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Lucas County & Others' Stormwater Management Program Plan

Including Waterville, Sylvania, Springfield, Washington, Jerusalem, Spencer, Monclova, and Swanton Townships
City of Waterville
Village of Holland
Village of Whitehouse

Submitted to:

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LUCAS COUNTY AND OTHERS
STORM WATER MANAGEMENT PROGRAM PLAN

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Introduction and Background

Purpose

In compliance with the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq.) and the Ohio Water Pollution Control Act (Ohio Revised Code Chapter 6111), dischargers of storm water are authorized by the Ohio Environmental Protection Agency (Ohio EPA) from Small Municipal Separate Storm Sewer Systems (MS4) to discharge from the outfalls and to the receiving surface waters of the State in accordance with the conditions outlined in most recent the general permit issued by Ohio EPA (OHQ000004). This permit was issued on April 1, 2021 and expires on March 31, 2026.

The Board of Lucas County Commissioners (BLCC) is a permittee under the MS4 program. In addition, eight (8) of the eleven (11) townships (Jerusalem, Monclova, Spencer, Springfield, Swanton, Sylvania, Washington, and Waterville) as well as the City of Waterville, and the Villages of Whitehouse and Holland are co-permittees with the BLCC. The Lucas County MS4 program is administered by the Lucas County Engineer. MS4s within the township co-permittees are owned by the BLCC and operated jointly by Lucas County and each township. MS4s within the municipal co-permittees are owned and operated by each jurisdiction.

As the MS4 permittee, the general permit requires each permittee to develop stormwater management programs (SWMP) plans designed to reduce the discharge of pollutants from the municipal separate storm sewer systems (MS4) to the maximum extent practicable (MEP) while also improving stream and water quality, and protecting the health and welfare of the public. Additionally, these SWMP's must include measurable goals and implement needed stormwater management controls. These goals and controls are to be designed to reduce the discharge of pollutants to the MEP.

According to U.S. EPA, stormwater runoff is "Rain or snowmelt that flows over land and does not percolate into the soil," (U.S. EPA 2). This is a naturally occurring phenomena, however, the imposition of man-made impervious surfaces such as parking lots, buildings, and roads can "significantly alter the natural hydrology of the land by increasing volume, velocity, and temperature of runoff and by decreasing its infiltration capacity," (U.S. EPA 2). It is because of these anthropogenic changes that a SWMP is necessitated - human alterations have hindered the watersheds' and streams' abilities to naturally assimilate pollutants and flows.

Common pollutants include pesticides, fertilizers, and other chemicals from residential lawn and agricultural application; sediment from construction and development; bacteria from failing septic systems and combined sewer overflows (CSO); and debris and garbage that have been carelessly discarded. All of these pollutants make their way, untreated, to waters of the state via MS4 discharges, impairing recreational and biological uses while affecting potable water supplies.

LUCAS COUNTY AND OTHERS
STORM WATER MANAGEMENT PROGRAM PLAN

Lucas County and its co-permittees are required by the Ohio EPA General Permit to "develop, implement, and enforce an SWMP designed to reduce the discharge of pollutants from your small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Ohio Revised Code (ORC) 6111 and the Clean Water Act," (Part III.A.1). Resultantly, "The SWMP should include management practices; control techniques and system, design, and engineering methods; and shall be modified to include provisions as Ohio EPA determines appropriate after its review of the program for the control of such pollutants," (Part III.A.1).

Part III.B of the NPDES Permit requires that Lucas County and Others implement six minimum control measures (MCM) which are to be included and outlined in the SWMP. The six MCM are:

1. Public Education and Outreach

2. Public Involvement/Participation

3. Illicit Discharge Detection and Elimination

4. Construction Site Storm Water Runoff Control

5. Post-Construction Storm Water Management in New Development and Re-development

6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each MCM will include BMP's that will address impairments as identified in a U.S. EPA approved Total Maximum Daily Load (TMDL) recommendation report for identified water quality problems associated with MS4 discharges within Lucas County's MS4 watersheds. The applicable TMDL reports, *Swan Creek Watershed* (Ohio EPA 2010) and *Maumee River (lower) and Lake Erie Tributaries* (Ohio EPA 2012) have been utilized in the design of Lucas County's SWMP.

The SWMP also overlaps with other congruent county objectives, including: home sewage treatment system (HSTS) failures, improving and expanding digital natural resource data available to land managers, and addressing conservation management with the agricultural community and others. These converging objectives are considered when developing and managing Lucas County's SWMP. Intragovernmental coordination of the county agencies and departments having purview over stormwater-related issues is fundamental to implementing a successful SWMP. In order to facilitate coordination and cooperation, the Lucas County Engineer's Office has been designated lead agency in implementing Lucas County and Others' SWMP. The National Pollutant Discharge Elimination System (NPDES) permit number OHQ000004, effective April 1, 2021, listed numerous additions to the TMDL requirements for Lucas County.

Urban stormwater management looks to address the following causes of water degradation: soil erosion and sediment control; home sewage treatment system failure and mismanagement; channelization and stream alterations; runoff from parking lots, development, and roads; the retention and conservation of riparian areas fertilizer and pesticide use; and household hazardous waste and illegal dumping.

Community Description

Lucas County, Ohio is situated in the northwest corner of the state. As of the 2020 United States Census, Lucas County had a population of 431,279 people.

The east and northern portions of the county are dominated by urban and suburban development, while the southern and western portion is decidedly rural in nature. A trend has occurred in recent years, where rural areas are becoming more suburban in nature with increased residential development.

Lucas County's SWMP is concerned with the urbanized areas outside of the City of Toledo, City of Oregon, City of Maumee, City of Sylvania, and the Village of Ottawa Hills, all of which are covered under other permits and their own SWMPs. The Lucas County SWMP area is estimated to have a population of 100,314 residents based on data from the 2020 Census.

The coverage area of the Lucas County SWMP is largely suburban to rural. Areas of Sylvania, Springfield, and Washington Townships adjacent to the cities of Sylvania, and Toledo are dominated by residential subdivisions, moderate density commercial development with some light industry. Most of these areas have been developed within the past twenty years, with intense development occurring after the year 1990.

At the same time, sections of Monclova and Waterville Townships are suburban, with new subdivisions in the past 25 years. In addition, sections of Swanton and Spencer Townships are experiencing industrial development, especially in the areas around the Eugene Kranz Toledo Express Airport. However, large portions of both townships are still rural in nature.

Finally, Spencer, Harding, Richfield, Providence, and Jerusalem Townships are largely rural. All are dominated by family farms and homesteads, with small urban neighborhoods mixed throughout. Harding, Providence, and Richfield Townships as well as the Village of Berkey are not co-permittees, and therefore are not covered under this SWMP.

The Lucas County SWMP covers the Ten Mile Creek/Ottawa River and Swan Creek watersheds in western Lucas County, and the Wolf Creek Frontal Lake Erie in Jerusalem Township, which is in the Maumee River (lower) Tributaries and Lake Erie Tributaries TMDL Areas.

Limitations of the SWMP Plan

The activities outlined in this plan guide the Lucas County Stormwater Management Program toward implementing a comprehensive program that not only meets minimum permit requirements, but also results in improvements to water quality within the MS4 area.

The audience of this plan is elected officials, township and county agency staff, Ohio EPA and the general public. Whenever possible, the

language and format of the plan is written and intended for a broad audience. To understand the specifics of the MS4 stormwater general permit, interested parties need to read the most current permit (OHQ000004 as of April 1, 2021).

Closing Comments

It is the intent of Ohio's Small MS4 NPDES Permit program that communities develop a program to address their stormwater management needs. In order to develop this SWMP, Lucas County has carefully considered the various geographic, hydrologic, and demographic characteristics of Lucas County and its partner townships, villages, and city. It is recognized by this SWMP that a comprehensive and holistic stormwater program will benefit the quality of life and sustainability of our communities, all while meeting state and federal requirements.

Minimum Control Measure 0 – Storm Water Program Operation/Administration

Introduction

"You shall develop, implement, and enforce an SWMP designed to reduce MCM 0 the discharge of pollutants from your small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of Ohio Revised Code (ORC) 6111 and the Clean Water Act. The SWMP should include management practices; control techniques and system, design, and engineering methods; and shall be modified to include provisions as Ohio EPA determines appropriate after its review of the program for the control of such pollutants." (Part III.A.1)

"You may partner with other small MS4s to develop and implement your SWMP. You may become Co-Permittees with one or more small MS4s by jointly submitting an NOI and including a Co-Permittee NOI for every additional small MS4. Your SWMP shall clearly describe which permittees are responsible for implementing each of the control measures. (Part I.D.2) Implementation of one or more of the minimum measures may be shared with another entity, or another entity may fully implement the measure on your behalf." (Part III.C)

Lucas County provides administrative and operational services necessary to meet permit requirements. These services include development and implementation of the SWMP and its associated programs; preparation of policy and procedural documents; permit compliance activity collection, evaluation, and reporting; recordkeeping and documentation; and coordination of permit compliance activities among Partner Agencies and Co-Permittees.

Program Areas

The following four program areas meet the requisite permit requirements:

Program Area 0-1: Program and Policy Development

Define, review, and update the Storm Water Management Program (SWMP); prepare and update regulations; and develop supporting policies, protocols, and guidance

Program Area 0-2: Activity Tracking, Reporting, and Recordkeeping

Develop and implement a permit compliance activity tracking program; evaluate progress towards meeting measurable goals and performance standards; report permit compliance activities to Ohio EPA; and establish and maintain recordkeeping practices

Program Area 0-3: Financial Management

Develop annual budgets and billing files, and account for costs

Program Area 0-4: Coordination

Maximize cost-effective compliance through routine interaction among Partner Agencies and Co-Permittees.

Program Area 0-1: Program and Policy Development

Purpose

Define, review, and update the Stormwater Management Program (SWMP) Plan; prepare and update regulations; and develop supporting policies, protocols, and guidance.

Responsible Party/Implementation Partner(s) (Part III.A.1.d)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
0-1a	Maintain Storm Water Management Program (SWMP) Plan	• Maintain existing SWMP • Conduct annual review • Perform updates as necessary to meet new permit requirements	County	Co-Permittees
0-1b	Maintain Regulations	• Establish and implement regulations; revise as necessary	County	Co-Permittees
0-1c	Maintain Policies and Protocol	• Develop and implement policies and protocol; revise as necessary	County	Co-Permittees

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards:

Best Management Practices

The MS4 General Permit requires Lucas County to create and maintain a SWMP *that "... should include . . . Best Management Practices (BMPs) that you or another entity will or already implements for each storm water minimum control measure ... where applicable, BMPs should address ... TMDL recommendations for identified water quality problems associated with MS4 discharges . . . the legal authority to implement said BMPs, . . . measurable goals for each BMP . . . interim milestones, . . . person(s) responsible for implementing BMPs ... a Table of Organization, and . . . rationale for how and why you selected each BMP and measurable goal."* (Part III.A.1)

The MS4 General Permit states that *"You shall update your SWMP to be consistent with requirements of this permit within one year of the effective date of this permit ... April 1, 2022."* (Part III.A.2)

The MS4 General Permit also requires that *"You shall do an annual review of your SWMP . . . You may change your SWMP during the life of the permit to . . . add components, controls, or requirements; or . . . replace an ineffective or infeasible BMP. Ohio EPA may require changes to the SWMP as needed"*. (Part III.D)

The following best management practices and associated strategies and mechanisms are established for this program area:

BMP 0-1a Maintain Storm Water Management Program (SWMP) Plan

Lucas County will maintain a SWMP meeting MS4 permit requirements. Lucas County will review and update the SWMP on an annual basis – in response to required changes by Ohio EPA and to accommodate new BMPs or replacement of ineffective or infeasible BMPs – following procedures outlined in the permit.

BMP 0-1b Maintain Regulations

Development and implementation of ordinances or regulations are required for MCMs 3 through 5. The County has adopted, through passage of a resolution by the BLCC, the following regulations:

- Soil Erosion and Sedimentation Control Regulations (MCM 4 and MCM5)
- Grading and Earthwork Rules (MCM 4)
- Floodplain Management Regulations (MCM4 and MCM5)

County adoption automatically includes all District township Co-Permittees. Municipal Co-Permittees adopt regulations through ordinance or resolution. Regulations are subject to amendment(s) to accommodate future permit requirements.

BMP 0-1c Maintain Policies and Protocol

To meet permit requirements and assist in consistent SWMP implementation, Lucas County has also developed, and will review and update as needed, the following protocols and processes to guide the implementation of this SWMP:

- Illicit Discharge Detection and Elimination Program (IDDEP) Plan (MCM3): The IDDEP plan includes standard protocols for MS4 mapping; home sewage treatment system (HSTS) mapping, inspections, and orders to repair/replace; prioritizing and performing dry weather field screening of outfalls; and investigation and elimination of illicit discharges.
- Construction SWP3 Plan Review, Approval, and Documentation (MCM4): A process is in place for screening plans for applicability, reviewing and approving applicable plans, and documenting the use of a standardized plan review checklist.
- Post-Construction SWP3 Plan Review, Approval, and Documentation (MCM5): A process is in place for screening plans for applicability, reviewing and approving applicable plans, and documenting the use of a standardized plan review checklist.
- Construction Site Inspection and Enforcement (MCM4): A process is in place for site inspections using a standardized checklist. An enforcement escalation protocol exists and is used when necessary.
- Post-Construction Inspection and Enforcement (MCM5): A process is in place for final installation inspections and long-term monitoring inspections using standardized checklists. An enforcement escalation protocol exists and is implemented when necessary.
- Facility Storm Water Management Plans (MCM6): The County has created standardized forms documenting MS4 facility operation and maintenance activity protocols and routine facility assessments to assess whether protocols are being implemented.

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods

The permit requires the MS4 operator to ". . .. evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs," (Part III.A.1.c)

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods (Part III.A.1.c)		
BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 0-1a Maintain Storm Water Management Program (SWMP) Plan		
Monitor and revise as needed	On-Going	• Conduct formal annual program implementation reviews using protocols for developing annual reports and budgets
Update to meet new permit requirements	On-Going	• Verify updated SWMP meets new permit requirements
BMP 0-1b Maintain Regulations		
Develop and adopt regulations	On-going	• Review existing regulations as new permit requirements are released • Identify necessary updates
BMP 0-1c Maintain Policies and Protocol		
Develop and maintain policies and protocol to meet program needs	On-going	• Review existing policies and protocols once per year • Identify changes in program implementation and lessons learned

Rationale and Decision Process (Part III.A.1.e)

The rationale and decision process used to develop this program area include:

- Permit sections III.B.3.d., III.B.3.i, ii., III.B.4.b.i., and III.B.5.e.v., and III.B.5.f.i. require adoption of specific regulatory mechanisms for MCM3, MCM4, and MCM5. Regulation development and adoption met all County local legal and procedural requirements.
- Development and implementation of established protocols and processes help the District meet permit requirements.
- Development and implementation of established protocols and processes encourages District-wide consistency in performing its activities.
- These regulatory mechanisms, policies, and protocols are in place, have been effective, and will continue.

Rationale for Program Modifications

The Policy and Protocol Development BMP was added to cover a program that is already in place and is being implemented.

Program Area 0-2: Activity Tracking, Reporting, and Recordkeeping

Purpose

Develop and implement a permit compliance activity tracking program; evaluate progress towards meeting measurable goals and performance standards; report permit compliance activities to Ohio EPA; and establish and maintain record-keeping practices.

