

Butler County Storm Water District

Butler County, Ohio



Storm Water Management Plan

February 25, 2003



BUTLER COUNTY ENGINEER'S OFFICE



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I. Executive Summary

Butler County is required to submit a Storm Water Management Plan (SWMP) in accordance with 40 CFR Part 122.32 and Ohio Law. This document outlines the Butler County Storm Sewer District's plan to develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants to the "maximum extent practicable", to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with the Ohio EPA NPDES Phase II program. The SWMP addresses the six minimum control measures (MCM's) as required by state regulations. The Plan also identifies the County's legal authority to implement the general permit.

II. Legal Authority

Butler County has established the Butler County Storm Sewer District under Ohio Revised Code (ORC) Section 6117 with authority to control the quality of separate storm water discharge to its storm sewer system. Its authority addresses municipal discharges. Butler County has both the fiscal authority and legal resources to fully implement its SWMP, with the exception of the requirement to enforce erosion and sediment control regulations on development of parcels, which have a size ranging from one acre up to, but not including five acres. Section 307.79 of the ORC specifically limits the authority of the Board of County Commissioners (BOCC) to regulate erosion and sediment control plans to five contiguous acres or more. The County Commissioners Association of Ohio is actively pursuing changes in current law to revise this restriction to one acre or more in compliance with proposed Ohio EPA rules and regulations.

III. Development of the SWMP

Following a selection process, Butler County retained the services of Fuller, Mossbarger, Scott and May Engineers, Inc. (FMSM) and Environmental Rate Consultants (ERC) to facilitate the formation of a countywide Storm Sewer District and the preparation of an NPDES Phase II Storm Water Permit. In June, 2002, representatives from local governments in the County along with other interested parties such as local development organizations, watershed groups, Chamber of Commerce, environmental and conservation groups and others were invited to a "Kick-off" meeting to discuss the NPDES Phase II Permit Program and the formation of a Steering Committee to assist the County in evaluating alternatives to address the Phase II requirements and prepare the SWMP. A diagram of the process is illustrated in Figure 1.

The Steering Committee has met monthly since the Kick-off meeting, with an average of 25 attendees, and addressed the following issues:

1. NPDES Phase II permit requirements;
2. Legal Organization Options;
3. Alternative Management Strategies and Structures;
4. Level of Service and Cost of Service;
5. Financing Programs;
6. Formation of an ORC 6117 Storm Sewer District;
7. Six Minimum Control Measures (MCM's) and associated Best Management Practices (BMP's)

8. Location of 303(d) Impaired Waters and causes of impairment;
9. Selection of BMP's that fit community needs and address impairments;
10. Storm Water Management Plan.

A list of participating organizations that attended these meetings is shown in Figure 2.

A Workshop for elected officials was held on January 15, 2003. Over 50 officials representing 20 local governments in the County attended this meeting. The Phase II program requirements were summarized along with information on the proposed Butler County Storm Sewer District. Resolutions were received from 12 local governments petitioning the County Commissioners to establish a County Storm Sewer District to administer the NPDES Phase II program. The Board of County Commissioners on February 20, 2003 established the Butler County Storm Sewer District chartered under Section 6117 of the Ohio Revised Code.

This NOI and SWMP is the direct result of the Steering Committee meetings and public officials workshop and participation and input by those attending.

iv. Permit Coverage Area

The SWMP includes all of the unincorporated areas in the townships listed in Appendix 6 (not included herein), of U.S. EPA Phase II Storm Water Rules update based on the 2000 Census along with those municipalities that by resolution or ordinance have agreed to participate in the County-wide District, including:

Butler County	Fairfield Township	Hanover Township
Lemon Township	Liberty Township	Madison Township
Ross Township	St. Clair Township	West Chester Township
Wayne Township	Village of New Miami	Village of Seven Mile
City of Trenton		

This area is shown on Figure 3 and has a population of 132,000 residents and represents 45 percent of the total land area in Butler County.

v. Rationale for Program BMP Selection

The Best Management Practices (BMP's) proposed in this SWMP have been developed to specifically address the list of "Impaired Waters" included in the OEPA 303(d) Report. The Storm Water Steering Committee intends to utilize the BMP's and the process shown in Figure 4 – the "Implementation Matrix" to mitigate the sources of impairment in the "Impaired Waters" noted above.

Since June 2002 Butler County has actively solicited input from local governments and other interest groups in the development of this Storm Water Management Plan and in establishing a County Storm Sewer District under ORC 6117. The purpose of this District is to provide sufficient funding, organization structure and staff for implementation of the permit requirements, the Six Minimum Control Measures (MCM's) and this Storm Water Management Plan. The Plan addresses each of the Six MCM's and provides a framework of BMP's to improve the quality of runoff to the area streams and rivers.

