BMPs; to ensure BMPs constructed and maintained to function as designed	City	Inspect all City BMPs annually	Inspect all City BMPs annually	Inspect all City BMPs annually	Inspect all City BMPs annually	Inspect all City BMPs annually	Kept inspection records. Fixed issues as needed.
		Require private BMP owner self-inspection and report submission	Maintain inventory, maintenance and inspection schedules of BMPs	To prolong the usefulness of installed BMPs; to ensure BMPs constructed and maintained to function as designed	City	Private BMPs inspected annually by owner	Private BMPs inspected annually by owner	Private BMPs inspected annually by owner	Private BMPs inspected annually by owner	Private BMPs inspected annually by owner	Kept inspection records and/or recorded survey results. Followed up with property owners when problems arose.
		MU BMP inspections	Maintain inventory, maintenance and inspection schedules of BMPs	To prolong the usefulness of installed BMPs; to ensure BMPs constructed and maintained to function as designed	MU	Landscape Services and Campus Facilities Departments perform routine maintenance on all stormwater and sewer utilities					Kept inspection records and/or recorded survey results.

		County BMP inspections	Maintain inventory, maintenance and inspection schedules of BMPs	To prolong the usefulness of installed BMPs; to ensure BMPs constructed and maintained to function as designed	County	Private BMPs inspected annually by owner	Kept inspection records and/or recorded survey results.					
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MCM 6: Pollution Prevention/Good Housekeeping

Permit Section	Permit Requirement	BMP Description	BMP Purpose	Goal/Expected Result of BMP	Responsible Permittee	Measureable Goals & Milestones by Permit Year					BMP Evaluation	
						Permit Year 1 2021	Permit Year 2 2022	Permit Year 3 2023	Permit Year 4 2024	Permit Year 5 2025		
6.A	The MS4 Operators shall develop or maintain controls for reducing or eliminating the discharge of floatables and pollutants from areas owned or operated by the MS4 Operator.	Maintain training program for Hazardous Material Management	Prevent, reduce and/or eliminate floatables and pollution from municipal operation activities	To maintain a written O&M program for Hazardous Material Management	County, MU	Review of Hazardous Material Management program once per permit cycle					Reviewed O&M program on an annual basis.	
		Complete City facility safety inspection audits	Prevent, reduce and/or eliminate floatables and pollution from municipal operation activities	To check facilities for safety and spill prevention techniques. Any needed changes are recorded in a tracking spreadsheet.	City	Inspect each facility annually	Inspect each facility annually	Inspect each facility annually	Inspect each facility annually	Inspect each facility annually	Safety inspection audits completed on time. All comments/concerns written in tracking spreadsheet and addressed in a timely manner.	
		Maintain Spill Control and Countermeasures Policy & Procedures (SPCC)	Prevent, reduce and/or eliminate floatables and pollution from municipal operation activities	To maintain a written O&M program for SPCC	County, MU							
			Prevent, reduce and/or eliminate floatables and pollution from municipal operation activities	To maintain a written O&M program for SPCC	City	Annual review of SPCC program	Annual review of SPCC program	Annual review of SPCC program	Annual review of SPCC program	Annual review of SPCC program	Reviewed O&M program on an annual basis.	
6.B	The MS4 Operators shall maintain an employee training program for MS4 staff.	Identify employee groups to train	Maintain timely, applicable training program; prevent/reduce stormwater pollution from municipal activities	To increase the number of employee groups trained on MS4 related issues	All	Maintain list of employees to train and review once per permit cycle					Updated list of employee groups to train. Increased number of employees trained.	
		Review & update training presentations	Maintain timely, applicable training program; prevent/reduce stormwater pollution from municipal activities	To improve understanding of pollution prevention practices on the part of employees	All	Review training information and presentations once per permit cycle					Training material updated by the end of the permit term.	
		Train impacted employees on SWPPP	Maintain timely, applicable training program; prevent/reduce stormwater pollution from municipal activities	To improve understanding of pollution prevention practices on the part of employees	All	Train employees on an annual basis	Train employees on an annual basis	Train employees on an annual basis	Train employees on an annual basis	Train employees on an annual basis	Track number of employees trained. Complete a verbal survey of participants after training sessions to assess understanding.	