Responsible Party/Implementation Partner(s) (Part III.A.1.d)

BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
Program Area BMPs, Mechanisms, and Responsible Parties Overview
0-2a	Track Program Activities	• Develop standardized reporting protocols and forms • Manage program data • Maintain data and document management applications • Document permit compliance activities and evaluate progress towards meeting goals	County	Co-Permittees, Partner Agencies
0-2b	Report Program Activities	• Develop permit compliance report for Ohio EPA	County	
0-2c	Keep Records	• Retain key documents following retention requirements in the permit	County	Co-Permittees, Partner Agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards:

Best Management Practices

BMP 0-2a: Activity Tracking

The MS4 General Permit requires the County *to "... evaluate program compliance, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals and satisfying performance standards."* (Part IV.A.1) The County, its partner agencies, and Co-Permittees will track and evaluate permit compliance activities to demonstrate progress towards achieving measurable goals and meeting performance standards. Activity tracking and evaluation mechanisms include:

- Development of standardized reporting protocols and forms.
    These forms and their use are described Annual Report Development Protocol. Forms will be modified as needed to accommodate new reporting requirements.
- Manage program activity data and maintain data management applications.
    The County manages permit compliance activity data in multiple formats including MS-Excel, GIS, and online applications. The data storage format is dictated by the type of permit compliance activity. The MS4 mapping and IDDE field screening program uses GIS-based systems.
- Track permit compliance activities.
    The County, Partner Agencies, and Co-Permittees track permit compliance data throughout the year. Requests for permit compliance activity are requested to Partner Agencies and Co-Permittees once a year in preparation for development of the annual report.
- Evaluate permit compliance activities.
    Information obtained from completed reporting forms is compiled and evaluated to assess progress towards program goals and meeting permit requirements.

BMP 0-2b Report Program Data

The MS4 permit requires the County to *"... submit annual reports . . . by the first day of April for each year. Your report should include a . . . Table of Organization, ... status of compliance, ... specific annual reporting requirements, ... activities you plan to undertake during the next*

reporting cycle, ... Proposed changes to your SWMP, (and) ... any variances granted ..." (Part IV.C)

The County will submit an annual report to Ohio EPA by the annual deadline of April 1st using the reporting method required at the time.

BMP 0-2c Recordkeeping

The MS4 permit requires the County *to "... retain copies of all reports and documents ... for at least three years or the term of this permit, whichever is longer. . . You shall make your records... available to the public if requested..."* (Part IV.B.1-2)

The County will retain copies of the annual reports, data used to demonstrate permit compliance, and other documents, including NOIs, as required under the permit. These documents are available to the public and Ohio EPA on request.

Key documents, including regulations and policies, annual reports, and public meeting notices will be posted on the Lucas County Engineer website.

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods (Part III.A.1.c)

The permit requires the MS4 operator to *". . .. evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"*

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods (Part III.A.1.c)		
BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 0-2a Activity Tracking		
Development of standardized reporting protocols and forms	On-Going	• Reporting forms are reviewed each year and updated as necessary to accommodate new reporting requirements
Manage program activity data and maintain data management applications.	On-Going	• Data sources are reviewed annually in preparation for development of the annual report
Track permit compliance activities.	On-Going	• Reviews during preparation of the annual report

Evaluate permit compliance activities	On-Going	• Permit compliance data is reported and compiled once a year to assess progress towards meeting permit requirements • Methods for collecting, compiling, and evaluating permit compliance activity data follows established protocols
BMP 0-2b Report Program Data		
Develop permit compliance report for Ohio EPA	Annual	• Tracked and reported compliance activity data is compared against annual Ohio EPA reporting metrics
BMP 0-2c Recordkeeping		
Retain key documents following permit requirements	On-going	• Periodic reviews of the document management system and website are performed to assess remaining retention times for key documents

Rationale and Decision Process (Part III.A.1.e)

The rationale and decision process used to develop this program area include:
- Permit compliance activity tracking by the County, its Partner Agencies, and Co-Permittees, provides the information for deriving performance metrics in the annual report.
- A coordinated activity tracking approach is necessary to assess permit compliance over many program components across Co-Permittee jurisdictions.
- Standardized activity tracking and reporting forms provide consistency across multiple agencies and Co-Permittee communities
- An organized recordkeeping system simplifies making County compliance documents available
- Established protocols for tracking and reporting permit compliance activities are being successfully implemented.

Rationale for Program Modifications

New permit requirements for document retention.

Program Area 0-3: Financial Management

Purpose

Manage the financial resources of the MS4 program.

Responsible Party/Implementation Partner(s) (Part III.A.1.d)

	Program Area BMPs, Mechanisms, and Responsible Parties Overview			
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
0-3a	Develop Budget	• Estimate coming year revenues and expenditures	County	Co-Permittees, Partner Agencies
0-3b	Develop Stormwater Fee Assessment Roll	• Develop annual Stormwater Fee Assessment Roll	County	
0-3c	Account for Costs	• Monitor finances	County	
0-3d	Pursue grants and loans	• Consider outside funding sources if necessary	County	Co-Permittees, Partner Agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards:

Best Management Practices

The County MS4 program is organized under Ohio Revised Code (ORC) 6117 which has requirements related to financial management:
- *"The board may fix reasonable rates and charges . . . to be paid by any person or public agency owning or having possession or control of any properties that are connected with, capable of being served by, or otherwise served directly or indirectly by, drainage facilities*

owned or operated by or under the jurisdiction of the county. In addition, the board may fix the rates and charges to pay the costs of complying with the requirements of phase II of the storm water program of the national pollutant discharge elimination system established in 40 C.F.R. part 122 . . . All moneys collected as drainage rates, charges, or penalties in or for any sewer district shall be paid to the county treasurer and kept in a separate and distinct drainage fund established by the board to the credit of the district.". (ORC 6117.02(D))

- *"A board of county commissioners may adopt a cost allocation plan that identifies, accumulates, and distributes allowable direct and indirect costs . . . and that prescribes methods for allocating those costs."* (ORC 6117.02(E))
- *"The (cost allocation) plan shall conform to United States office of management and budget Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments"* (ORC 6117.02(E))

The following BMPs and associated strategies and mechanisms are established for this program area.

BMP 0-3a: Develop Budget

The County developed a Cost Allocation Methodology in 2012 that provides the framework for assessing property owners within Co-Permittee Townships boundaries an annual fee to cover expenditures related to complying with Ohio EPA MS4 permit requirements. Co-Permittee municipalities are assessed an annual fee based on their pro-rata share for their municipality. Protocols for estimating revenues and projecting expenditures to produce an annual budget are well established and will be continued. Annual projected expenditures are determined through development of annual permit compliance work plans.

BMP 0-3b: Develop Stormwater Fee Assessment Roll

The County allocates its costs to properties within the co-permittee townships and municipalities based on the storm water contributed by each property according to the methodology in the Cost Allocation Plan. Well-defined protocols have been developed for generating an annual billing file for Co-Permittees electing to have the fee assessed via tax bill for individual parcel/property owners are in place. A corollary protocol is also in place for invoicing Co-Permittees who elect to pay the entire fee for all parcels within their jurisdictional boundaries via a direct bill. Both protocols will continue under this permit term.

BMP 0-3c: Account for Costs

The County provides permit compliance services through existing County agencies and consultants who are reimbursed for these costs from Stormwater Fee revenue. The Lucas County Engineer is responsible for management of MS4 Program finances and tracking expenditures.

BMP 0-3d: Pursue Grants and Loans

The County, Co-Permittees, or Partner Agencies may pursue grants, loans, and/or other funding sources as allowed under their respective authorities. Such supplemental sources of revenue may be pursued on an as-needed basis at the discretion of the County, Co-Permittees, or Partner Agencies.

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods

The permit requires the MS4 operator to ". . .. evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs," (Part III.A.1.c).

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods (Part III.A.1.c)		
BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 0-3a: Develop Budget		
Meet OMB/Auditor Deadlines	Summer	• Internal quality control review
BMP 0-3b: Develop Stormwater Fee Assessment Roll		
Meet Auditor Deadlines	Late Fall	• Internal quality control review
BMP 0-3c: Account for Costs		
Monitor costs in relation to budget	On-going	• Monitor Expenditures
BMP 0-4d: Pursue Grants and Loans		
Assess alternative funding sources	On-going	• Monitor potential funding sources for MS4 programs via Federal and State sources

Rationale and Decision Process (Part III.A.1.e)

The rationale and decision process used to develop this program area include:

- Effective storm water management requires governmental services that protect the health, safety, and welfare of Lucas County residents.
- Many governmental agencies, directly or indirectly, provide necessary storm water services.
- The cost allocation methodology and fee structure were developed and implemented to meet ORC 6117 requirements and provide the revenue necessary to provide MS4 program services.
- Lucas County Engineer services to meet regulatory requirements are most cost effectively provided by having the County only perform activities that are not currently performed by another government agency.
- Development of annual budgets and billing files are performed using well-established and successful protocols.

Rationale for Program Modifications

The Financial Management BMP was added to cover a program that is already in place and is being implemented.

Program Area 0-4: Coordination

Purpose

Maximize cost-effective compliance through routine interaction among Partner Agencies and Co-Permittees

Responsible Party/Implementation Partner(s) (Part III.A.1.d)

	Program Area BMPs, Mechanisms, and Responsible Parties Overview			
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
0-4a	Coordinate with Co-Permittee jurisdictions	• Respond to Co-Permittee requests	County	Co-Permittees
0-4b	Coordinate with Other Stakeholders	• Hold meetings with stakeholders	County	
0-4c	Coordinate with Partner Agencies	• Hold coordination meetings with Partner Agencies	County	Partner Agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards:

Best Management Practices

The following best management practices (BMPs) and associated strategies and mechanisms are established for this program area:

BMP 0-4a: Coordination with Co-Permittee Jurisdictions

The County will coordinate activities with the co-permittee communities (Townships, Cities, & Villages) and aid, guidance, and training to the co-permittees. Assistance can include:

- Training for Co-Permittee staff to meet permit requirements,
- Provision of guidance documents and other materials needed to implement MS4 programs,
- Assistance in implementing MS4 regulations, and
- Response to inquiries.

Municipal Co-Permittees are provided with an opportunity each year to elect to self-perform some or all permit compliance activities not associated with base services. This election is captured on signed level of service election forms.

BMP 0-4b: Coordinate with Stakeholders

The County will coordinate meetings with Co-Permittees, Partner Agencies, and other stakeholders when necessary to obtain feedback on the MS4 program and to consider changes to the MS4 program.

BMP 0-4c: Coordinate with Partner Agencies

Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully take over the measure. You may rely on another entity only if . . . There shall be written acceptance of this obligation (Part III.C).

Provision of MS4 services is implemented through formal, written agreements with Partner Agencies to leverage existing services for permit compliance. Permit compliance activities to be performed by each agency and consultant are established in annual work plans. Formal Partner Agency coordination meetings are held on a regular basis each year to assess progress towards permit compliance and develop opportunities to coordinate activities to provide cost-effective services.

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods

The permit requires the MS4 operator to *". . .. evaluate the success of this minimum measure, including how you selected the measurable goals for*

each of the BMPs," (Part III.A.1.c).

Best Management Practice (BMP), Measurable Goals, Milestones, and Evaluation Methods (Part III.A.1.c)		
BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 0-4a Coordination with Co-Permittee Jurisdictions		
Respond to Jurisdiction Requests	On-Going	• Track response to requests
BMP 0-4b Coordinate with Other Stakeholders		
Respond to Stakeholder Requests	On-going	• Track response to requests
BMP 0-4c Coordinate with Partner Agencies		
Provide mechanisms for coordination of Partner Agency activities	On-going	• Track Partner Agency coordination meetings and prepare meeting summaries • Track progress on tasks identified during Partner Agency meetings

Rationale and Decision Process (Part III.A.1.e)

The rationale and decision process used to develop this program area include:

- The Lucas County MS4 program was created to provide storm water services to its Co-Permittee jurisdictions more cost-effectively than could be provided by each jurisdiction individually.
- Service delivery must be responsive to varying jurisdiction conditions and concerns.
- Multiple mechanisms achieve coordination with Co-Permittee jurisdictions at reasonable time commitment.
- Multi-agency service delivery requires coordination to achieve compliance at minimum cost.
- County can assist in developing solutions to water quality issues that transcend multiple jurisdictions.

Rationale for Program Modifications

The Coordination BMP was added to cover a program that is already in place and is being implemented.

Minimum Control Measure 1 – Public Education and Outreach

Introduction

"You shall 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." (Part III.B.1.a)

"Your storm water public education and outreach program, at a minimum, shall include: more than one outreach mechanism; a minimum of five storm water themes or messages over the permit term; your storm water public education and outreach program shall reach at least 50 percent of your population over the permit term; and target each (identified) TMDL pollutant....at least once..." (Part III.B.1.c)

Lucas County and Others will provide education and outreach targeted towards identified TMDL pollutants on a District-wide basis to achieve permit compliance in the most cost-effective manner. Tables with themes and targeted pollutants (including applicable TMDL pollutants) are included in each program area under MCM1.

Program Areas

The following three program areas establish the framework of public education and outreach within this current SWMP:

Program Area 1-1: Media-based Outreach
- Use traditional, internet, social, and print-based media to raise awareness across a broad audience about stormwater, common and TMDL pollutants, and steps to reduce stormwater pollutants through quick and repetitive messages.

Program Area 1-2: Education and Outreach Events
- Promote and provide educational opportunities and hands-on activities that encourage deeper understanding of stormwater pollution, common and TMDL stormwater pollutants, their impacts, and how they can be controlled.

Program Area 1-3: Kindergarten Through College Education
- Implement in-depth education activities for students on stormwater pollution, common and TMDL stormwater pollutants, their sources, and actions that can reduce pollutants in waterways.

Lucas County Population Analysis

Performance Standard: Reach at least 50% of the population over the five-year permit term.

The entire population of Lucas County is estimated at 431,000 people from the 2020 U.S. Census. The population of the County that lives within Lucas County and Others' small MS4 is estimated at about 100,300 people, almost a quarter of the total County population. While exact measurements of target audience exposure are at best an obscure estimate, the SWMP base measurement for reaching the 50% threshold is half of the MS4 residents, or 50,150 residents over the five-year period. Breaking that number down per year, the required yearly goal for the program is 10,030 residents. Utilizing sign-in sheets from outreach events and student education programs, as well as media-based outreach estimates, the program will obtain a measurement of the program's effectiveness.

Program Area 1-1: Media-based Outreach

Purpose

Use traditional, internet, social, and print-based media to raise awareness across a broad audience about stormwater, common and TMDL pollutants, and steps the public can take to reduce stormwater pollutants through quick and repetitive messages.

Responsible Party/Implementation Partners

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
1-1a	Develop Media-based Outreach	• Internet, social media, broadcast media, print media	County	Partner agencies
1-1b	Develop Print-based Education & Outreach Program	• Develop & distribute general awareness printed materials • Develop & distribute printed materials to property owners during IDDE activities	County	Partner agencies
1-1c	Develop Educational Materials for Public Events	• Develop & use interactive educational tools at public events	County	Partner agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards.

Best Management Practices

The permit requires the SWMP to describe *"your outreach strategy, including the mechanisms you will use to ...inform individuals and households about the steps they can take to reduce storm water pollution, ... become involved in the storm water program, and ...reach target audiences."* (Part III.B.1.b.i,ii, and v)

The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 1-1a: Develop Media-based Outreach

The media-based outreach strategy employs multiple mechanisms throughout the year, including:
- Internet: Develop and distribute educational materials through internet-based platforms such as websites, streaming, online advertising, e-newsletters, and targeted email.
- Social Media: Develop and distribute educational materials through Facebook, Twitter, Instagram, and other social media platforms as they emerge.
- Broadcast Media: Develop and distribute materials designed for traditional media that may include television, cable, and radio.

The specific themes and audiences for materials developed and distributed each year under the media outreach program will be determined annually based on permit requirements, progress towards achieving measurable goals, effectiveness in prior years, and new opportunities for outreach.

BMP 1-1b: Develop Print-based Education and Outreach Program

The print-based outreach strategy is to distribute stormwater themed printed items, including brochures, fact sheets, and door hangers, to targeted audiences throughout the year. The programs outreach mechanisms include:
- Develop and distribute stormwater themed printed materials to the general public by partner agencies and Co-Permittees.
- Develop and distribute educational materials to businesses and residents during outfall field screenings, targeted business inspections, or responses to spills.
- Develop and distribute printed giveaway items at meetings and events.