VI. Reporting Requirements

The Butler County Storm Sewer District will submit its required report annually during the first term of the permit cycle. The report will include the status of compliance with the permit conditions, an assessment of the appropriateness of the best management practices (BMP's) and progress towards achieving the measurable goals for each of the six MCM's. Also included will be a summary of the activities the Butler County Storm Sewer District will undertake during the reporting cycle and any changes to BMP's or measurable goals and all relevant data (monitoring) obtained during the reporting period.

VII. Storm Water Management Program

This Plan outlines the six Minimum Control Measures (MCM's), which are expected to result in reductions in pollutants discharged within Butler County. The identified water quality problems include, but are not limited to, organic enrichment, habitat and flow alteration, nutrients, and siltation. The six MCM's will address the identified water quality pollutants.

This Storm Water Management Program defines the requirements and the proposed actions for the Butler County Storm Sewer District to address each requirement with BMP's or other means of compliance. The SWMP is intended to reduce pollutant levels to the maximum extent practicable under current state law, to protect water quality, and to comply with the Ohio Revised Code and the Clean Water Act. The SWMP includes management practices, control techniques, system design, and engineering methods. Each MCM includes BMP's, measurable goals, person(s) or departments responsible, and rationale and decision process documentation. The measurable goals and time frame for each BMP can be viewed in the Implementation Matrix of the SWMP (Figure 4).

The Six Minimum Control Measures are addressed separately below. This plan outlines the six MCM's, which are expected to result in reductions in pollutants discharged by Butler County. The six MCM's will address the identified water quality pollutants.

Introduction

This Storm Water Management Program defines the requirements, in blue, and the methods for the Butler County Storm Sewer District to address each requirement with BMP's or other means of compliance, in green. The SWMP should reduce pollutant levels to the maximum extent practicable, to protect water quality, and to comply with the Ohio Revised Code and the Clean Water Act. The SWMP includes management practices, control techniques, system design, and engineering methods. Each MCM includes BMP's, measurable goals, person(s) or departments responsible, and rationale and decision process documentation. The measurable goals and time frame for each BMP can be viewed in the Implementation Matrix of the SWMP (Appendix A).

The Six Minimum Control Measures are addressed separately below:

1. Public Education and Outreach on Storm Water Impacts

- 1.1. The Butler County Storm Sewer District will implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.
 - 1.1.1 To distribute educational materials to the community, the Butler County Storm Sewer District will annually develop and distribute a media awareness packet to local media outlets (TV, Radio, Regional and Neighborhood Newspapers).
 - 1.1.2 To distribute educational materials and inform the public through an outreach program, the Butler County Storm Sewer District will coordinate an education and curriculum program with local school districts, provide and distribute educational materials, train educators about the program, and establish a Butler County Storm Sewer District website.
 - 1.1.3 To inform the public on the impacts pollutants can have on water bodies and to reduce pollutants in storm water runoff, the Butler County Storm Sewer District will implement a storm drain stenciling program including purchasing and coordinating installation of 300 stencils per year, until all storm water facilities are labeled, utilizing local governments, watershed groups, and civic groups. Labeling practices shall also be included in all future storm water facility construction, both public and private.
- 1.1 The District will document the decision process for the development of a storm water public education and outreach program. The decision process documentation shall include the overall public education program, individual BMP's, measurable goals, and persons responsible for the program.
 - 1.2.1 The Storm Water Coordinator will be responsible for the overall management and implementation of the Public Education and Outreach program. The Storm Water Coordinator will create and document requirements by implementing the BMP's listed above. The Public Information Specialist will identify target audiences and develop an outreach strategy, to reach them. The Storm Water Coordinator will determine target pollutant sources to address. The Storm Water Coordinator will evaluate the success of the Public Education MCM and BMP's and document the achievement of the measurable goals.

2. Public Involvement / Participation

- 2.1 The District will comply with State and local public notice requirements when Implementing the public involvement/participation program.
 - 2.1.1 To comply with State and local public notice requirements, the Butler County Storm Sewer District will hold public meetings and/or citizen discussion panels until the plan is fully implemented, throughout the county, targeting diverse groups.

