



THE CITY OF

MORRIS

MINNESOTA

MS4 SWPPP Audit

City of Morris, MN
June 2022



Real People. Real Solutions.

Prepared by:

Bolton & Menk, Inc.
1960 Premier Drive
Mankato, MN 56001
P: 507-625-4171
F: 507-625-4177
BMI Project No. W14.117552

Table of Contents

Unique BMP MCM1: Public Education and Outreach	1
Unique BMP MCM2: Public Participation/Involvement	3
Unique BMP MCM3: Illicit Discharge Detection and Elimination (IDDE).....	5
Unique BMP MCM 4: Construction Site Stormwater Runoff Control.....	9
Unique BMP MCM5: Post-Construction Stormwater Management	12
Unique BMP MCM6: Pollution Prevention/Good Housekeeping for Municipal Operations	14

BMP Summary Sheet

Unique BMP MCM1: Public Education and Outreach

MS4 Name:	City of Morris
Minimum Control Measure:	MCM1 Public Education And Outreach
BMP Title:	MCM1 Public Education and Outreach
MNR040000 Permit Reference:	Lines 16.1 - 16.9

BMP Description:

A public education program to distribute educational materials or equivalent outreach that informs the public of the impact stormwater discharges have on waterbodies and that includes actions citizens, businesses, and other local organizations can take to reduce the discharge of pollutants to stormwater.

Based on the EPA EJScreen report (Updated in 2022) the Population of Morris is:

	Morris, MN	State of MN
Demographic Index	21%	22%
Low Income	30%	24%
Linguistically Isolated	1%	2%
Less Than High School Education	7%	7%
Under Age 5	6%	6%
Over Age 64	17%	15%

The City has identified that property owners, residents, and businesses in the City of Morris seek information via the City’s official newspaper, City website, and City Facebook Page.

The education program will include the distribution of written educational items for each of the following topics:

- Household chemical disposal
 - The City will coordinate with the County for this educational outreach and event.
- Yard waste/composting
- Illicit discharge recognition and reporting
- Deicing salt impacts on receiving waters, methods to reduce use, and proper storage
- Pet waste impacts receiving waters, management of pet waste, and the City Code.

The City will use the official newspaper, City website, and the City Facebook Page to distribute written educational items. The City may use additional methods of outreach such as radio and utility bill inserts from time to time to supplement the other methods used.

Written materials will be in English. The City will provide copies of written educational materials in alternative formats or languages upon request. Requests can be made via the email or phone numbers posted on the City website or in person at City Hall.

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Documentation and Measurable Goals:

Activities held

- At least one per calendar year,

Educational materials distributed

- At least one seasonally appropriate educational material will be prepared and distributed each quarter.
- Dates, description, and estimated audience.

Document any feedback or requests for alternative educational material format from the Public and the City’s Action because of that feedback or request.

- The City will respond to all feedback or requests within 5 regular business days.

BMP Review and Update:

This BMP will be reviewed each calendar year in advance of the MS4 Annual Report. The annual review will include an assessment of program compliance, and the measurable goals, and determine any necessary or desirable BMP improvements.

Necessary changes to the BMP will be documented as part of the MS4 Annual Reporting. Changes to the BMP will be implemented within 60-calendar days of the MS4 Annual Report being submitted.

Schedule:

Quarterly	Post seasonal materials and create links on the City website & City Facebook Page
Quarterly	Provide written information to City's Official Newspaper
As Needed	Radio and Utility Billing Inserts
Ongoing	BMP Documentation and Measurable Goals
Annual	BMP Review and update as needed.

Responsible Party for this BMP:

Title: City Manager
 Department: City Administration
 Contact Phone: 320-589-3141
 Contact E-mail: cityhall@ci.morris.mn.us

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Summary Sheet

Unique BMP MCM2: Public Participation/Involvement

MS4 Name:	City of Morris
Minimum Control Measure:	MCM2 Public Participation/Involvement
BMP Title:	MCM2 Public Participation/Involvement
MNR040000 Permit Reference:	Lines 17.1 – 17.8