BMP 1-1c: Develop Educational Materials for Public Events

The outreach strategy includes the use of interactive tools to engage target audiences at events. The programs outreach mechanisms include:
- Develop or identify stormwater themed interactive tools promoting stormwater awareness.
- Incorporate stormwater themed interactive tools into public meetings and events.

Themes, Target Audiences and Targeted Pollutants (Part III.B.1.b.i, ii, iii, and iv)

The permit requires the stormwater plan to identify ". . . target audiences for your educational program who are likely to have significant storm water impacts"., and to ". . . target pollutant sources your public education program is designed to address". Over the five-year permit term, themes will address all of the targeted pollutants identified in our watersheds.

Such themes and their overall targets include:

- General- Overall awareness of stormwater systems and pollutant sources, introduction to illicit discharges/spills and impacts on waterways.
- Property Management- Lawn/landscaping, leaf collection, exterior maintenance, materials storage, pesticide/herbicide usage, pet waste, waste management and disposal, vehicle and equipment maintenance.
- Stormwater Controls- Proper design, operation and maintenance.
- Stream and Watershed Awareness- Identification of local waterways and watersheds, human activities impacting water quality, mitigation opportunities
- Construction Projects- Earth disturbance, construction materials/wastes, sediment and erosion controls.
- Sustainable Landscaping and Urban Agriculture- Sustainable landscaping and agricultural practices in an urban environment.

Audiences that will be targeted for the program include:

- Residents- represent the predominant land use in Lucas County and various residential activities may be significant pollutant sources if not controlled.
- Businesses- often use pollutants in high quantities that, if not controlled, may become significant pollutant sources.
- Stream Corridor Property Owners- unique responsibilities to manage riparian areas of their properties in a manner that filters pollutants, stabilizes streambanks, and protects aquatic habitat.
- Development Community- requires education to properly and cost-effectively achieve permit requirements under Ohio

EPA's Construction General Permit (CGP) as well as under the small MS4 permit MCMs 4 and 5.

- Co-Permittee Jurisdictions and MS4 Staff- play an important role in extending educational messages throughout their jurisdiction and also need to be educated about illicit discharges, improper disposal of waste, and pollution prevention under the MS4 permit.

Pollutants that will be targeted for this program include:

Total Suspended Solids (TSS), Total Phosphorus (TP), Nitrite/Nitrates, E. coli, Total Aluminum, Benzo(a)pyrene, Ammonia, Dissolved Solids, Strontium, Dieldrin

Best Management Practice, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.1.b.vii)

The permit requires the MS4 operator to *".... Evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs,"*. The County will continue to pursue the measurable goals listed in the table below on an ongoing bases and evaluate compliance with these goals each year by tracking usage of each outreach mechanism and its content.

Best Management Practice, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.1.b.vii)		
BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 1-1a Develop Media-based Outreach		
Provide content for internet-based outreach	On-Going	• Tracking data is collected quarterly
Create and broadcast media-appropriate content	On-Going	• Data is compiled and evaluated annually during preparation of the annual report using established protocols
		• Evaluate progress towards meeting 50% reach goal
BMP 1-1b Develop Print-based Education and Outreach Program		
Develop and distribute educational materials	On-going	• Tracking data is collected annually
		• Data is compiled and evaluated annually during preparation of the annual report using established protocols
		• Evaluate progress towards meeting 50% reach goal
BMP 1-1c Develop Educational Materials for Public Events		
Develop interactive displays and content	On-going	• Tracking data is collected annually
		• Data is compiled and evaluated annually during preparation of the

| | | annual report using established protocols |
| | | • Evaluate progress towards meeting 50% reach goal |

Rationale and Decision Process (Part III.B.1.b)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:

- Residents, businesses, and their customers within Lucas County are not generally knowledgeable about stormwater and its impacts.
- Frequent, varied messages delivered by a variety of media are needed to "reach" residents, business owners, and their customers.
- Raising public awareness and changing public behavior may take several generations; children are generally more open to receiving and acting on educational messages.
- Public will become more engaged as their awareness of stormwater increases, reducing long-term compliance costs.
- Internet-based and social media outreach, complemented by traditional media, is becoming a cost-effective mechanism for reaching a large, diverse audience.
- Developers and property owners can alter streams and encroach into riparian areas, exacerbating flooding and erosion and degrading stream water quality.
- Themes will be expanded to emphasize TMDL pollutants addressed.

Rationale for BMP Modifications

This program area and its associated BMPs related to traditional, internet, and social media, which has proven to be effective over the last permit term, will continue shifting focus towards internet and social media to reach a larger audience. Print-based media was integrated into Media-based Outreach program area as it has similar themes, target audiences, and targeted pollutants. Print-based media, which has proven to be effective in the past, is decreasing in applicability as the general public increasingly turns toward mass media, the internet, and social media for information. In recognition of this trend, and to maximize the effectiveness of the media outreach program, print-based media will continue but eventually integrated into internet and social media over the permit term. Sources of identified TMDL pollutants are now permit-required themes. Existing themes will be adapted to target TMDL pollutants, their sources, and control measures.

Program Area 1-2: Education and Outreach Events

Purpose

Provide a range of displays, presentations, and hands-on activities that promote a more in-depth understanding of stormwater pollution, its impacts, and its control.

Responsible Party/Implementation Partner(s) (Part III.B.1.b.vi)

	Program Area BMPs, Mechanisms, and Responsible Parties Overview			
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
1-2a	Events for Residential and Business Audiences	• Plan and implement education events and presentations • Provide materials for events and presentations organized by others	County	Partner Agencies
1-2b	Events for Development Community Audiences	• Provide educational events on development and construction practices • Provide an educational event on green infrastructure	County	Partner agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards.

Best Management Practices

The permit requires the SWMP to *describe "your outreach strategy, including the mechanisms you will use to ... inform individuals and households about the steps they can take to reduce stormwater pollution ... become involved in the stormwater program, and ... reach target audiences."* (Part III.B.b.i, ii, and v)

The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 1-2a: Events for Residential and Business Audiences

The County employs multiple strategies to identify, support, and implement events that will have the broadest impact on reducing the likelihood of targeted pollutants reaching local waterways via runoff over the permit term. There is some overlap of events with strategies for permit compliance under MCMs 4 through 6. This BMP involves the following mechanisms:
- Plan and implement live or virtual events that focus on target pollutants for residential and/or business audiences likely to have a broad impact on reduction of polluted runoff reaching local waterways.
- Promote relevant public education and outreach events and educational opportunities provided by third parties such as pubic agencies, watershed organizations, and non-profits.
- Decide on an approach to be followed each year. Plan and implement accordingly.
- Perform an annual review of outreach events and make modifications as necessary for the coming year(s).

BMP 1-2b: Events for Development Community Audiences

The County employs multiple strategies to identify, support, and implement events that will have the broadest impact on reducing the likelihood of targeted pollutants reaching local waterways via runoff over the permit term. There is some overlap of events with strategies for permit compliance under MCMs 4 and 5. This BMP involves the following mechanisms:
- Provide the development community with education and training on erosion and sediment control requirements and practices, post-construction controls, and construction site waste management.
- Develop and present training to the development community on green infrastructure post-construction controls once per permit term.

Themes, Target Audiences and Targeted Pollutants (Part III.B.1.b.i, ii, iii, and iv)

The permit requires the stormwater plan to identify ". . . target audiences for your educational program who are likely to have significant storm water impacts"., and to " . . . target pollutant sources your public education program is designed to address". Over the five-year permit term, themes will address all of the targeted pollutants identified in our watersheds.

Such themes and their overall targets include:
- General: Overall awareness of stormwater systems, pollutants sources and controls, and introduction to illicit discharges/spills and impacts on waterways.

- Property Management: Lawn/landscaping, leaf collection, exterior maintenance, materials storage, pesticide/herbicide usage, pet waste, waste management and disposal, vehicle and equipment maintenance.
- Pavement Maintenance: Deicing, road maintenance, street cleaning, street/parking lot/sidewalk maintenance.
- Stormwater Controls: Targeted pollutants, proper design, operation, and maintenance.
- Stream and Watershed Awareness: Stream and watershed protection.
- Construction Projects: Earth disturbance, construction materials/wastes, sediment and erosion control, post-construction controls.
- Sustainable Landscaping and Urban Agriculture: Sustainable landscaping and ag practices in urban environments.

Audiences that will be targeted for this program include:
- Residents: represent the predominant land use in Lucas County and various residential activities may be significant pollutant sources if not controlled.
- Businesses: often use pollutants in high quantities that, if not controlled, may become significant pollutant sources and have the potential to become illicit discharges.
- Development Community: requires education related to proper sediment and erosion controls at construction sites and to properly design, install, and maintain pollution controls to cost-effectively achieve permit requirements under Ohio EPA's CGP, as well as under the MS4 permit MCMs 4 and 5.

Pollutants that will be targeted for this program include:
> Total Suspended Solids (TSS), Total Phosphorus (TP), Nitrite/Nitrates, E. coli, Total Aluminum, Benzo(a)pyrene, Ammonia, Dissolved Solids, Strontium, Dieldrin

Best Management Practice, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.1.b.vii)

The permit requires the MS4 operator to *".... Evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs,"*. The County will continue to pursue the measurable goals listed in the table below on an ongoing basis and evaluate compliance with these goals each year by tracking usage of each outreach mechanism and its content.

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 1-2a: Events for Residential and Business Audiences		
Hold events or presentations/booths, displays, interactive activities	On-Going	• Tracking data is collected quarterly
Provide stormwater themed information to events	On-Going	• Data is compiled and evaluated annually during preparation of the annual report using established protocols

organized by others		• Evaluate progress towards meeting 50% reach goal
BMP 1-2b: Events for Development Community Audiences		
Educate development community regarding erosion and sediment controls, post-construction controls, and stream corridor protection	On-going	• Tracking data is collected annually • Data is compiled and evaluated annually during preparation of the annual report using established protocols • Evaluate progress towards meeting 50% reach goal

Rationale and Decision Process (Part III.B.1.b)

he targeted audiences, pollutants sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
- Residents, businesses, and developers within Lucas County are not generally knowledgeable about stormwater and its impacts.
- Individual events provide an opportunity to focus on targeted pollutants to an audience that is already interested in stormwater issues.
- Audience-specific events focusing on pollutants relevant to each audience allow more in-depth coverage of pollutant sources and the methods to control them.
- A knowledgeable public is more likely to become engaged in stormwater-related actions.
- Educating and engaging the public increases the likelihood that situations and spills that threaten local waterways will be reported to the County, reducing compliance costs.

Rationale for BMP Modifications

Sources of identified TMDL pollutants have been incorporated as themes per the new small MS4 permit TMDL performance standards. Existing themes will be adapted as needed to target TMDL pollutants, their sources, and control measures. Education of the development/construction community is now emphasized as the small MS4 permit also focuses on implementation of the Ohio EPA CGP.

Program Area 1-3: Kindergarten Through College Education

Purpose

Implement traditional classroom and non-classroom educational activities for students on stormwater pollution, local TMDL pollutants, their sources, and actions that can reduce pollutants in waterways.

Responsible Party/Implementation Partner(s) (Part III.B.1.b.vi)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
1-3a	Update program offerings	• Review/update classroom curriculum as necessary • Distribute materials as required	County	Partner Agencies
1-3b	Present to students	• Provide educational presentations at schools and in non-school settings	County	Partner agencies
1-3c	Present at teacher workshops	• Provide educational presentations for teachers	County	Partner agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet MS4 permit requirements and performance standards.

Best Management Practices

The permit requires the SWMP to describe *"your outreach strategy, including the mechanisms you will use to … inform individuals and households about the steps they can take to reduce storm water pollution, … become involved in the storm water program, and … reach target audiences."* (Part III.B.1.b.i, ii, and v)

The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 1-3a: Update Program Offerings

Educational materials are reviewed and updated to keep materials relevant and appropriate. During this permit term, educational materials will be updated to target identified TMDL pollutants.

BMP 1-3b: Present to Students

The County utilizes partner agencies for successful stormwater-related educational programs for students, ranging from kindergarten through college. This program will continue during the permit term. The County will employ a mix of strategies and methods to provide stormwater themed information to students (kindergarten through college) in classroom and non-classroom settings, including, but not limited to:
- Curriculum materials presented in classrooms during the school year
- Presentations in libraries, parks, youth groups, or other non-classroom settings
- Hand-on instruction opportunities
- Virtual learning/internet-based education

In recognition of limitations due to Covid-19 restrictions, virtual learning was adopted in 2020 and will continue as an important mechanism. The outreach strategy for student presentations includes:
- Reaching out to teachers in all school districts located within County boundaries to provide an opportunity for presentation of materials related to stormwater.
- Preparing and distributing an e-newsletter providing information on educational opportunities related to stormwater and water quality to teachers/instructors, librarians, youth group leaders, and other potential audiences throughout the year.
- Providing opportunities to students in public and private schools, homeschooling settings, libraries, and various youth groups.

BMP 1-3c: Present at Teacher Workshops

The County's partner agencies will continue its successful teacher workshop program to train educators on stormwater education, awareness, and actions that students and their families can take to protect/preserve water quality in local waterways. The train-the-teacher workshops provide teachers and instructors with the means to incorporate environmental and stormwater concepts into their lesson plans while meeting state standards for education in classrooms.

Themes, Target Audiences and Targeted Pollutants (Part III.B.1.b.i, ii, iii, and iv)

The permit requires the stormwater plan to identify ". . . target audiences for your educational program who are likely to have significant storm water impacts"., and to " . . . target pollutant sources your public education program is designed to address". Over the five-year permit term, themes will address all of the targeted pollutants identified in our watersheds.

Such themes and their overall targets include:
- General: Overall awareness of stormwater systems, pollutant sources, and practices to control; introduction to illicit discharges/spills and impacts on waterways
- Property Management: Lawn/landscaping, leaf collection, exterior maintenance, materials storage, pesticide/herbicide usage, pet waste, waste management and disposal, vehicle and equipment maintenance
- Stream and Watershed Awareness: Stream and watershed protection

Audiences that will be targeted for this program include:
- Students, Instructors, and Group Leaders: Instructors and/or group leaders can provide educational messages to their students who, in turn, can take messages received to their homes, employers, and other activities.

Pollutants that will be targeted for this program include:
- Total Suspended Solids (TSS), Total Phosphorus (TP), Nitrite/Nitrates, E. coli

Best Management Practice, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.1.b.vii)

The permit requires the MS4 operator to *"... evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs."* The County will continue to pursue the measurable goals listed in the table below on an ongoing basis and evaluate compliance with these goals each year by tracking usage of each outreach mechanism and its content.

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 1-3a: Update Program Offerings		
Review/update classroom curriculum as necessary	On-Going	• Tracking data is collected annually
Distribute materials as required	On-Going	• Data is compiled and evaluated annually during preparation of the annual report using established protocols
		• Evaluate progress towards meeting 50% reach goal
BMP 1-3b: Present to Students		

Conduct educational presentations; document presentations conducted	On-going	• Tracking data is collected annually • Data is compiled and evaluated annually during preparation of the annual report using established protocols • Evaluate progress towards meeting 50% reach goal
BMP 1-3c: Present at Teacher Workshops		
Conduct educational presentations; document presentations conducted	On-Going	• Tracking data is collected annually • Data is compiled and evaluated annually during preparation of the annual report using established protocols • Evaluate progress towards meeting 50% reach goal

Rationale and Decision Process (Part III.B.1.b)

The targeted audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
- Raising public awareness and changing public behavior typically takes several generations.
- Students are typically more open to receiving and acting on educational messages.
- Students often relay what they have learned to their parents, broadening the outreach achieved.
- Integrating stormwater education into science curricula gains support of schools.
- Teachers who gain experience with stormwater curricula can continue such education with limited County support.