- 2.2 The District will document the decision process for the development of a storm water public involvement / participation program. The decision process documentation will include the overall public involvement/participation program, individual BMP's, measurable goals, and persons responsible for the program. The District will:
- 2.2a Identify how they have involved the public in the development and submittal of the Notice of Intent (NOI) and SWMP description.
 - 2.2b Actively involve the public in the development and implementation program.
 - 2.2c Identify the target audiences for the public involvement program, including the types of ethnic and economic groups engaged and actively involve potentially affected stakeholder groups, including commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and educational groups, among others.
 - 2.2d Identify the types of public involvement activities included in the program. Where appropriate, consider the following types of public involvement activities:
 - Citizen representatives on a storm water management panel
 - Public hearings
 - Working with citizen volunteers willing to educate others about the program
 - Volunteer monitoring or stream clean-up activities
 - 2.2e Identify the person or department that is responsible for overall management and implementation of the storm water public involvement/participation program and individual BMP's.
 - 2.2f Identify how to evaluate the success of the minimum control measure, including the BMP's and measurable goals.
- 2.2.1 The Storm Water Coordinator will be responsible for the overall management and implementation of the Public Involvement/Participation program. Requirements will be addressed by the Coordinator through creating, implementing, and documenting the BMP process. The Coordinator will evaluate the success of the Public Education MCM and BMP's and document achievement of the measurable goals. To get the community actively involved in the program, the Butler County Storm Sewer District will implement the following BMP's:
- 2.2.2 Facilitate and oversee volunteer stream clean-up and monitoring programs.
 - 2.2.3 Establish and maintain a community storm water hotline. The hotline will be used to develop a database of complaints, as an investigation tool for the complaints, and as a means of enforcement.

3. Illicit Discharge Detection and Elimination

3.1 The District will develop, implement, and enforce a program to detect and eliminate illicit discharges into the MS4.

3.1.1 The Butler County Storm Sewer District will develop an Illicit Discharge Plan and coordinate approval by member local governments:

3.1.1.1 As part of the Plan, the District will develop a database of potential problems areas.

3.2 The District will develop a storm sewer system map, showing the location of all outfalls and the names and location of all surface waters of the State that receive discharges from those outfalls.

3.2.1 The Butler County Storm Sewer District will work within the existing County GIS to create a storm sewer map.

3.3. Within five (5) years of when coverage under the general permit was granted, the District will submit the following to the Ohio EPA:

3.3.a A list of on-site sewage disposal systems (Home Sewage Treatment Systems, HSTS's) connected to discharge to the MS4, with addresses;

3.3b A storm sewer map showing the location of HSTS's connected to the MS4. The map shall include details on the type and size of conduits/ditches in the MS4 that receive discharges from the HSTS's, as well as water bodies receiving the discharges from the MS4.

3.3.1 The Butler County Storm Sewer District, in conjunction with County Agencies and an Executive Committee will develop a list of on-site sewage disposal systems. The District will be charged with collecting the data, establishing a database, and creating a map.

3.4 To the extent allowable under State or local law, the District will effectively prohibit, through ordinance, or other regulatory mechanism, illicit discharges into its storm sewer system and implement appropriate enforcement procedures and actions.

3.4.1 The District will draft the illicit discharge detection and elimination ordinance, including enforcement procedures and will meet with participating local governments to coordinate enactment and implementation of the ordinance.

3.5 The District will develop and implement a plan to detect and eliminate non-storm water discharges, including illegal dumping into the storm system.

3.5.1 The District will develop the draft Plan to detect and eliminate non-storm water discharges including illegal dumping by:

3.5.1.1 Performing Dry weather screening

3.5.1.2 Conducting Chemical field tests (see 3.9d) and

3.5.1.3 Meeting with each participating local government to coordinate adoption of the Illicit Discharge Plan.

3.6 The District will inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

3.6.1 The District and Storm Water Coordinator will meet with local government employees, business groups, and the public to inform them of the hazards by preparing brochures and a news release about the hazards. This requirement will also be addressed through the Public Education MCM as well as in the Pollution Prevention/Good Housekeeping MCM.

3.7 The District will address the following categories of illicit discharges only if they are identified as significant contributors of pollutants: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltrations, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges from fire fighting activities.

3.7.1 The Storm Water Coordinator will monitor the effectiveness of BMP's and address adverse affects of the above stated potential illicit discharges.

3.8. The District will create a list of other similar occasional incidental non-storm water discharges that will not be addressed. They will document any local controls or conditions on the discharges. They will include a provision prohibiting any individual non-storm water discharge that is determined to be contributing significant amounts of pollutants to the MS4.

3.8.1. The Storm Water Coordinator will create a list of non-storm water discharges and include provisions for restrictions in the Illicit Discharge Ordinance.

3.9. The District will document the decision process for the development of a storm water illicit discharge detection and elimination program. The decision process documentation will include the overall illicit discharge detection and elimination program, individual BMP's, measurable goals, and persons responsible for the program. The District will:

3.9.1 The Storm Water Coordinator will be responsible for the overall management and implementation of the Illicit Discharge Detection and Elimination Program. To meet permit requirements, the Coordinator will thoroughly document the processes of creating and implementing the relevant plans or actions. The Storm Water Coordinator will evaluate the success of the Illicit Discharge Detection and Elimination MCM and BMP's and document achievement of the measurable goals.