Rationale for BMP Modifications

Sources of identified TMDL pollutants are now permit-required themes. Evaluate and revise educational materials to target TMDL pollutants, their sources, and control measures. Virtual learning was introduced in 2020 to provide student education in response to Covid-19 restrictions. This adaptation proved effective and virtual learning will continue to be a part of the student education program.

MCM 1 – Annual Reporting Requirements (Part III.B.1.c.v)

MCM 1 - Annual Reporting Requirements (Part III.B.1.c.v)
1. Identify each mechanism used and its storm water theme, target pollutant(s), its target audience and an estimate of how many people within your jurisdiction were reached by each mechanism

Minimum Control Measure 2 – Public Involvement and Participation

Introduction

"You shall comply with State and local public notice requirements and satisfy this Minimum Control Measure's minimum standard when implementing a public involvement/participation program." (Part III.B.2.a)

"Your storm water public involvement/participation program, at a minimum, shall include: i. Five public involvement activities over the permit term. ii. Target each TMDL pollutant identified for your small MS4 at least once … if your small MS4 discharges to a watershed with a U.S. EPA approved TMDL." (Part III.B.2.c)

"Your annual report shall identify each public involvement/participation activity conducted, including a brief description of the activity, the target pollutant(s) and include an estimate of how many people from your jurisdiction participated." (Part III.B.2.c.iii)

Program Areas

The following four program areas establish the framework of public education and outreach within this current SWMP:

Program Area 2-1: Public Reporting
- Provide and promote effective communication between the public and the County to allow effective reporting of and response to potential stormwater problems.

Program Area 2-2: Public Involvement Activities
- Involve residents in activities which protect water quality or raise awareness of stormwater issues.

Program Area 2-3: SWMP Development and Implementation
- Provide mechanisms for public involvement in the development and implementation of the SWMP.

Program Area 2-4: Public Access to County Information
- Expand and maintain the County website as the central location for providing the public access to County regulatory compliance documents including the SWMP, County regulations, annual reports, public notices, and other County policy/plans/regulatory documents.

Program Area 2-1: Public Reporting

Purpose

Provide and promote effective communication between the public and the County to allow effective reporting of and response to potential stormwater problems.

Responsible Party/Implementation Partner(s) (Part III.B.2.b.v)

	Program Area BMPs, Mechanisms, and Responsible Parties Overview			
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
2-1a	Respond to citizen complaints and inquiries	• Respond to inquiries received at County office • Respond to reported construction site issues • Respond to reported stream and watershed issues • Respond to inquiries from other reporting mechanisms (e.g., County and partner agency websites)	County	Partner Agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs and associated strategies and mechanisms are established for this program area:

  BMP 2-1a: Respond to Citizen Complaints and Inquiries

The County considers the receipt and response to citizen complaints and inquiries to be an integral part of *its "… program to detect … non-storm water discharges, including illegal dumping, to your system"* (Part III.B.3.e). The County's system to receive and respond to citizen complaints and inquiries also satisfies the permit requirement of *"procedures for receipt and consideration of information submitted by the public,"* pertaining to construction sites (Part III.B.4.a.v). To provide opportunities for reporting of stormwater-related issues, the County will employ the following mechanisms:

- Respond to reported complaints and inquiries received at the County Engineer's office.
- Respond to complaints and inquiries posted through reporting mechanisms on County Engineer and partner agency websites.
- Respond to reported stormwater-related issues that are reported through other mechanisms.

Target Audiences (Part III.B.2.b. iii)

- Residents: Familiar with the areas they live, work, and play, and are likely to generate a significant portion of reports of stormwater-related issues.

- Businesses and their Customers: Often use pollutants in high quantities and should be actively involved in reporting improper handling and disposal activities that can create significant pollutant sources.

- Riparian Corridor Property Owners: Located along water bodies within MS4 outfalls are uniquely situated to notice and report potential illicit discharges or activities that may impact water quality.

- Co-Permittees and Co-Permittee MS4 Facility Staff: Tend to be more aware of the impacts of stormwater on their communities and infrastructure- such as issues with their MS4 assets and localized flooding. The staff are frequently in the field performing other tasks and are a primary source of reporting for potential illicit discharges and spills. Staff are educated on identifying and reporting illicit discharges during the County's MCM 6 training.

Best Management Practice, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.2.b.vi)

The permit requires the MS4 operator to *"… evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs."*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 2-1a: Public Reporting		
Respond to citizen complaints and inquiries	On-Going	• Complaints, issues, and responses are tracked and documented
Respond to Construction Site Issues/Other Reporting Mechanisms	On-Going	
Respond to Stream and Watershed Issues/Other Reporting Mechanisms	On-Going	• Data is compiled and evaluated during preparation of the annual report using established protocols
Respond to Program Inquiries/Other Reporting Mechanisms	On-Going	• Inquiries and responses are tracked and documented • Data is compiled and evaluated annually during preparation of the annual report using established protocols

Rationale and Decision Process (Part III.B.2.b)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
• Establishing and maintaining a primary means for reporting issues, observations, and requesting services increases County efficiency and enhances service delivery.
• The County has established mechanisms and procedures in place to respond to reported issues.
• These mechanisms have proved successful in the past based on the number of complaints and inquiries received and responded to.
• Awareness and use of County reporting mechanisms have proven to be effective in identifying potential and confirmed water quality issues, including illicit discharges.
• Timely, informed response to citizen service requests builds confidence in the County.

Rationale for Program Modifications

No program modifications are planned.

Program Area 2-2: Public Involvement Activities

Purpose

Involve residents in activities which protect water quality or raise awareness of stormwater issues.

Responsible Party/Implementation Partner(s) (Part III.B.2.b.v)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
2-2a	Pollution control activities	• Plan, promote, and implement activities	County	Partner agencies
2-2b	Stream and watershed awareness activities	• Plan, promote, and implement activities	County	Partner agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet small MS4 permit requirements and performance standards.

Best Management Practices

The small MS4 permit requires the SWMP to describe the "… types of public involvement activities included in your program," (Part III.B.2.b.iv). The following BMPs and associated strategies and mechanisms are established for this program area with the goal of providing at least one event under either category each year during the permit term. Events are promoted online, via social media, in partner agency e-newsletters, and through third-parties. The specific event(s) implemented during the permit term will be based on a yearly assessment of which events have success in attracting meaningful numbers of target audiences. Events may be planned, promoted, or conducted in conjunction with other entities should an appropriate opportunity arise. In addition, the County will meet the new TMDL performance standard by adopting it County-wide. Public involvement activities will involve multiple County Co-Permittees and target the identified TMDL pollutant within County boundaries.

BMP 2-2a: Pollution Control Activities

The County will plan, promote, and/or conduct at least one public involvement event targeting land-based pollution control activities and TMDL pollutants. Public involvement activities in this activity can include, but not limited to:

- Soil fertility testing
- Tree and plant sales
- Rain barrel workshop
- Rain garden workshop
- Recycling drives

BMP 2-2b: Stream and Watershed Awareness Activities

The County will plan, promote, and/or conduct at least one public involvement event targeting stream and watershed activities and TMDL pollutants. Public involvement activities in this category include, but not limited to:

- Volunteer water quality monitoring
- Streambank stabilization/live-staking
- Clean Your Streams annual event

Target Audiences (Part III.B.2.b. iii)

- Residents: Familiar with the areas where they live, work, and play and are likely to generate a significant portion of reports of stormwater- related issues.

- Businesses and their Customers: Often use pollutants in high quantities and should be actively involved in reporting improper handling and disposal activities that can create significant pollutant sources.

- Riparian Corridor Property Owners: Located along water bodies within MS4 outfalls are uniquely situated to notice and report potential illicit discharges or activities that may impact water quality.

Best Management Practices, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.2.b.vi)

The permit requires the MS4 operator to "… evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs."

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 2-2a: Pollution Control Activities		
Plan, promote, and/or conduct public involvement event targeting land-based pollution control activities	Annually	• Event metrics are tracked and documented • Participation metrics including audience type, number of participants, and event location will be evaluated at the end of each year to assess program success and reach towards meeting County goals
BMP 2-2b: Stream and Watershed Awareness Activities		
Plan, promote, and/or conduct public involvement event targeting stream and watershed activity awareness	Annually	• Event metrics are tracked and documented • Participation metrics including audience type, number of participants, and event location will be evaluated at the end of each year to assess program success and reach towards meeting County goals

Rationale and Decision Process (Part III.B.2.b)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
- Public engagement is an efficient way to implement County programs and achieve County goals.
- Frequent, varied public involvement opportunities appeal to a broad range of interests and needs among County communities.
- Public involvement increases the likelihood of having a positive impact on local waterways.

Rationale for Program Modification

Meet the new TMDL performance standard for targeting identified TMDL pollutants.

Program Area 2-3: Storm Water Management Plan (SWMP) Development

Purpose

Provide mechanisms for public involvement in the development and implementation of the SWMP.

Responsible Party/Implementation Partner(s) (Part III.B.2.b.v)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
2-3a	SWMP development with public input	• Meetings with partner agencies • Municipal and township representation • Public notice of County meetings • Posting and public notice for Draft SWMP • Response to comments in Draft Final SWMP • Public notice for Lucas County Board of County Commissioner meeting	County	Partner agencies, municipalities, and third parties

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 2-3a: Stormwater Management Plan with Public Input

The small MS4 permit suggests that you *"... involve the public in the development and submittal of your NOI and SWMP description*,*"* (Part III.B.2.b.i). Opportunities for public input in the SWMP development process include:
- Individual meetings with each County partner agency
- Individual meetings with Co-Permittees during SWMP development
- Public notice of draft SWMP availability for public review and comment
- Response to comments in preparing the final SWMP
- Public notice of a vote for approval of the County SWMP as an agenda item of the Board of Lucas County Commissioners meeting on March 29, 2022.

Target Audiences (Part III.B.2.b. iii)

- Residents: Represent a significant portion of County property owners within the County and have an inherent interest in implementation of County programs and activities.

- Businesses: Represent another significant portion of County property owners who, due to the nature of their activities, have an inherent   interest in implementation of County programs and activities.

- Riparian Corridor Property Owners: Unique responsibilities to protect and manage riparian areas of their properties in compliance with County regulations and policies.

- Development Community: Impacted by County regulations related to construction site runoff control and post-construction stormwater   management. They are also responsible for compliance with Ohio EPA's CGP, which is the foundation of the related County Erosion and   Sediment Control Rules.

- Co-Permittee Jurisdictions: Key to implementation of the County SWMP plan and compliance with County regulations and policies and   encompass a broad spectrum of interests, ethnicities, and economic groups.

Best Management Practice, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.2.b.vi)

The permit requires the small MS4 operator *to "... evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs."*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 2-3a: SWMP Development with Pubic Input		
Provide opportunities for public input in to the County SWMP	April 1, 2022	• Compile comments received and responses provided • Summarize public input process and results when completed

Rationale and Decision Process (Part III.B.2.b)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
- The County covers a large geographic area and 11 Co-Permittee jurisdictions.
- Effective implementation of SWMP activities require broad input into County program development.
- Partner agencies are the primary program implementation mechanism for most County programs.
- Co-Permittees are responsible for implementation of many County program activities and ensuring permit compliance. Their staff have been briefed on the impacts of new permit requirements covered by the SWMP as they apply to their community.
- The regional stormwater coalition has representation from Co-Permittee municipalities and townships.
- Lucas County Board of County Commissioners meetings are public notice and open to the public.
- Offering the opportunity for public input via a public comment and review period is an appropriate and efficient practice for receiving input for a County program planning document.

Rationale for Program Modifications

The SWMP development effort has been added as a separate program area and BMP as its goal and target audiences differ from the programmatic public involvement activities.

Program Area 2-4: Public Access to District Information

Purpose

Maintain the County website as the central location for providing the public access to County regulatory compliance documents including the

SWMP, County regulations, annual reports, public notices, and other County policy, plans, or regulatory documents.

Responsible Party/Implementation Partner(s) (Part III.B.2.b.v)

BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
Program Area BMPs, Mechanisms, and Responsible Parties Overview				
2-4a	Develop web features	• Maintain and update website • Post County documents on website	County	Partner agencies

Legal Authority Limitations: None

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices (Part III.B.2.a)

The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 2-4a: Develop Web Features
The County maintains a website to provide the public with access to County regulations, public notices, and permit compliance documents and information.
- The County maintains a website and posts documents and links related to County permit compliance, regulations, policy, guidance, public notices, and reporting.
- Links to the County website are posted on partner agency websites to spread awareness.

Target Audiences (Part III.B.2.b. iii)

The permit requires the County to identify *"… who are the target audiences for your public involvement program…"* (Part III.B.2.b.iii)
- Residents: Represent a significant portion of County property owners within the County and have an inherent interest in implementation of County programs and activities.

- Businesses: Represent another significant portion of County property owners who, due to the nature of their activities, have an inherent   interest in implementation of County programs and activities.

- Riparian Corridor Property Owners: Unique responsibilities to protect and manage riparian areas of their properties in compliance with County regulations and policies.

- Development Community: Impacted by County regulations related to construction site runoff control and post-construction stormwater   management. They are also responsible for compliance with Ohio EPA's CGP, which is the foundation of the related County Erosion and   Sediment Control Rules.

Best Management Practices, Measurable Goals, Milestones, and Evaluation Methods (Part III.B.2.b.vi)

The permit requires the small MS4 operator *to "... evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs,"*. The County will continue to pursue the measurable goals listed in the table below on an ongoing basis and evaluate compliance with these goals each year by tracking usage of each outreach mechanism and its content.

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 2-4a: Develop Web Features		
Update and maintain website	On-Going	• Tracking website updates • Data is compiled and evaluated annually during preparation of the annual report using established protocols
Update website with content	On-Going	• Periodic review to assess whether County information is up to date and is meeting program goals • Track added/revised content and compile summary information to be included in the annual report using established protocols

Rationale and Decision Process (Part III.B.1.b)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
- Residents, businesses, and their customers within Lucas County are not generally knowledgeable about stormwater and their impacts on

local waterways.

- Public awareness of County regulations, policies, and program can result in positive impacts on local waterways.
- The public will become more engaged as their awareness of stormwater and related County regulations increase, reducing long-term compliance costs.
- Internet-based outreach is a cost-effective mechanism for reach a large, diverse audience.
- Developers and property owners can alter streams and encroach into riparian areas, exacerbating flooding and erosion and degrading stream water quality. The County website provides access to regulations and policies that can help mitigate these issues.
- A website containing key documents provides County stakeholders with an opportunity for meaningful engagement.

Rationale for BMP Modifications

This program area was added to the SWMP to recognize an existing County activity to provide public access to County permit compliance documents, regulations and policies, reporting, and public notices. This activity will continue during the permit term.

MCM 2 – Annual Reporting Requirements (Part III.B.2.c.iii)

MCM 2 - Annual Reporting Requirements (Part III.B.2.c.iii)
1. Identify each public involvement/participation activity conducted, including a brief description of the activity, the target pollutant(s) and include an estimate of how many people from your jurisdiction participate

Minimum Control Measure 3 – Illicit Discharge, Detection, and Elimination (IDDE)

Introduction

"You shall develop, implement, and enforce a program to detect and eliminate illicit discharges, as defined in Part VI of this permit, into your small MS4. For illicit discharges to your small MS4 via an adjacent, outside of your jurisdiction, interconnected MS4, you are only required to immediately inform the neighboring MS4 and inform Ohio EPA in your annual report." (Part III.B.3.a)

Performance standards include *"Initial dry-weather screening of all your storm water outfalls… program shall establish priorities and specific goals for long-term system-wide surveillance of your small MS4, as well as for specific investigations of outfalls and their tributary area where previous surveillance demonstrates a high likelihood of illicit discharges… data collected each year shall be evaluated and priorities and goals shall be revised annually… comprehensive storm sewer system map shall be updated annually …. Notify Ohio EPA (within 24 hours) of illicit sanitary cross connections from industrial, commercial or multi-family sources and leaking or broken sanitary sewer lines that are actively contributing sewage to your small MS4 … TMDL Performance Standard: Include an annual employee training which includes illicit discharge detection and elimination topic(s),"* (Part III.B.3.J.i-vi).