4. Construction Site Storm Water Runoff Control

- 4.1 The District will develop, implement, and enforce a program to reduce pollutants in storm water runoff to the MS4 from construction activities that result in or create a land disturbance of greater than or equal to one acre, to the maximum extent practicable under current state law. The plan will include the development and implementation of:
 - 4.1a An ordinance to require erosion and sediment controls, as well as sanctions to ensure compliance;
 - 4.1b Requirements for construction site operators to implement appropriate erosion and sediment control BMP's.
 - 4.1c Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality.
 - 4.1d Procedures for site plan review, which incorporate consideration of potential water quality impacts.
 - 4.1e Procedures for receipt and consideration of information submitted by the public.
 - 4.1f Procedures for site inspection and enforcement of control measures.
- 4.1.1 The District will draft an ordinance establishing:
 - 4.1.1.1 Runoff control BMP's,
 - 4.1.1.2 Erosion control BMP's, and
 - 4.1.1.3 Sediment control BMP's

To reduce pollutants in storm water runoff and will coordinate enactment by participating local governments. Fees for new development or re-development will be charged to defray the cost to the general public.
- 4.1.2 The District will draft and coordinate implementation procedures for site plan review and site inspection and enforcement measures. The ordinance will incorporate cooperation with building and construction management departments that have jurisdiction within the District.
- 4.2 The District will document the decision process for the development of a construction site storm water control program. The decision process documentation will include the overall construction site storm water control program, individual BMP's, measurable goals, and persons responsible for the program. The District will provide documentation on:
 - 4.2.1 The Storm Water Coordinator will be responsible for the overall management and implementation of the Construction Site Storm Water Runoff Control program. Requirements will be addressed by thoroughly documenting the creation of BMP's, The Storm Water Coordinator will evaluate the success of the Construction Site Storm Water Runoff Control program and BMP's and document achievement of the measurable goals.

5. **Post-Construction Storm Water Management**

- 5.1 The District will develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, to the maximum extent practicable under current state law. The program will ensure that controls are in place that would prevent or minimize water quality impacts by;

5.1a Implementing strategies, which include a combination of structural and/or non-structural BMP's, appropriate for the community;

5.1b Adopting an ordinance to address post-construction runoff from new development and redevelopment projects;

5.1c Ensuring adequate long-term inspection and maintenance of BMP's.

5.1.1 The Butler County Storm Sewer District will develop:

- A riparian corridor and buffer zone plan, and
- Post Construction ordinance for the community.

New riparian corridors and buffers will be established in developing areas and a plan to restore riparian corridors buffers in redeveloping areas will be prepared and implemented.

5.1.1.1 The Butler County Storm Sewer District, along with other local governments will address the long term O&M of the riparian corridor and buffer zone.

5.1.2 The Butler County Storm Sewer District will coordinate with the County Department of Development and local governments to draft new language to update platting requirements to implement Post-Construction Storm Water management.

5.1.2.1 The Butler County Storm Sewer District will develop a plan to provide for long term O&M of the BMP's.

- 5.2 The District will document the decision process for the development of the post-construction storm water management program (SWMP). The decision process documentation will include the overall post-construction storm water management program, individual BMP's, measurable goals, and persons responsible for the program.

5.2.1 The Storm Water Coordinator will be responsible for the overall management and implementation of the Post-Construction Storm Water Management program. Requirements will be addressed by thoroughly documenting the creation of BMP's. The Storm Water Coordinator will evaluate the success of the Post-Construction Storm Water Management program and BMP's and document the achievement of the measurable goals.

6. Pollution Prevention/Good Housekeeping for Municipal Operations

- 6.1 The District will develop and implement an O&M program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from governmental operations.
 - 6.1a They will include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbance, and storm water system maintenance.
 - 6.1.1 The District will develop and implement a plan for government employee training to reduce pollutant runoff and provide one joint training class per year.
 - 6.1.1.1 The District will provide a recommended Maintenance Schedule to local participating governments, and
 - 6.1.1.2 Establish an Inspection Plan for County owned storm water facilities and inspect half of the facilities each year.
 - 6.1.2 The District will develop and coordinate implementation of an illegal dumping and control plan.
- 6.2 The District will document the decision process for the pollution prevention / good housekeeping program. The decision process documentation will include the overall pollution prevention/good housekeeping program, individual BMP's, measurable goals, and persons responsible for the program.
 - 6.2.1 The Storm Water Coordinator will be responsible for the overall management and implementation of the Pollution Prevention / Good Housekeeping program. Requirements will be addressed by thoroughly documenting the creation of BMP's. The Storm Water Coordinator will evaluate the success of the Pollution Prevention/Good Housekeeping program and BMP's and document the achievement of the measurable goals.