Annual reporting requirements include *"total number of MS4 outfalls… number of outfalls which had dry-weather screening… number of outfalls where dry-weather flows were identified… number of outfalls where illicit discharges were identified via dry-weather screening or other methods… number of outfalls where illicit discharges were eliminated… number of illicit discharges identified through other methods and the number eliminated… a list of all illicit discharges that have been identified but have yet to be eliminated… summary of any storm sewer system mapping updates… if applicable, summary of activities taken to satisfy your illicit discharge detection and elimination program TMDL performance standard,"* (Part III.B.3.J.vii).

Program Areas

The following three program areas establish the framework of public education and outreach within this current SWMP:

Program Area 3-1: Storm Sewer System Mapping
- Create a GIS-based map of County stormwater infrastructure that supports planning, maintenance, and permit compliance needs, as well as provide ongoing MS4 surveillance during mapping activities.

Program Area 3-2: Home Sewage Treatment System (HSTS) Management
- Locate HSTSs and their discharge points, monitor and manage them consistent with applicable state laws and local regulations.

Program Area 3-3: Illicit Discharge Detection and Elimination

- Eliminate illicit discharges to the MS4 through a cost-effective blend of system surveillance methods and enforcement of applicable legal authorities.

Program Area 3-1: Storm Sewer System Map

Purpose

Create a GIS map of all County stormwater infrastructure that supports planning, maintenance, capital improvement and permit compliance needs, as well as provide an additional mechanism for ongoing MS4 surveillance for illicit discharges.

Responsible Party/Implementation Partner(s) (Part III.B.3.i.vi)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
3-1a	MS4 Mapping Program Planning	• Develop mapping protocol • Refine mapping protocols • Develop a mapping delivery system for MS4	County	Toledo Lucas County Health Department (TLCHD)
3-1b	Map Existing MS4	• Create map of MS4 outfall location screening sites and receiving waters • Map MS4 using field and office-based protocols • Maintain map of impervious cover • Update map to label type of post-construction controls	County	TLCHD
3-1c	Map New MS4	• Map new MS4 areas using construction documents and as-built plans	County	TLCHD

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The permit *requires "... a comprehensive storm sewer system map, showing the location of all outfalls and the names and locations of all surface waters of the state that receive discharges from those outfalls…. Catch basins, pipes, ditches, flood control facilities (retention/detention ponds), and post-construction water quality BMPs (public and private) ... previously existing post-construction BMPs shall be identified by type of practice within five (5) years of the effective date of this permit,"* (Part III.B.3.b). The following BMPs and associated strategies and mechanisms are established for this program area:

> **BMP 3-1a: MS4 Mapping Program Planning**
> - The County developed an initial storm sewer system map under previous permit terms. Through the years, revisions have occurred to create a new data delivery system with refined mapping protocols to accommodate lessons learned and new technologies.
>
> **BMP 3-1b: Map Existing MS4**
> - Mapping of field-observed outfalls, other field screening locations, and associated surface waters of the state was completed previously. Locations and/or status are updated based on observations made during field screening, MS4 mapping, or other County field activities.
> - Field mapping of the MS4 system infrastructure identified in the permit was completed during the previous permit term.
> - Field-based mapping along with office-based QA/QC of the MS4 map will ensure that the mapping is kept up to date as new inspections are conducted.
> - GIS-based MS4 map is refined as new technologies and software emerge (latest is ArcGIS-PRO).
> - Mapping of existing infrastructure is performed for Co-Permittees as they share construction documents and plans.
> - As-builts of constructed stormwater infrastructure, from current permitted projects, are digitized into the County map.
> - Previously existing post-construction controls will be labeled based on type of practice by April 1, 2026.
> - County also maintains impervious cover for each of the plans reviewed internally.
>
> **BMP 3-1c: Map New MS4**
> - County continuously updates the MS4 map following established protocols. New MS4 infrastructure is mapped using construction documents. New post-construction controls are mapped after final inspection and will be labeled based on type of practice.

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.3.c.vii)

The permit requires the small MS4 operator to *"… evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 3-1a: MS4 Mapping Program Planning		
Develop mapping protocol	Completed in previous permits	• Document lessons learned • Review mapping approach during annual program reviews
Refine mapping protocol	On-going	
BMP 3-1b: Map Existing MS4		
Initial MS4 Mapping	Complete in previous permits	• N/A
Use field-based mapping to refine MS4 map	On-going	• Periodic review of current map delivery system • Feedback from users
Platform office-based QA/QC of MS4 map	On-going	• Review progress annually • Evaluate data, processes, and lessons learned
Map previously constructed post-construction BMPs	April 1, 2026	• Define locations, BMP type through records review, BMP inspections, and/or other field activities • Review progress annually
Maintain impervious cover map	On-going	• Review updates at least once a year to verify inclusion of new imagery
BMP 3-1c: Map New MS4		
Map new MS4s/post-construction BMPs from construction documents	On-going	• Compile information on new storm sewers and post-construction controls • Annual review to evaluate progress

Rationale and Decision Process (Part III.B.3.i)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:

- Comprehensive map of the storm sewer system within Lucas County is essential to meet Ohio EPA and local compliance objectives.
- Use of a standardized mapping protocol provides consistency.
- Maintaining a centralized GIS-based MS4 map provides control over content and ease of use.
- Two-phase mapping process, incorporating both field and office operations is the most cost-effective way to develop and maintain the MS4 map.
- Field mapping activities provide another mechanism for identifying potential illicit discharges and is part of the long-term outfall surveillance program.

Rationale for Program Modification

- Labeling post-construction control types is a new requirement under the latest small MS4 permit.
- Mapping protocol was adapted to field and office operations to enable QA/QC of the MS4 map.
- New requirement of labeling post-construction control types enable a streamlined approach to conducting annual ditch inspections for the report to Lucas County Board of County Commissioners.

Program Area 3-2: Home Sewage Treatment System (HSTS) Management

Purpose

Locate HSTSs and their discharge points, and manage them accordingly with applicable state laws and local regulations.

Responsible Party/Implementation Partner(s) (Part III.B.3.i.vi)

BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
Program Area BMPs, Mechanisms, and Responsible Parties Overview				
3-2a	Map HSTSs	• Maintain County HSTS inventory list • Map HSTSs and the associated MS4 connections	TLCHD	Co-Permittees
3-2b	Update HSTS Control Plan	• Update and maintain the HSTS plan	TLCHD	
3-2c	Screen HSTS	• Inspect HSTSs for proper operation	TLCHD	
3-2d	Enforce HSTS Plan	• Require and enforce order to either connect to the sanitary sewer or repair/replace malfunctioning systems	TLCHD	

Legal Authority Limitations:

As the responsible party for this program area, Toledo/Lucas County Health Department is subject to Ohio Revised Code 3718 and Ohio Administrative Code 3701-29.

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 3-2a: Map HSTS

The permit requires "a list of all on-site sewage disposal systems located within your jurisdiction and are connected or discharging to your small MS4," (Part III.B.3.c.i); "a storm sewer map showing the locations of all HSTSs… connected or discharging to your small MS4… the type and size of conduits/ditches in your small MS4 that receive discharges from HSTSs, as well as the water bodies receiving the discharges from your small MS4," (Part III.B.3.c.ii). HSTS lists and maps were prepared by the County during the previous permit terms, and are maintained in the following manner:
- The County maintains an inventory of HSTSs within County boundaries.
- The County maintains and updates a map of HSTSs and their discharge points within the County boundaries. This map includes attributes of the MS4 and the bodies of water receiving discharges from the MS4.
- The HSTS map is updated to accommodate changes.
- An online HSTS map is included in the County GIS program available to the public.

BMP 3-2b: Update HSTS Control Plan

The permit requires the County to *"Establish… priorities and specific goals for long-term systemwide surveillance,"* (Part III.B.3.j.ii). Working with the Toledo Lucas County Health Department, the County has created layers within the GIS map to include the locations of known HSTSs within the County boundaries. Through field inspections conducted by TLCHD personnel, the inspectors are able to inspect and edit the HSTS layer directly in the GIS program, creating a long-term surveillance program that will focus on previously identified "hot-spots", as well as issues and complaints received at the County or TLCHD.
- The County implements this surveillance program through partnership with the TLCHD.

BMP 3-2c: Screen HSTSs

The permit includes three requirements for coordinating regulations of on-site sewerage disposal systems:
- *"Proactively identify residences with existing individual discharging HSTSs that can be legally, feasibly, and economically connected to central sewers,"* (Part III.B.3.e.i).
- *"Implement/enhance an existing operation and maintenance program which determines if existing discharging HSTSs are operating as designed and … requires elimination, upgrade, or replacement,"* (Part III.B.e.ii).

- *"Evaluate the planned or possible future installation of sewers for areas which contain high densities of discharging HSTS,"* (Part III.B.3.e.iv).

TLCHD routinely inspects HSTSs within the County boundaries to determine whether these systems are operating as designed. Known areas of concern are inspected thoroughly to determine whether the extension of central sewer systems is feasible, such us the 2022 focus area of Curtice.

BMP 2-3d: Enforce HSTS Plan

The permit states that if a "contamination source has been identified… as a discharging HSTS that is not operating as designed…" the permit requires the County to resolve "the non-functioning HSTS with connection to central sewers…", replacement with system that does not discharge or "allowing a replacement discharging HSTS when no other option is available," (Part II.B.3.e.iii). When a malfunctioning system is identified, the plan requires one of the following actions, in compliance with the Ohio and/or Toledo Lucas County Health Codes:
- Enforce order to repair malfunctioning HSTSs
- Enforce order to replace malfunctioning HSTSs
- Enforce order to connect to a centralized sanitary sewer system

Governed by the Ohio Revised Code and the Ohio Administrative Code, the Toledo Lucas County Health Department enforces the orders to repair, replace, or connect malfunctioning HSTSs to a centralized system through its operation and maintenance (O&M) management for sewage treatment systems.

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.3.c.vii)

The permit requires the MS4 operator to "evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 3-2a: Map HSTS		
Maintain HSTS list	On-going	• Review annually to assess progress as part of established workplan/budget and annual report development protocols
Map HSTSs and their MS4 connections		
BMP 3-2b: Update HSTS Control Plan		

Update and maintain HSTS plan	On-going	• Review annually to assess progress as part of established workplan/budget and annual report development protocols
BMP 3-2c: Screen HSTS		
Inspect HSTSs for proper operation	On-going	• Review annually to assess progress as part of established workplan/budget and annual report development protocols
BMP 3-2d: Enforce HSTS Plan		
Require and enforce orders to connect to centralized sanitary sewer or repair/replace malfunctioning HSTSs	On-going	• Review annually to assess progress as part of established workplan/budget and annual report development protocols

Rationale and Decision Process (Part III.B.3.i)

The target audiences, pollutant sources, mechanisms, and strategies have been developed over several permit terms based on the following considerations:
- Nearly 12,000 HSTSs serve property owners within Lucas County, most in areas not served by sanitary sewer systems.
- When properly operated, monitored, and maintained in accordance with TLCHD regulations, HSTSs can be managed to minimize pollution to the receiving waters so they are not a significant pollution source. Because there is always some risk with discharging systems causing pollution, upgrades/updates or replacements are required when changing flow/waste strength to such systems or when substantial changes occur to the home. Existing HSTS inspection programs are a cost-effective way of detecting and eliminating illicit discharges in drainage catchments where HSTSs predominate. Funds from state and federal programs also help to offset the cost of replacing or connecting to a centralized sanitary sewer should the resident fall within a determined poverty level.

Rationale for Program Modification

Enforcing an HSTS plan was the combination of previous measurable goals from the last permit.

Program Area 3-3: Illicit Discharge Detection and Elimination (IDDE)

Purpose

Eliminate illicit discharges to the MS4 through a cost-effective blend of system surveillance methods and aggressive enforcement of applicable legal authorities.

Responsible Party/Implementation Partner(s) (Part III.B.3.i.vi)

		Program Area BMPs, Mechanisms, and Responsible Parties Overview		
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
3-3a	Prioritize Surveillance and Investigations Using Available Information	• Targeted prioritization approach	TLCHD, County	
3-3b	Dry-weather Screening	• Conduct dry-weather outfall screening at priority locations using established protocols	TLCHD	Co-Permittees
3-3c	Proactive Source Screening	• Perform surveillance during business inspections • Perform surveillance during MS4 mapping	TLCHD	
3-3d	Reactive Source Screening	• Train MS4 staff on IDDE identification and reporting • Respond to reports/referrals from other agencies and Co-Permittees • Respond to public reporting through County website and phone calls received	TLCHD	County, Co-Permittees, Other local agencies
3-3e	Investigations and Enforcement	• Investigate reports/evidence of illicit discharges • Issue and enforce elimination orders • Respond to spills	TLCHD	County, Co-Permittees, Other local agencies

Legal Authority Limitations: The County's partner agency, Toledo Lucas County Health Department, can investigate good faith complaints and sources of pollution, but a search warrant would be needed should entrance to private property be refused by the property owner.

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The permit requires the County to "develop and implement a program to detect and eliminate non-storm water discharges, including illegal dumping, to your system," (Part III.B.3.e). To comply with MS4 permit requirements, the County has developed an IDDE plan with the local health department, TLCHD. The plan has been developed over the years and through the phases of the previous permit requirements. Latest modifications of the plan include:

- Protocols for prioritizing dry-weather screening at outfall locations
- Description of the long-term surveillance program
- Collection and analysis of field samples where illicit discharges are suspected
- Identifying and investigating confirmed illicit discharges contributing area and source(s)
- Process for illicit discharge elimination, as defined by TLCHD regulations

The IDDE plan was recently reviewed by the County and TLCHD, and revisions are currently being made to address historical lessons learned and incorporating new protocols to sufficiently meet all permit requirements. The following BMPs and associated strategies and mechanisms are established for this program area:

BMP 3-3a: Prioritize Surveillance and Investigations Using Available Information

"Your program shall establish priorities and specific goals for long-term system-wide surveillance of your small MS4, as well as for specific investigations of outfalls and their tributary area where previous surveillance demonstrates a high likelihood of illicit discharges," (Part B.3.j.ii). The County completed screenings of all outfall locations within its boundaries under the prior permit terms. Other activities employed by the County assisted in identifying illicit discharges, to include:

- Training MS4 staff to identify and report suspected illicit discharges
- Perform surveillance during MS4 mapping
- Perform surveillance during construction and post-construction stormwater control inspections
- Referrals by partner agencies and other public entities
- Response to public reporting and complaints

- Response to reported spills

BMP 3-3b: Dry-weather Screening

The permit requires the County *"shall have already included an initial dry-weather screening of all your storm water outfalls,"* (Part III.B.3.j.i). The permit also requires the County to *"implement a program to detect and eliminate non-storm water discharges, including illegal dumping, to your system,"* (Part III.B.3.e). From the screenings of the previous permit term, outfalls determined to be high-priority areas, or "hot-spots," will be the focus of field surveillance of future screenings. The outfall location field screening program will:

- Be conducted using established procedures set forth by TLCHD in the IDDE plan.
- Include pollutant sampling of suspected illicit discharge locations.
- Include follow-up investigations to identify the source(s).
- Report identified cross-connections or broken sanitary lines discharging to the small MS4 to Ohio EPA within 24 hours.

BMP 3-3c: Proactive Source Screening

The County will continue to implement the existing activities under its proactive source screening program for medium and low priority catchments. These include, but are not limited to, surveillance for potential illicit discharges during:

- Targeted business screenings by TLCHD
- MS4 mapping activities by the County, TLCHD, and Co-Permittees
- Random inspections from MS4 staff while conducting other regular duties in the field
- Suspected illicit discharges will be reported to TLCHD for follow-up investigation and enforcement activities.