VIII. Financial Capability

With the formation of the ORC 6117 Butler County Storm Sewer District, the County now has the capability of establishing "rates and charges" for storm water programs. The County will establish a storm water permit for new construction which will finance a portion of the Phase II program costs. The remainder of the funding for this program will result from the establishment of a storm water charge to be levied against all parcels of property within the Phase II area.

IX. Summary

Since June 2002, Butler County has actively solicited input from local governments and other interest groups in the development of this Storm Water Management Plan and in establishing a County Storm Sewer District under ORC 6117 to administer the District and provide sufficient funding for implementation of the permit requirements, the Six

Minimum Control Measures and this Storm Water Management Plan. The SWMP addresses each of the Six Minimum Control Measures and provides a framework of Best Management Practices to improve the quality of runoff to the area's rivers and streams. The BMP's have been developed to specifically address the list of "Impaired Waters" included in the OEPA 303(d) Report.

Figure 1 – Storm Water Study Program Development

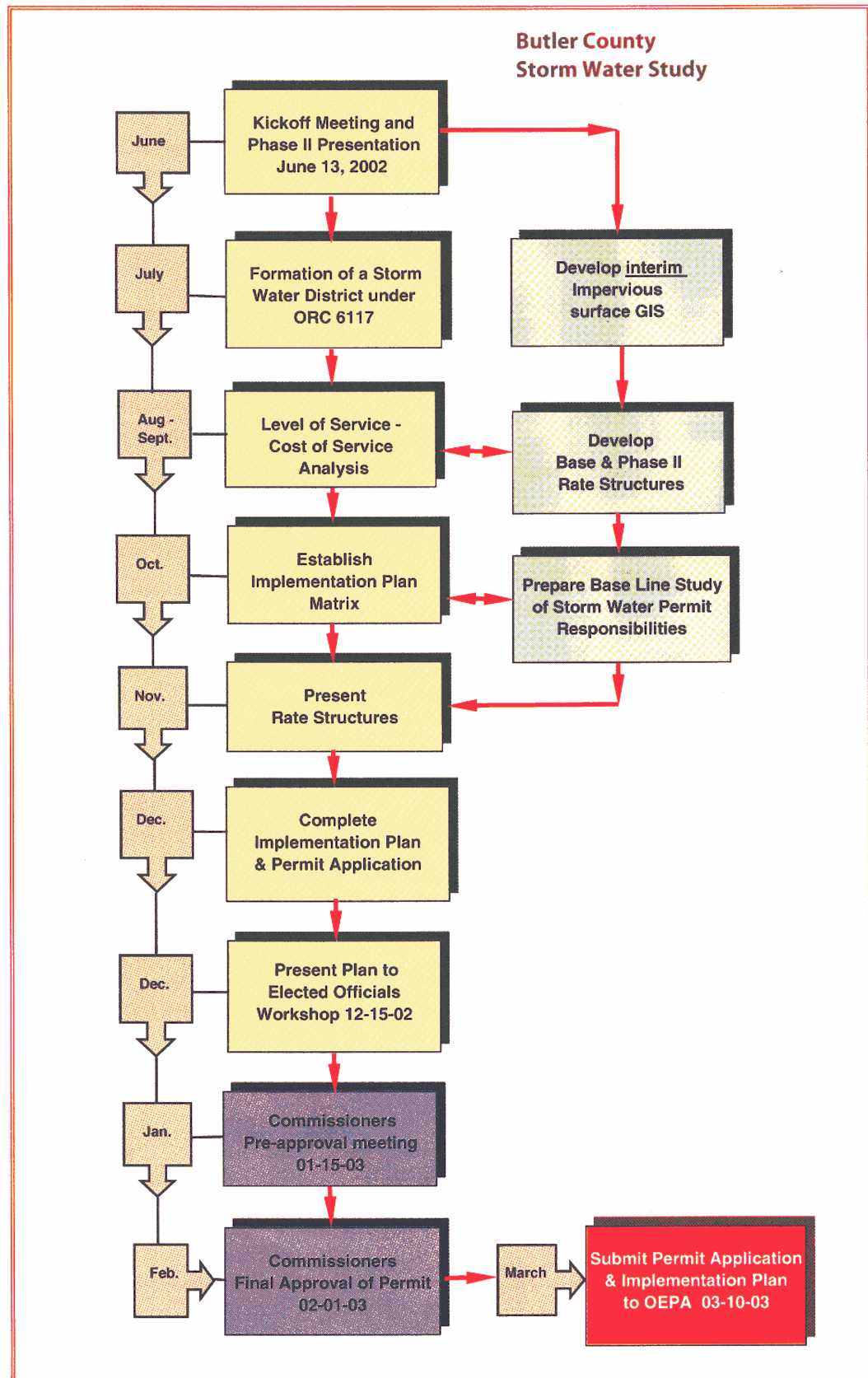


Figure 2 - Butler County Steering Committee Attendance									
Organization	Name	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Butler County Townships									
Township of Fairfield	Randolph, Ron	X	X	X		X	X		X
Township of Fairfield	Sutton, Mark		X						X
Township of Hanover	Cropenbaker, Bill	X	X	X	X	X	X	X	X
Township of Lemon	Snook, Robert	X	X	X	X	X	X	X	X
Township of Lemon	Croucher, Elsa								X
Township of Liberty	Kern, David	X	X		X			X	
Township of Liberty	King, Tim							X	
Township of Madison	Kramer, Ben								X
Township of Madison	McGuire, Bill						X	X	X
Township of Milford	Gillespie, Paul	X					X	X	
Township of Ross	Willsey, Thomas			X			X		X
Township of St. Clair	Berry, Don								X
Township of St. Clair	Collins, Jewel	X	X			X	X	X	X
Township of Wayne	McIntire, Bill					X	X	X	
Township of West Chester	Fitzgerald, Mark	X	X	X		X			X
West Chester Township	Brewer, Marie						X		
West Chester Township	Stoker, C						X		X
West Chester Township	Tacosic, Dave								X
West Chester Township	Alvarez, Jose								X
West Chester Parks	Zerkle, Bill								
West Chester Planning & Zoning	Elliff, Brian								
Butler County Municipalities									
City of Fairfield	Turner, Jim	X	X	X	X	X			
City of Hamilton	Arthur, Dan						X	X	X
City of Hamilton	Crum, Darla							X	
City of Hamilton	Haskins, Alison	X	X		X	X	X	X	X
City of Hamilton	Hinchberger, Jim			X	X	X	X		
City of Hamilton	Reigelsperger, Ralph	X	X						
City of Middletown	Duritsch, Dave		X						
City of Oxford	Orth, Andy				X	X		X	X
City of Oxford	Popescu, Victor		X	X	X	X	X	X	X
City of Trenton	Leichman, Rob	X	X	X	X	X		X	X
City of Trenton	Mobley, James								X
Village of Millville	Settles, Robert								X
Village of New Miami	Fox, Donald L., Sr.	X							

Butler County									
Butler County Engineer	Greg Wilkens	X	X	X	X	X	X	X	X
Butler County Engineer	Dennis Krall	X	X	X	X	X	X	X	X
Butler County Engineer	Scott Harris	X	X	X	X	X	X	X	X
Butler County Engineer	Eric Pottenger	X	X	X	X	X	X	X	X
Butler County Health Department	Agrew, Jeff	X			X			X	
Butler County Farm Bureau	Hoelscher, Pat		X	X	X	X	X	X	
Butler County Metro Parks	Muska, Michael	X		X	X		X	X	
Butler County Prosecutor	Davidson, Betsy	X	X			X	X	X	X
Butler County Health Department	Krinov, Bob			X		X	X		
Department of Development	Juengling, Michael F.			X	X	X		X	X
Department of Environmental Services	Lodor, Mary Lynn		X	X	X	X	X	X	X
Department of Environmental Services	Moore, Mary	X	X	X	X		X	X	X
Soil & Water Conservation District	Carter, David						X		
Soil & Water Conservation District	Deaton, Jennifer	X	X	X	X	X	X	X	X
Soil & Water Conservation District	Prunty, Brian						X		
Special Interest Groups									
Developers	Wunnenberg, Chris	X	X	X		X	X	X	X
Home Builders' Association	Kleingers, Jim					X			
Home Owners' Associations	Betscher, Keith		X	X		X	X		
Home Owners' Associations	Healey, Pat	X			X			X	
Izaak Walton League	Zehler, Raymond C.		X		X			X	
Kleingers & Associates	Painter, Rob				X				
Kleingers & Associates	Wolfe, Randy				X				
Miami Conservancy District	Rinehart, Kurt	X	X	X			X		X
Mill Creek Watershed Council	Ellwood, Nancy	X	X	X	X	X	X	X	
Ohio Contractors Association	Smith, Dan		X	X					
Ohio State University Extension	Remley, Dan						X	X	
Ohio Valley Development Council	Reed, Etta		X		X	X	X	X	
Three Valley Conservation Trust	Frimerman, Larry A.	X	X				X		
Three Valley Conservation Trust	Renwick, Bill		X	X	X	X	X	X	X