BMP 3-3d: Reactive Source Screening

The County will continue to implement the existing activities under its reactive source screening program for medium and low priority catchments. These activities include, but are not limited to:

- Training of MS4 staff (under the MCM 6 annual training program) to identify and report suspected illicit discharges
- Responding to reports of suspected illicit discharges from partner agencies and other government entities
- Responding to reports of suspected illicit discharges discovered during MS4 mapping
- Illicit discharge education and outreach (MCM 1) and subsequent response to citizen inquiries and complaints reported through the

County office, website and partner agencies
- Suspected illicit discharges discovered through this surveillance will be reported to TLCHD for follow-up investigation and enforcement activities.

BMP 3-3e: Investigation and Enforcement

The permit requires the County to "effectively prohibit, through ordinance or other regulatory mechanism, illicit discharges into your storm sewer system and implement appropriate enforcement procedures and actions," (Part III.B.3.d). Legal authority for IDDE enforcement falls upon TLCHD through the ORC and OAC sections applicable. Where suspected illicit discharges are identified, the County and TLCHD will:

- Collect and analyze samples at the discharge location to determine the presence of pollutant(s)
- Investigate and identify the source(s) in the contributing area
- Develop in coordination with the responsible party a plan to eliminate the source(s)
- Implement enforcement actions for non-compliant owners following established protocols
- Turn over enforcement to applicable municipal entity
- Revisit the site periodically to verify the illicit discharges have ceased

TLCHD will identify all illicit discharges detected, those eliminated, and those that have not been eliminated. The following information will be reported to Ohio EPA: location, estimated volume, source and type, the receiving water body, and a schedule for elimination.

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.3.c.vii)

The permit requires the small MS4 operator to "evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs,"

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 3-3a: Prioritize Surveillance and Investigations Using Available Information		
Develop prioritization approach for surveillance and investigations using available information	On-going	• Conduct pilot testing to evaluate priority factors
Conduct pilot testing of prioritization approach	On-going	• Review results of pilot testing program • Develop correlation between predicted and actual results

		• Revise priority factors as necessary based on results
Prepare prioritization for on-going surveillance	On-going, annual review	• Annual review and update as needed
BMP 3-3b: Dry-weather Field Screening		
Conduct system-wide outfall screening	Completed in prior permit term	• N/A
Conduct targeted outfall screening at priority sites	On-going	• Compile tracking results • Review annually to assess progress as part of established workplan/budget/annual report development protocols
BMP 3-3c: Proactive Source Screening		
Conduct surveillance at businesses	On-going	• Compile tracking results
Conduct surveillance during MS4 mapping	On-going	• Review annually to assess progress as part of established workplan/budget/annual report development protocols
Conduct as-needed inspections/surveys	On-going	• Compile tracking results
BMP 3-3d: Reactive Source Screening		
Respond to citizen inquiries	On-going	• Compile tracking results
Respond to reports from other government entities	On-going	• Review annually to assess progress as part of established workplan/budget/annual report development protocols
BMP 3-3e: Investigations and Enforcement		
Define legal authority	Completed in previous permit	• N/A
Investigate report/evidence of illicit discharges		• Compile tracking results
Issue and enforce illicit discharge elimination orders as allowed under local and state codes	On-going	• Review annually to assess progress as part of established workplan/budget/annual report development protocols
Respond to all major spills, document response		

Rationale and Decision Process (Part III.B.3.i)

- Prior MS4 permit-mandated dry-weather screenings did not reveal evidence of a side-scale incidence of illicit discharges.
- Effective and efficient methods to identify incidents of illegal discharges include annual MS4 training for employees, MS4 mapping,

targeted business inspections, referrals from other government agencies, and complaints/reports submitted by the public to the County office, TLCHD, or Ohio EPA.

- A prioritized and targeted approach on "hot-spots" and other key catchments enables the County and TLCHD to yield evidence of illicit discharges.
- TLCHD investigation process is a cost-effective solution at identifying sources of illicit discharges and developing plans to eliminate them.
- State and County regulations, enforcement protocols, and mechanisms are in place to eliminate illicit discharges.
- The County utilizes GIS database to track and report incidents at outfalls.

Rationale for Program Modifications

With the previous permit requiring the inspection of all outfalls in a dry-weather status, the change to a surveillance of high priority catchments along with responses to reports from other government entities and the public allow for a continuous inspection approach to ensure that illicit discharges are detected and resolved promptly.

MCM 3 – Annual Reporting Requirements (Part III.B.3.j.vii)

MCM 3 - Annual Reporting Requirements (Part III.B.3.j.vii)
1. Document the total number of outfalls
2. Document the Number of outfalls which had dry-weather screening
3. Document the Number of outfalls where dry-weather flows were identified
4. Document the Number of outfalls where illicit discharges were identified via dry-weather screening or other methods
5. Document the Number of outfalls where illicit discharges were eliminated
6. Document the Number of illicit discharges identified through other methods and the number eliminated
7. Provide a list of all illicit discharges that have been identified but have yet to be eliminated, including details on the location, an estimate of volume (gpd), the source and the type (continuous/intermittent/one-time), the types of pollutants believed to be present, the receiving surface water and an estimated schedule for elimination
8. Provide a summary of any storm sewer system mapping updates
9. If applicable, provide a summary of activities taken to satisfy your illicit discharge detection and elimination program TMDL performance standard

Minimum Control Measure 4 – Construction Site Runoff Control

Introduction

"You shall develop, implement, and enforce a program to reduce pollutants in any storm runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in storm water discharges from construction activity disturbing less than one acre shall be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more," (Part III.B.4.a)

Performance standards of this measure include the need to enact an "ordinance or other regulatory mechanism with the technical requirements set forth in the Ohio EPA NPDES General Storm Water Permit for Construction Activities (OHC000005) … within one (1) year of the effective date of this permit." The County must perform "pre-construction (SWP3) review and approval," and use an "objective tool such as software or checklist to document each SWP3 review," as well as to "document each site inspection." Documentation must be maintained "of any communications regarding review and plan revisions and any notification to obtain NPDES permit coverage." Finally, the County must conduct an initial inspection and routine follow-up inspections in TMDL watersheds if certain violations have occurred. (Part III.B.4.c.i-iv)

Annual reporting requirements included in this measure:

- Number and list of applicable sites in your jurisdiction for the reporting year
- Number of pre-construction SWP3's reviewed and number approved
- Number and average frequency of site inspections
- Number of violation letters/reports/notices issued
- Number of enforcement actions taken
- Number of complaints (external and internal) received, and number addressed
  (Part III.B.4.c.v)

Program Areas

The following program area was established in the original SWMP, and will continue throughout the current permit term:

Program Area 4-1: Construction Site Runoff Control

Minimum Control Measure 5 – Post-Construction Stormwater Management   64

- Require control of erosion, sedimentation, and other pollution during construction projects.

Program Area 4-1: Construction Site Runoff Control

Purpose

Require control of erosion, sedimentation, and other pollution during construction projects.

Responsible Party/Implementation Partner(s) (Part III.B.4.b.vii)

	Program Area BMPs, Mechanisms, and Responsible Parties Overview			
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
4-1a	Plan Approvals	• Review plans for applicability • Review and approve applicable plans using a standardized plan review checklist	County	
4-1b	Site Inspections	• Conduct pre-construction meetings • Inspect sites with earth disturbing activities using a standardized inspection checklist • Receipt and response to information submitted by the Public	County	
4-1c	Enforcement	• County regulations consistent with Ohio EPA Construction General Permit (CGP) • Issue Notice of Violations (NOV), Stop Work Orders, and legal action if necessary • Written enforcement escalation policy	County	County Prosecutor, Co-Permittees

Legal Authority Limitations: Ohio Revised Code Section 307.79 – Administrative Rules

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs, associated strategies, and mechanisms are established for this program area:

BMP 4-1a: Plan Approvals

The permit requires the small MS4 operator to develop *"procedures for storm water pollution prevention plan review which incorporate consideration of potential water quality impacts,"* (Part III.B.4.a.iv). Also required is an *"objective tool such as software or checklist shall be used to document each SWP3 review,"* (Part III.B.4.c.ii). The County employs a standardized approach for reviewing and approving plans, which includes:

- Initial review for plan applicability of all Federal, State, and local rules and regulations
- Formal plan review and approval using a standardized approach
- Use of standardized SWP3 plan review checklists covering all requirements established under the Ohio EPA CGP

BMP 4-1b: Site Inspections

The permit requires the small MS4 operator to develop *"procedures for receipt and consideration of information submitted by the public, and procedures for site inspection and enforcement of control measures,"* (Part III.B.4.b.iv-v). Other requirements include *"procedures for site inspection and enforcement of control measures"* using *"... an objective tool such as software or checklist,"* (Part III.B.4.c.iii). The County utilizes a web-based program that was formulated and adapted by MS4 staff based off of Ohio EPA site checklists. The site inspection process includes the following mechanisms:

- Facilitating a pre-construction meeting for each site to review the site plans as they relate to sediment and erosion control practices and waste management practices
- Inspections of all permitted earth disturbance sites at least once a month
- Use of a standardized inspection checklist and entry of information in to the program, which directly communicates with Permittees and Co-Permittees of the CGP through e-mail.
- Immediate Stop Work Orders hand-delivered to site owners/operators should an applicable earth disturbance being conducted

should not be permitted or a SWP3 reviewed by the County office. Inspections of these sites are conducted every 14 (fourteen) days until a County-approved SWP3 and CGP are obtained, with inspections then transitioning to once a month externally.

- The County, utilizing the web-based inspection software, has initiated the inspection of Individual Lot Notice of Intents (NOI) for builders and homeowners within a permitted subdivision.

BMP 4-1c: Enforcement

The permit requires the County to enact an *"ordinance or other regulatory mechanism… equivalent with the technical requirements set forth in the Ohio EPA NPDES General Storm Water Permit for Construction Activities (OHC000005) … within one (1) year of the effective date of this permit,"* (Part III.B.3.c.i). Further requirements include *"an ordinance or other regulatory mechanism to require erosion and sediment controls, and non-sediment pollutant controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law,"* with a program that will include *"a written enforcement escalation policy describing your procedures for when you will use certain sanctions including nonmonetary penalties (such as stop work orders), fines, bonding requirements…"* (Part III.B.4.a.i, b.i-iii). The County's enforcement escalation process is standardized in Ohio Revised Code Section 307.79, and such rules outlined include:

- Utilizing a software to provide real-time inspection reports to Permittees, Co-Permittees, and other applicable representatives regarding maintenance and corrective items noted on site that require attention
- Issuance of Notice of Violations (NOV), Stop Work Orders (SWO), and/or legal actions if problems are severe or persist beyond a reasonable measure of time
- Increased frequency of inspections for sites with persistent issues

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.4.b.viii)

The permit requires the small MS4 operator to *"evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 4-1a: Plan Approvals		
Review all plans for applicability	On-going	• Collect tracking data annually • Data is compiled and evaluated annually with established protocols • Verify plans are reviewed in accordance with regulations
Review and approve applicable	On-going	• Collect tracking data annually

plans		• Data is compiled and evaluated annually with established protocols
Develop and implement SWP3 review checklists; document plan reviews	On-Going	• Evaluate standardized checklist for compliance with CGP requirements • Evaluate documentation process annually • Future reviews to verify checklists have been completed as required and apply to most current rules and regulations
BMP 4-1b: Site Inspections		
Conduct pre-construction meetings	On-going	• Consolidate meeting information once a year • Data is compiled and evaluated annually with established protocols
Inspect earth disturbed sites	On-going	• Annual review to identify number of inspections completed at each active site through tracking software • Data is compiled and evaluated annually with established protocols • Evaluate whether minimum inspection rate is achieved
Develop and implement a standardized inspection checklist	On-going	• Evaluate and update standardized checklist for compliance with CGP requirements • Periodic reviews to verify inspections have been completed as required
BMP/Measurable Goals	**Schedule Milestone**	**Evaluation Methods**
BMP 4-1c: Enforcement		
Refine protocols/guidance to be equivalent with applicable Ohio EPA CGP	Completed	• Review new CGP • Update Lucas County Commissioners Erosion and Sediment Control Rules
Issue Notice of Violation, Stop Work Order, and legal action if necessary	On-going	• Consolidate tracking data annually • Data is compiled and evaluated annually with established protocols
Develop written enforcement escalation policy	Completed	• Review plan to verify it meets MS4 permit requirements • Update/revise for all future releases of NPDES permits

Rationale and Decision Process (Part III.B.4.b)

The following rationale and decision processes were used to develop this program area:
- A strong, consistently applied program is imperative for a successful construction site stormwater control.
- Current mechanisms for public input and information have been successful in identifying potential and actual construction-related issues,

and will continue in to the future.

- The County will use standardized plan review and inspection checklists to ensure consistent application of County and state requirements. Retaining these completed checklists will provide documentation of the program consistency regardless of project type or size.
- Pre-construction meetings are an excellent opportunity to educate participants on the importance of compliance with sediment and erosion control practices and site waste management requirements in protecting local waterways.
- Existing site inspection program maintains water quality as a priority in active construction projects.
- The County resolves identified construction site issues through cooperation with site representatives and owners.
- When necessary, implementation of the enforcement escalation policy has proved successful and will continue in to the future.
- Tracking systems for construction plan reviews and approvals, site inspections, and enforcement are currently being utilized.

Rationale for Program Modifications

Requirements for standardized plan review and inspections are new in the 2021 MS4 permit and have been incorporated in to this program. A greater focus of site inspections within watersheds containing U.S. EPA approved TMDLs in the County's boundaries has become a new standard.

MCM 4 – Annual Reporting Requirements (Part IV.B.4.c.v)

MCM 4 - Annual Reporting Requirements (Part III.B.4.c.v)
1. Document the number and list of applicable sites in your jurisdiction for the reporting year
2. Document the number of pre-construction SWPPPs reviewed and number approved
3. Document the number and average frequency of site inspections
4. Document the number of violation letters/reports/notices issued
5. Document the number of enforcement actions taken
6. Document the number of complaints (external and internal) received, and number addressed

Minimum Control Measure 5 – Post-Construction Stormwater Management

Introduction

"You shall 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 (1) acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program shall ensure that controls are in place that will prevent or minimize potential water quality impacts. You shall develop and implement strategies which include a combination of structural and/or non-structural post-construction runoff controls appropriate for your community," (Part III.B.5.a & b)

Performance standards of this program include enacting *"ordinance or other regulatory mechanism… equivalent with the technical requirements set forth in the Ohio EPA NPDES General Storm Water Permit for Construction Activities (OHC000005) … within one (1) year of the effective date of this permit."* The County will perform *"pre-construction (SWP3) review and approval … to ensure that required post-construction controls are designed per requirements"* using *"… an objective tool such as software or checklist."* Inspections will be conducted *"to ensure that controls are installed per requirements,"* and the County requires *"that long-term O&M plans are developed and agreements in place … including after changes of ownership… that private and public post-construction runoff controls are being maintained,"* with inspections of the controls occurring annually. In portions of the County with *"MS4 discharges to a watershed with a U.S. EPA approved TMDL… for Total Suspended Solids (TSS)… or nutrients,"* the County provides *"an educational opportunity to contractors, SWP3 designers, and/or employees on OHC000005 Table 4b practices and/or other green infrastructure practices during the permit term,"* (Part III.B.5.f.i-v).

Annual reporting requirements of this program include:
- Number of applicable sites in your jurisdiction requiring post-construction controls for the reporting year
- Number of pre-construction SWP3 reviews and approvals for post-construction runoff controls
- Number of inspections verifying that post-construction runoff controls were built per requirements
- Number of enforcement actions taken for failure to adequately install post-construction runoff controls and the number of enforcement actions taken for a failure to maintain
- Number of long-term O&M plans developed and agreements in place for post-construction runoff controls
- Number of long-term O&M inspections performed on post-construction controls
- If applicable, summary of activities taken to satisfy your post-construction storm water management program TMDL performance standard
  (Part III.B.5.f.vi)

Program Areas

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Program Area 5-1: Post-construction Stormwater Management

Require the installation of permanent stormwater controls, with consideration of green infrastructure, for complete construction projects and ensure controls are properly maintained via inspections and enforcement actions.

Program Area 5-2: Installation of Post-construction Stormwater Controls in Co-Permittee MS4s

Implement structural and/or non-structural post-construction stormwater controls, with consideration of green infrastructure, within Co-Permittee MS4s discharging to a watershed or watersheds with an approved U.S. EPA TMDL for TSS and/or nutrients.

Program Area 5-1: Post-construction Stormwater Management

Purpose

Require installation of structural and non-structural permanent stormwater controls, with consideration of green infrastructure, for completed construction projects in the County, and ensure controls are properly maintained via inspections and enforcement actions.

Responsible Party/Implementation Partner(s) (Part III.B.5.e.vii)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
5-1a	Plan Approvals	• Review plans for applicability • Review and approve applicable plans using a standardized plan review checklist	County	
5-1b	Construction Site Inspections	• Conduct pre-construction meetings • Inspect all BMP installations for proper	County	Co-Permittees

		construction using a standardized inspection checklist		
5-1c	Long-term O&M	• Maintain long-term O&M plans and agreements • Conduct and/or require inspections of existing BMPs for proper maintenance and operation	County	Co-Permittees
5-1d	Enforcement	• Enact County regulations consistent with Ohio EPA CGP • Conduct enforcement actions when necessary • Written enforcement escalation plan	County	County Prosecutor

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs, associated strategies, and mechanisms are established for this program area:

BMP 5-1a: Plan Approvals

The County is required to perform "a pre-construction SWP3 review and approval of all projects from construction activities that result in a land disturbance of greater than or equal to one (1) acre… to ensure that required post-construction controls are designed per requirements… software or checklist shall be used to document each SWP3 review. Documentation of any communications regarding review and plan revisions shall be maintained," (Part III.B.5.f.ii & iv). The plan approval process includes the following mechanisms:

- Initial review for plan applicability based on state and local rules and regulations
- Formal plan review and approval using a standardized approach
- Use of standardized SWP3 plan review checklists covering all requirements established under the Ohio EPA CGP
- All communications between the developer and County are fully documented

BMP 5-1b: Construction Site Inspections

The permit requires *"applicable sites shall be inspected to ensure that controls are installed per requirements. An objective tool such as software or checklist shall be used to document each site inspection to ensure all conditions of OHC000005 are addressed,"* (Part III.B.5.f.iii). The County inspects the post-construction controls during active construction, with the sediment control (usually a specified skimmer) attached. Upon final stabilization of the site, the control is inspected to ensure the transition from sediment control to post-construction is achieved according to the approved SWP3. The long-term post-construction BMP is then inspected annually within the inspection software for tracking purposes and correspondence with Owners.

BMP 5-1c: Long-term Operation and Maintenance (O&M)

The County's program is required to *"ensure that long-term O&M plans are developed and agreements in place for all applicable sites, including after changes of ownership,"* (Part III.B.5.f.iv). Further requirements include the County *"maintain a copy of the long-term O&M plans and agreements provided during construction and document long-term O&M inspections,"* and require *"one on-site inspection… of each post-construction runoff control during this permit term,"* (Part III.B.5.f.iv). The County accomplishes this by:

- Using the standard plan review checklist while conducting plan reviews and approvals, including verification of proper long-term O&M plans to be recorded for the site/plat
- All new controls inspected annually to ensure that proper maintenance and operation is occurring for the control
- Documentation of identified issues, remedies, and related communications is maintained by the County
- District regulations provide a path for remedying issues identified during O&M inspections

BMP 5-1d: Enforcement

The permit requires the County to *"enforce… an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects,"* (Part III.B.5.f.i). The County employs the required action of this measure through language in the long-term BMP agreement that maintains the control on a site in perpetuity. The Lucas County Commissioners' Erosion and Sediment Control Rules includes the process for enforcement actions in regards to deficiencies found during post-construction control inspections. Co-Permittees of the County's small MS4 permit maintain their own standards of ordinances to enforce corrective actions against Owners.

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.5.e.viii)

The County is required to *"evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 5-1a: Plan Approvals		
Review all plans for applicability	On-going	• Collect tracking data annually • Data is compiled and evaluated annually with established protocols • Verify plans are reviewed in accordance with regulations
Review and approve applicable plans	On-going	• Collect tracking data annually • Data is compiled and evaluated annually with established protocols
Develop and implement SWP3 review checklists; document plan reviews	On-going	• Evaluate standardized checklist for compliance with CGP requirements • Perform periodic reviews of checklist based on developer feedback and update if necessary
BMP 5-1b: Construction Site Inspections		
Conduct pre-construction meetings	On-going	• Tracking data is collected annually • Data is compiled and evaluated annually with established protocols
Inspect sites for proper post-construction BMP installation		
Develop and implement a standardized inspection checklist	Completed	• Perform future reviews of checklist based on developer feedback and update accordingly • Perform random periodic reviews of documentation practices
BMP 5-1c: Long-term Operation and Maintenance (O&M)		
Review and retain applicable O&M agreements	On-going	• Tracking data is collected annually • Data is compiled and evaluated annually with established protocols • Evaluate inspections annually and throughout the permit term
Follow-up inspections for post-construction BMPs		

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 5-1d: Enforcement		
Define legal authority to control post-construction runoff	Completed in previous permits	• Review if legal authority changes and revise as necessary
Refine protocol, guidance to be equivalent with applicable Ohio EPA CGP	Completed – latest revision December 2021	• Review when future CGPs are released and update if necessary
Conduct enforcement actions, where applicable	On-going	• Tracking data is collected annually • Data is compiled and evaluated annually with established protocols • Evaluate annually and over the permit term
Develop an enforcement escalation policy	Completed	• Periodic review of projects where escalated enforcement was necessary

Rationale and Decision Process (Part III.B.5.e)

- Uncontrolled runoff from developed land modifies natural hydrology and heightens pollutant transport, causing flooding, stream erosion, and habitat/water quality degradation.
- Permanent stormwater controls are installed most cost-effectively as part of a larger construction/development/re-development project.
- A strong, consistent program is imperative for a successful construction site stormwater control.
- The County utilizes a standard plan review and inspection checklist to ensure consistent application of County and state requirements. Retaining these completed checklists and plans will provide documentation of the program consistency regardless of project type or size.
- Existing site inspection program has been successful in completing construction projects with water quality protection as a priority.
- The County resolves issues identified during inspections through cooperation with site representatives and owners.
- When necessary, implementation of the enforcement escalation policy has proved successful and will continue in to the future.
- A tracking system is available and used to track plan reviews and approvals, site inspections, and enforcement.

Rationale for Program Modifications

Modified to meet new small MS4 permit requirements related to documenting plan reviews/approvals and inspections.

Program Area 5-2: Post-construction Stormwater Controls in TMDL Watersheds

Purpose

Implement structural and non-structural post-construction stormwater controls, with consideration of green infrastructure, within Co-Permittee MS4s discharging to a watershed(s) with an approved U.S. EPA TMDL for TSS and/or nutrients.

Responsible Party/Implementation Partner(s) (Part III.B.5.e.vii)

Program Area BMPs, Mechanisms, and Responsible Parties Overview				
BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
5-2a	Create strategy for program implementation	• Educate development community on green infrastructure practices • Evaluate alternatives • Develop strategy in coordination with Co-Permittees	County	Co-Permittees
5-2b	Develop program guidance	• Prepare program guidance • Distribute guidance to Co-Permittees for comment • Finalize program guidance	County	Co-Permittees
5-2c	Implement program and track progress	• Modify County regulations, if necessary • Implement post-construction BMPs in Co-Permittee MS4s • Track progress	County	Co-Permittees

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs, associated strategies, and mechanisms are established for this program area:

BMP 5-2a: Create Strategy for Program Implementation

New requirements within the current permit include watersheds with a U.S. EPA approved TMDL for TSS or nutrients to provide *"an educational opportunity to contractors, SWP3 designers, and/or employees on OHC000005 Table 4b practices and/or other green infrastructure practices,"* as well as one choice from an additional performance standard, of which the County will *"perform restoration of at least 300 linear feet of channelized stream where natural channel stability or floodplain restoration will reduce stream erosion,"* (Part III.B.5.f.v.a-e). Throughout the current permit term, the County will also:

- Provide education on green infrastructure to the development community, in association with educational opportunities provided under MCM 1, and seek feedback on feasibility of implementing said controls within typical development projects
- Evaluate certain peak water quantity structures/controls installed before 2003, and determine feasibility of a retrofit for certain petitioned subdivisions within County boundaries
- Work with Co-Permittees to develop an overall compliance strategy and identify any potential projects compatible with the required controls
- Finalize the strategy and establish a schedule and of projects for implementation

BMP 5-2b: Develop Program

With several ditches/streams petitioned by benefitting landowners through ORC 6131.04, and the largest creeks within the County currently under the petition process, projects are currently in the construction process as well as development stage for stream restoration. Recent successful restorations in the County include Ten Mile Creek in Sylvania Township, Drennan Ditch within Spencer Township, and Morrison Ditch in Monclova Township, all Co-Permittee locations. Further development of this program area includes:

- Continue to identify project opportunities compatible with the required controls and define potential implementation partners
- Develop technical guidance and identify resources to assist in implementing projects
- Distribute guidance to applicable Co-Permittees and/or other implementation partners

BMP 5-2c: Implement Program and Track Progress

- The County aims to incorporate considerations to developers and designers for Table 4b and other green infrastructure controls
- Records of stream restoration construction documents are retained for recordkeeping and historical reference
- The County will continue a mutual relationship with all Co-Permittees to track the progress of the program and explore any and all avenues to evaluate the possibilities of retrofits and Table 4b practices

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.5.5.e.viii)

The permit requires the MS4 to *"evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 5-2a: Create Strategy for Program Implementation		
Provide education on green infrastructure	On-going	- Education and training opportunities provided - Track attendance at events/meetings - Record feedback on green infrastructure opportunities
Define implementation requirements	On-going	- Technical memorandum
Develop compliance strategy		- Track meeting minutes of County Commissioners/Co-Permittees
BMP 5-2b: Develop Program		
Identify project opportunities	On-going	- Technical memorandum(s)
Develop and distribute guidance materials		- Track meeting minutes of County Commissioners/Co-Permittees
BMP 5-2c: Implement Program and Track Progress		
Amend County regulations if necessary	April 1, 2026	- LCBOCC approval documentation - Co-Permittee approval documentation
Implement selected projects	April 1, 2026	- Periodic progress meetings/reports - Project acceptance documentation

Rationale and Decision Process (Part III.B.5.e)

- Retrofit of post-construction controls into existing MS4s, and/or requirements that developers implement green infrastructure (Table 4b), are new permit requirements within TMDL watersheds of TSS/nutrients.
- County coordination of compliance strategies should result in more cost-effective opportunities to address TMDL limits, assist Co-Permittees, and identify potential implementation partners.

Rationale for Program Modifications

BMP created to meet 2021 small MS4 permit requirements.

MCM 5 – Annual Reporting Requirements (Part III.B.5.f.vii)

MCM 5 Annual Reporting Requirements (Part III.B.5.f.vii)	
1.	Document the number of applicable sites in your jurisdiction requiring post-construction controls for the reporting year
2.	Document the number of pre-construction SWP3 reviews and approvals for post-construction runoff controls
3.	Document the number of inspections verifying that post-construction runoff controls were built per requirements
4.	Document the number of enforcement actions taken for failure to adequately install post-construction runoff controls and the number of enforcement actions taken for failure to maintain
5.	Document the number of long-term O&M plans developed and agreements in place for post-construction runoff controls
6.	Document the number of long-term O&M inspections performed on post-construction controls (number performed by MS4 and number performed privately)
7.	Document the If applicable, summary of activities taken to satisfy your post-construction storm water management program TMDL performance standard

Minimum Control Measure 6 - Pollution Prevention and Good Housekeeping

Introduction

The pollution prevention and good housekeeping for municipal (county) operations MCM #6 is an important element of any jurisdiction's small MS4 program. Ideally, the goal is to reduce and prevent pollutant runoff from MS4 operations, covering activities such as park and open spaces owned and operated by the jurisdiction, fleet and building maintenance, MS4 maintenance, in addition to jurisdiction initiated new construction (road or bridge projects), and other initiated land disturbances. In order to ensure pollution does not occur from jurisdiction sponsored activities, Lucas County must develop and implement an operation and maintenance (O&M) program with BMPs designed to address stormwater impairment.

As a result, Lucas County must examine and alter its actions to help ensure a reduction in the amount and type of pollution that collects on to roads and streets, parking lots, open spaces, storage and vehicle maintenance areas, and is discharged into local waterways. Similarly, pollution that results from environmentally damaging land development and flood management practices or poor maintenance of existing storm sewers is released in to the waterways. As a result, the pollution prevention and good housekeeping minimum control measure will address sources of pollution from all County-sponsored maintenance and development activities.

Effective s m a l l MS4 management programs begin with their own employees. It is because of this that pollution prevention and good housekeeping measures oblige Lucas County to educate its staff on their and their employer's impact on water quality and what they can do to help. The following is a list of industrial facilities that are owned or operated by the MS4s that are subject to Ohio EPA's NPDES Industrial Storm Water General Permit (OHR000006) or individual NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to each small MS4. The only facility owned and operated by Lucas County or a Co-Permittee subject to Ohio EPA's NPDES Industrial Storm Water General Permit (OHR000006) is the Lucas County Water Resource Recovery Facility located at 5758 S. River Road in Maumee, Ohio (2PK00000).

Individual NPDES Permits which outlet to the MS4 are the following:

OEPA Permit Number	Facility	Address
2IN00214	Toledo Express Airport	11013 Airport Highway, Swanton, OH
2IO00003	Ohio National Guard 180th Wing	2660 S. Eber Rd, Swanton, OH
2PK00000	Lucas County WRRF	5758 S. River Road, Maumee, OH

Performance standards of this program include (Part III.B.6.e.i-vi):

- Provide ". . . annual employee training".
- Maintain ". . . appropriate documented procedures, controls, maintenance schedules and recordkeeping"
- Ensure ". . . salt piles covered with no run-on and subsequent run-off of salt" and ". . . liquid road treatments . . . " with ". . . secondary containment or alternatively bollard or barrier protection completed no later than two (2) years after the effective date of this permit."
- Stabilize ". . . areas of soil disturbance associated with ditch/MS4 maintenance . . . . no later than two (2) years after the effective date of this permit"
- For watersheds with a USEPA approved TMDL, ". . . include, at a minimum, one of the following performance standards . . . no later than two (2) years after the effective date of this permit.:
    - ". . . . a street sweeping program . . . on curbed streets two times per year; or
    - ". . . . a catch basin cleaning program . . . .scheduled to be cleaned once every five years; or
    - ". . . . a leaf/yard waste collection program; or
    - ". . . . routine facility inspections . . . at least quarterly"

Annual reporting requirements of this program include (Part III.B.6.e.vii):

- Summary of employee training program(s) implemented, listing topics, target pollutants and the number of employees that attended each training
- List of municipal facilities subject to your program with the number of facilities inspected and the frequency of such inspection
- Document the wastes properly disposed from your small MS4 and your municipal operations, including the disposal location
- Document whether your road salt storage is covered, tons of salt used, gallons of brine used (and concentration), lane miles treated and measures taken to minimize usage
- Document the gallons used of pesticides and herbicides and measures taken to minimize usage
- Document the pounds used of fertilizer and measures taken to minimize usage
- Document the amount of street sweeping and catch basin cleaning material collected and properly disposed, including disposal location.

Program Areas

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Program Area 6-1: Operation and Maintenance Program for Government Facilities

Cost-effectively prevent illicit discharges and minimize storm water pollution at government facilities.

Program Area 6-2: Operation and Maintenance Program for Government Field Operations

Cost-effectively prevent illicit discharges and minimize storm water pollution during government field activities.

Program Area 6-1: Operation and Maintenance Program for Government Facilities

Purpose

Cost-effectively prevent illicit discharges and minimize storm water pollution at government facilities.