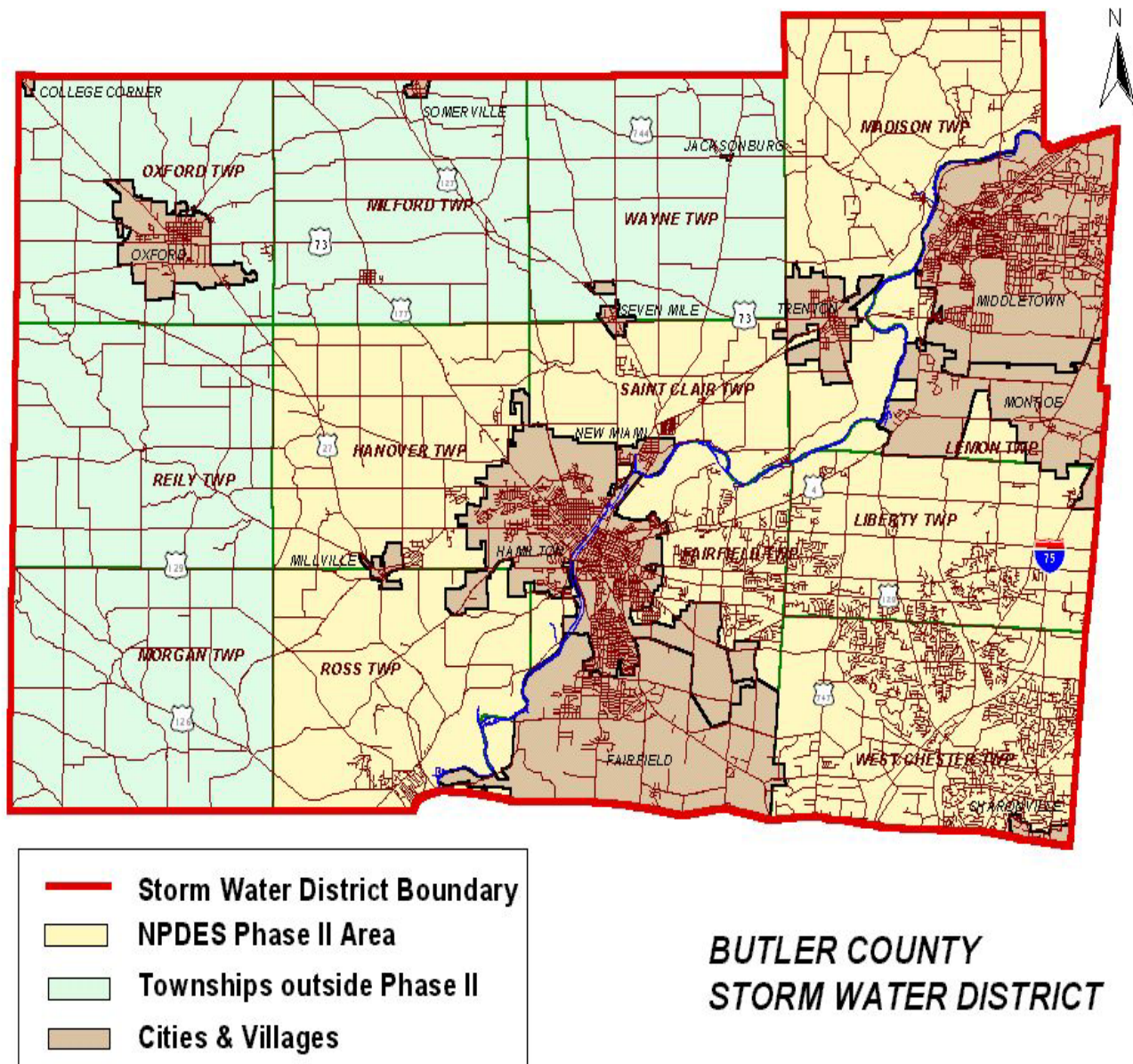


Figure 4 Implementation Matrix

MCM No.	Minimum Control Measure	
4	Consntruction Site Storm Water Runoff Control	
5	Post Construction Storm Water Management	
6	Pollution Prevention / Good Housekeeping	

3.7.1	Monitor BMP's	Monitor each installed BMP at least every other year
3.8.1	List and Restrict Non-Storm Water Discharges	Prepare Plan to Restrict Non-Storm Water Discharges and implement within three years
3.9.1	Document the Decision Process	Document Decision Process
BMP No.	BMP's	Measurable Goals
4.1.1	Construction Control Ordinance	Enact Construction Control Ordinance, including runoff, erosion, and sediment control plans, and implement within five years.
*4.1.1.1	<u>Runoff Control BMP's</u>	Implement Runoff Control BMP Plan and enforce within 3 years
*4.1.1.2	<u>Erosion Control BMP's</u>	Implement Erosion Control BMP Plan and enforce within 4 years
*4.1.1.3	<u>Sediment Control BMP's</u>	Implement Sediment Control BMP Plan and enforce within 4 years
4.1.2	Site Plan Review and Inspection Process	Develop Site Plan Review and Inspection Process and enforce within three years
4.2.1	Document the Decision Process	Document Decision Process
*5.1.1	<u>Post construction Ordinance with Riparian Corridor (RC) and Buffer Zone (BZ).</u>	Enact Post Construction Ordinance with Riparian Corridor (RC) and Buffer Zone (BZ) within five years
5.1.1.1	Long Term RC and BZ Stability Plan	Develop a Plan to ensure long term RC and BZ stability
*5.1.2	<u>Update Zoning Ordinances</u>	Develop Draft of Updated Zoning Ordinances within five years
5.1.2.1	Long Term Stability of Zoning Ordinances	Develop a Plan for Long Term Stability of Zoning Ordinances within five years
5.2.1	Document the Decision Process	Document Decision Process
6.1.1	Train Government Employees	Establish Plan for training Government Employees and train 25% of them beginning year 2
*6.1.1.1	<u>Maintenance Schedule</u>	Develop Maintenance Plan and Schedule within 4 years
6.1.1.2	Inspection Plan for BMP's	Develop Inspection Plan for BMP's and inspect half of BMP's each year, beginning year 2
6.1.2	Illegal Dumping and Control Program	Develop Plan for Illegal Dumping and Control Program within five years
6.2.1	Document the Decision Process	Document Decision Process

Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District	Review BMP's and prepare effectiveness reports	District
Prepare Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District	Review and update Plan and list of Non-Storm Water Discharges	District
Prepare documentation guidelines	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District
Year 1 (2003)	Responsibility	Year 2 (2004)	Responsibility	Year 3 (2005)	Responsibility	Year 4 (2006)	Responsibility	Year 5 (2007)	Responsibility								
Develop Draft Construction Control Ordinance with sanctions	District	Meet with local jurisdictions and implement Ordinance	District Local	Implement Ordinance	District Local	Enforce Ordinance	District Local	Enforce Ordinance and review program	District Local								
Defer to year 2		Draft BMP Plan	District	Implement and enforce BMP Plan	District	Enforce BMP Plan	District	Enforce BMP Plan	District								
Defer to year 3		Defer to year 3	District	Draft BMP Plan	District	Implement and enforce BMP Plan	District	Enforce BMP Plan	District								
Defer to year 3		Defer to year 3	District	Draft BMP Plan	District	Implement and enforce BMP Plan	District	Enforce BMP Plan	District								
Develop Site Plan Review and Inspection Process Plan	District	Develop Site Plan Review and Inspection checklist and manual	District	Enforce Site Plan Review and Inspection Plan	District	Enforce Site Plan Review and Inspection Plan	District	Enforce Site Plan Review and Inspection Plan and review program	District								
Prepare documentation guidelines	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District								
Develop Draft Post Construction Ordinance with Riparian Corridor (RC) and Buffer Zone (BZ)	District County	Solicit comments from public and communities adopt ordinance	District	Implement and enforce RC and BZ ordinance	District County	Enforce RC and BZ ordinance and review program	District County		District County								
Develop Draft of Long Term Stability Plan of RC and BZ	District County	Solicit comments from public and communities adopt Plan	District Local	Implement Long Term Stability Plan	District County	Implement Long Term Stability Plan	District County	Implement Long Term Stability Plan	District County								
Defer to year 3		Defer to year 3		Obtain copies of existing Zoning Ordinances	District	Draft an update of Zoning Regulations	District County	Implement new Zoning Ordinances	District County								
Defer to year 4		Defer to year 4		Defer to year 4	District County	Develop a Draft Plan for Long Term Stability of Zoning Ordinances	District County	Implement Long Term Stability Plan	District County								
Prepare documentation guidelines	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District								
Develop Training materials and Plan	District County Local	Produce training materials and hold training sessions for 25% of government maintenance employees	District County Local	Produce training materials and hold training sessions for 50% of government maintenance employees	District County Local	Produce training materials and hold training sessions for 75% of government maintenance employees	District County Local	Produce training materials and hold training sessions for 100% of government maintenance employees	District County Local								
Defer to year 2		Develop Maintenance Plan	District County	Coordinate with local entities to develop schedule	District County	Implement Maintenance Plan and Schedule	District County	Implement Maintenance Plan and Schedule	District County								
Develop Inspection Plan and schedule	District County	Coordinate with local entities to develop Plan and schedule inspection of 50% of BMP's	District County	Coordinate with local entities to develop Plan and schedule inspection of 50% of BMP's	District County	Coordinate with local entities to develop Plan and schedule inspection of 50% of BMP's	District County	Coordinate with local entities to develop Plan and schedule inspection of 50% of BMP's	District County								
Defer to year 3		Defer to year 3		Develop draft of Illegal Dumping and Control Program	District County	Implement Illegal Dumping and Control Program and incorporate Butler County Hazardous waste collection	District County	Continue Illegal Dumping and Control Program and incorporate Butler County Hazardous waste collection	District County								
Prepare documentation guidelines	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District	Yearly documentation	District								