Responsible Party/Implementation Partner(s) (Part III.B.6.d.iv)

BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
Program Area BMPs, Mechanisms, and Responsible Parties Overview				
6-1a	Employee Training Program	• Train employees on MS4 requirements during facility visits and other times/locations	County	Co-Permittees
6-1b	Operation and Maintenance Program	• Prepare O&M Plans for MS4 facility operations • Implement O&M Plans at each MS4 facility • Conduct visits to MS4 facilities to assess plan implementation • Quarterly inspection of municipal facilities (if selected by a Co-Permittee in a TMDL watershed) • Track use and disposal of permit listed materials for each MS4 facility	County, Co-Permittees	Co-Permittees

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs, associated strategies, and mechanisms are established for this program area:

LUCAS COUNTY AND OTHERS
STORM WATER MANAGEMENT PROGRAM PLAN

BMP 6-1a: Employee Training

The permit requires ". . . 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 disturbances, and storm water system maintenance." (Part III.B.6.b). The County will continue to provide MS4 employee training and annual facility visits to meet permit requirements. Training will focus on:

- Physical and administrative controls that can be implemented at MS4 facilities and during field operations to reduce the likelihood of polluted runoff reaching the MS4 and local waterways.
- Maintenance schedules for controls being implemented at their facilities.
- Identification of illicit discharges and sources and mechanisms for reporting potential discharges (in association with training requirements under MCM3).
- Recordkeeping and documentation protocols.
- Topics related to other programs such as MS4 mapping, and construction site sediment and erosion control. Training of MS4 employees who are frequently in the field about other programs has resulted in increased reporting of potential issues.

BMP 6-1b: Operation and Maintenance Program

The permit requires a ". . . list of industrial facilities you own or operate," and "… Storm Water Pollution Prevention Plans (SWP3s) …" for municipal facilities subject to this program." (Part III.b.6.c). The facilities subject to these permit requirements is shown below:

MCM 6 - MS4 Regulated Facilities (Part III.b.6.c)		
Facility	**Address**	**Type**
Lucas County Engineer and Sanitary Engineer	1049 S. McCord Road, Holland, OH	MS4
Lucas County Recreational Center and Fairgrounds	2901 Key Street, Maumee. OH	MS4
Lucas County Water Resource Recovery Facility	5758 S. River Road, Maumee, OH	Industrial
Lucas County Board of Developmental Disabilities	1154 Larc Lane, Toledo, OH	MS4
Sylvania Township Road Maintenance	4927 Holland Sylvania Rd, Sylvania, OH	MS4
Springfield Township Road Maintenance	7555 Angola Rd, Holland, OH	MS4
Washington Township Road Maintenance	5731 Blessing Dr, Toledo, OH	MS4

Jerusalem Township Road Maintenance	9501 Jerusalem Road, Curtice, OH	MS4
Spencer Township Road Maintenance	9401 Frankfort Rd, Holland, OH	MS4
Monclova Township Road Maintenance	4650 Keener Rd, Monclova, OH	MS4
Swanton Township Road Maintenance	13410 Airport Hwy, Swanton, OH	MS4
City of Waterville Road Maintenance	1211 Waterville-Monclova Rd, Waterville, OH	MS4
Village of Holland Road Maintenance	6963 Village Meadows Trail, Holland, OH	MS4
Village of Whitehouse Road Maintenance	11269 Waterville St, Whitehouse, OH	MS4

This inventory is updated to include new facilities and remove permanent closed facilities.

The County is committed to operating its municipal facilities in a manner that is protective of surface water quality. For facilities not requiring a separate NPDES Industrial Permit that conduct activities described in 40 CFR 122.26 (b) (14) such as vehicle maintenance facilities, fueling stations, salt storage, waste transfer stations, composting facilities, and bus terminals, a stormwater pollution prevention plan (SWPPP), must be developed and implemented using the industrial permit SWPPP as a guide. Each facility SWPPP consists of a form set that defines the operation and maintenance (O&M) plan for municipal facilities. The flexible format of the facility SWPPP allows for creation of individualized O&M programs for each municipal facility. A completed facility SWPPP form set documents onsite operations; types and quantities of materials stored and used; areas with high potential for spills; and controls being implemented to reduce the likelihood of polluted runoff from municipal facilities. Each facility SWPPP includes maps showing facility layout, locations of operations and materials, locations of floor drains and storm drains in relation to operational areas and stored materials, drainage directions, local waterways, and outfalls. Maps are included in the facility SWPPP and updated as necessary to accommodate changes. The facility SWPPP includes a set of assessment forms for each type of operation at the facility. These are completed during facility walkthroughs to evaluate and document performance of controls being used to reduce polluted runoff emanating from the facility. Facility SWPPPs are updated for each MS4 facility at least once a year. Co-permittees in TMDL watersheds may use the facility SWPPP to perform quarterly facility inspections as one option to meet the TMDL performance standard.

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.6.d.v)

The permit requires the MS4 to *"evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 6-1a: Employee Training		

Train Applicable Employees	Annually	• Tracking data is collected annually • Data is compiled and evaluated annually during preparation of the annual report
BMP 6-2b: Operation and Maintenance Program		
Prepare the O&M Program (i.e. Facility SWPPP) for government facilities	On-going	• Plan reviews are conducted annually and revised as appropriate • Facility walkthroughs are performed to verify plan implementation • Plans are updated as necessary to incorporate changes at the facility, materials are stored and used, active controls, and recommendations
Implement O&M Plans (i.e. Facility SWPPP)	On-going	• Facility SWPPP plans are reviewed annually at the time of facility walkthroughs to verify controls are being implemented • Co-permittees are provided with recommendations for any issues identified during the walkthrough, which are documented in the Facility SWPPP
Perform facility walkthroughs to reinforce plan and training	Annually	• Co-permittees participate in annual walkthrough to assess implementation of plan controls • Co-permittees are provided with recommendations for any identified issues, which are documented in the Facility SWPPP • Annual visits are tracked and documented by the County for annual report preparation
Perform inspections (if selected by a Co-permittee to meet a TMDL watershed performance standard)	Quarterly, starting Spring 2023	• Complete and track documentation listed in the MS4 permit
Track and document usage and disposal of MS4 facility materials	On-going, reported annually	• Tracking information is collected and reviewed as part of the annual report preparation

Rationale and Decision Process (Part III.B.6.d)

The annual training and O&M Program were developed with the following rationale:

• The County has found that training MS4 employees who are frequently in the field about other programs has resulted in increased reporting

of potential issues.

- MS4 employees who are aware of the potential impacts of their actions on the MS4 and local waterways are more likely to act in a manner to reduce the likelihood of these actions.

- The County has seen a positive correlation between IDDE training and reporting of potential illicit discharges.

- A comprehensive facility SWPPP program is applied across all Co-Permittee jurisdictions and provides consistency in field-based operations best management practices and program performance.

- Co-permittees may perform additional quarterly facility inspections to meet TMDL performance standards, if applicable.

Rationale for Program Modifications

Employee Training and Facility SWPPP was implemented previously and will continue. Quarterly facility inspections addressed in permit.

Program Area 6-2: Operation and Maintenance Program for Government Field Operations

Purpose

Cost-effectively prevent illicit discharges and minimize storm water pollution during government field activities.

Responsible Party/Implementation Partner(s) (Part III.B.6.d.v)

BMP#	BMP Name	Mechanism (s)	Responsible Party	Implementation Partners
**Program Area BMPs, Mechanisms, and Responsible Parties Overview**				
6-2a	Employee Training Program	• Train employees on MS4 requirements during facility visits and other times/locations	County	Co-Permittees
6-2b	Operation and Maintenance Program	• Prepare O&M Plans for MS4 field operations • Implement O&M Plans for field operations at each MS4 facility • Conduct visits to MS4 facilities to assess plan implementation • County and Co-permittees may perform street sweeping, catch basin cleaning, or leaf/yard waste collection to meet TMDL performance standard • Track use and disposal of permit listed materials for each MS4 facility	County, Co-Permittees	Co-Permittees
6-2c	Road Salt Application Program	• Prepare Road Salt Application Plan for each co-permittee that documents rationale for road salt application rates and methods, identifies controls and practices for minimization of road salt usage on roadways and parking lot operations.	County, Co-Permittees	Co-Permittees

Program Elements

The following program elements are established in order to meet the small MS4 permit requirements and performance standards.

Best Management Practices

The following BMPs, associated strategies, and mechanisms are established for this program area:

BMP 6-2a: Employee Training

The permit requires ". . . 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 disturbances, and storm water system maintenance." (Part III.B.6.b). The County will continue to provide MS4 employee training and annual facility visits to meet permit requirements. Training will focus on:

- Physical and administrative controls that can be implemented at MS4 facilities and during field operations to reduce the likelihood of polluted runoff reaching the MS4 and local waterways.
- Maintenance schedules for controls being implemented at their facilities.
- Identification of illicit discharges and sources and mechanisms for reporting potential discharges (in association with training requirements under MCM3).
- Recordkeeping and documentation protocols.
- Topics related to other programs such as MS4 mapping, and construction site sediment and erosion control. Training of MS4 employees who are frequently in the field about other programs has resulted in increased reporting of potential issues.

BMP 6-2b: Operation and Maintenance Program

The permit requires the following activities be addressed (Part III.B.6.d.iii):

- "Controls to reduce floatables and other pollutants"
- "Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, . . . salt/sand handling and storage locations and snow disposal areas you operate. A description of the materials used for roadway and municipal parking lot winterization (use of salt, sand, bottom ash, etc. or combination thereof), associated application rates, and the rationale for the selected application rates shall be included. Also identify controls or practices to be used for reducing or eliminating discharges of pollutants resulting from roadway and municipal parking lot winterization activities"

- "Procedures for the proper management and disposal of waste removed from your small MS4 and your municipal operations"
- "Procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices"
- "Soil stabilization associated with ditch/MS4 maintenance"

The County is committed to conducing its field operations in a manner that is protective of surface water quality. The Facility SWPPP program, described in Program Area 6.1, includes forms for field operations. The facility SWPPP identifies field activities performed out of each facility in the MS4 inventory and practices to implement to reduce the likelihood of introducing polluted runoff into the MS4 and local waterways while these activities are being conducted.

The Facility SWPPP includes a set of assessment forms for each type of field operation performed by employees. These forms are reviewed and updated at least once a year to evaluate performance of identified practices. Facility SWPPPs are updated for each MS4 facility at least once a year. Co-Permittees will track and document salt and brine use; pesticide, herbicide and fertilizer use, quantities and locations of materials collected and disposed during street sweeping, catch basin cleaning, and MS4 maintenance. Procedures will be revised to meet the new stabilization timeframes for soil disturbances during ditch and MS4 maintenance.

Co-permittees in TMDL watersheds will select the specific TMDL performance standard appropriate for their jurisdiction and implement it (if not an existing maintenance practice) by April 1, 2023. Options include street sweeping twice per year, catch basin cleaning every five years, a leaf/yard waste program, or quarterly municipal facility inspections (addressed in Program Area 6-1).

BMP 6-2c: De-icing Materials Application Program

The permit requires the following activities be addressed (Part III.B.6.d.iii):

- "Controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, . . . salt/sand handling and storage locations and snow disposal areas you operate. A description of the materials used for roadway and municipal parking lot winterization (use of salt, sand, bottom ash, etc. or combination thereof), associated application rates, and the rationale for the selected application rates shall be included. Also identify controls or practices to be used for reducing or eliminating discharges of pollutants resulting from roadway and municipal parking lot winterization activities"

The County is committed to minimize its application of de-icing in a manner that improves surface water quality. This involves placement of de-icing materials (i.e. road salt and brine) in a manner that placed the right amount of material, in the right locations, and at the right time.

Measurable Goals, Milestones, and Evaluation Methods (Part III.B.6.d.v)

The permit requires the MS4 to *"evaluate the success of this minimum measure, including how you selected the measurable goals for each of the BMPs"*

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
BMP 6-2a: Employee Training		
Train Applicable Employees	Annually	• Tracking data is collected annually • Data is compiled and evaluated annually during preparation of the annual report
BMP 6-2b: Operation and Maintenance Program		
Prepare the O&M Program (i.e. Facility SWPPP) for government facilities	On-going	• Plan reviews are conducted annually and revised as appropriate • Facility walkthroughs are performed to verify plan implementation • Plans are updated as necessary to incorporate changes at the facility, materials are stored and used, active controls, and recommendations
Implement O&M Plans (i.e. Facility SWPPP)	On-going	• Facility SWPPP plans are reviewed annually at the time of facility walkthroughs to verify controls are being implemented • Co-permittees are provided with recommendations for any issues identified during the walkthrough, which are documented in the Facility SWPPP
Perform facility walkthroughs to reinforce plan and training	Annually	• Co-permittees participate in annual walkthrough to assess implementation of plan controls • Co-permittees are provided with recommendations for any identified issues, which are documented in the Facility SWPPP • Annual visits are tracked and documented by the County for annual report preparation
Perform inspections (if selected by a Co-permittee to meet a TMDL watershed performance standard)	Quarterly, starting Spring 2023	• Complete and track documentation listed in the MS4 permit
Track and document usage and disposal of	On-going, reported	• Tracking information is collected and reviewed as part of the

BMP/Measurable Goals	Schedule Milestone	Evaluation Methods
MS4 facility materials	annually	annual report preparation
BMP 6-2c: De-icing Materials Application Program		
Prepare De-icing Materials Application Plan and Review Annually	Annually	• De-icing Materials Application Plans will be prepared for each co-permittee after 2021-2022 season and evaluated. Co-permittees will be provided recommendations during each annual review to reduce de-icing material usage (i.e. Road Salt and Brine).
Track and document usage of de-icing materials	On-going, reported annually	• Tracking information is collected and reviewed as part of the annual report preparation

Rationale and Decision Process (Part III.B.6.d)

The annual training and O&M Program were developed with the following rationale:

- The County has found that training MS4 employees who are frequently in the field about other programs has resulted in increased reporting of potential issues.

- MS4 employees who are aware of the potential impacts of their actions on the MS4 and local waterways are more likely to act in a manner to reduce the likelihood of these actions.

- The County has seen a positive correlation between IDDE training and reporting of potential illicit discharges.

- A comprehensive facility SWPPP program is applied across all Co-Permittee jurisdictions and provides consistency in field-based operations best management practices and program performance.

- Development of a De-icing Materials Application Program provide a rational method to ensure the right amount of de-icing materials, is placed at the right rate for effective de-icing, at the right time for maximum effectiveness.

- Most co-permittees already perform street sweeping, catch basin cleaning and/or leaf collection as required to meet TMDL performance standards, if applicable.

Rationale for Program Modifications

The program will be modified to meet new permit requirements related to stabilizing disturbed earth during ditch/MS4 maintenance. The program has also been modified to provide greater focus on reducing use of de-icing materials.

MCM 6 – Annual Reporting Requirements (Part III.B.6.e.vii)

MCM 6 - Annual Reporting Requirements (Part III.B.6.e.vii)	
1.	Summarize employee training program(s) implemented, listing topics, target pollutants and the number of employees that attended each training
2.	List the MS4 municipal facilities subject to your program with the number of facilities inspected and the frequency of such inspections
3.	Document the amounts of wastes properly disposed from each small MS4s and your municipal operations, including the disposal locations
4.	Document whether each MS4s road salt storage is covered, tons of salt used, gallons of brine used (and concentration), lane miles treated and measures taken to minimize usage
5.	Document the gallons used of pesticides and herbicides and measures taken to minimize usage in each MS4
6.	Document the pounds used of fertilizer and measures taken to minimize usage in each MS4
7.	Document the amount of street sweeping and catch basin cleaning material collected and properly disposed, including disposal locations in each MS4
8.	Summarize any new or existing flood management projects that were assessed for possible impacts on water quality in each MS4
9.	If applicable, summarize activities taken to satisfy your pollution prevention good housekeeping program TMDL performance standards in each MS4