BMP Description:
<p>A Public Participation/Involvement program to solicit public input on the SWPPP and involve the public in activities that improve or protect water quality.</p> <p>The permit requires that the permittee provide a minimum of one opportunity for the public to provide input on the adequacy of the Stormwater Pollution Prevention Plan (SWPPP). To meet this requirement, the City will post the SWPPP on the City website. Comments will be accepted at any time and may be submitted via the contact information on the website or at the public comment period of any regularly scheduled City Council Meeting.</p> <p>The annual reports, enforcement response procedures (ERPs), and stormwater ordinances are available to the public upon request. Requests can be made via the email or phone numbers posted on the City website or in person at City Hall.</p> <p>The permit requires that the permittee must provide a minimum of one public involvement activity that includes pollution prevention or water quality theme. To meet this requirement the City will coordinate a household hazardous waste collection day with the County.</p>
BMP Documentation and Measurable Goals:
<p>Document all oral and written input regarding the SWPPP submitted by the public.</p> <ul style="list-style-type: none"> • The City will respond to all feedback within 5 regular business days. <p>Document the City responses to public input and any revisions to the SWPPP.</p> <ul style="list-style-type: none"> • Activities held <ul style="list-style-type: none"> ○ At least one per calendar year, ○ Document dates, description, and estimated audience.
BMP Review and Update:
<p>This BMP will be reviewed each calendar year in advance of the MS4 Annual Report. The annual review will include an assessment of program compliance, and the measurable goals, and determine any necessary or desirable BMP improvements.</p> <p>Necessary changes to the BMP will be documented as part of the MS4 Annual Reporting. Changes to the BMP will be implemented within 60-calendar days of the MS4 Annual Report being submitted.</p>

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

Schedule:	
Annually	Post a public notice soliciting comments on the SWPPP.
Annually	Provide a public involvement event.
Ongoing	BMP Documentation and Measurable Goals
Annual	BMP Review and update as needed.
Responsible Party for this BMP:	
Title:	City Manager
Department:	City Administration
Contact Phone:	320-589-3141
Contact E-mail:	cityhall@ci.morris.mn.us

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Summary Sheet

Unique BMP MCM3: Illicit Discharge Detection and Elimination (IDDE)

MS4 Name:	City of Morris
Minimum Control Measure:	MCM3 Illicit Discharge Detection And Elimination
BMP Title:	MCM3 Illicit Discharge Detection and Elimination
MNR040000 Permit Reference:	Lines 18.1 – 18.18

BMP Description:
<p>A program to detect and eliminate illicit discharges into the MS4.</p> <p>The City will annually maintain and update a map(s) of the MS4 that includes:</p> <ul style="list-style-type: none">• All pipes 12 inches or greater in diameter, including stormwater flow direction in those pipes,• Outfalls labeled with a unique identification (ID) number, and geographic coordinates,• Structural stormwater BMPs,• All receiving waters, and• Inventory of priority areas identified as having a higher likelihood of illicit discharges. Areas will be determined based on:<ul style="list-style-type: none">○ Zoning,○ Previous known or suspected IDDE, and○ Areas with storage of significant materials that could result in an illicit discharge <p>The City Code prohibits non-stormwater discharges to the City’s stormwater system, except for those non-stormwater discharges authorized in item 3.2 of the MS4 General Permit. The</p> <p>The City Code requires owners or custodians of pets to remove and properly dispose of feces on City property.</p> <p>At least once per year, outfalls will be inspected for illicit discharge. This inspection will be done during dry weather conditions (e.g., periods of 72 or more hours of no precipitation).</p> <p>City Field Staff will receive training at least once per year to recognize IDDE. Training will be done using videos, handouts, posted materials, and in some cases attendance at outside events. The type and level of training will be determine based on the work duties and responsibilities.</p> <ul style="list-style-type: none">• City Staff will report suspected IDDE to their direct supervisor.• The direct supervisor will verify the report and follow the checklist for IDDE.• Field staff to be trained includes but is not limited to police, fire department, public works, and parks staff.• Training for IDDE may include, but is not limited to, videos, in-person presentations, webinars, training documents, and/or emails. <p>The City may contract for investigating, locating, eliminating illicit discharges, and/or enforcement or designate one or more City Staff to complete this task. City Staff designated to complete this task will receive training every three (3) calendar years following the initial training.</p>

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Written Procedures for this BMP:

Investigating, Locating, and Eliminating the Source of Illicit Discharge:

The following written procedure will be followed for investigating, locating, and eliminating the source of illicit discharges.

- **Timeframe:**
 - Reports of Illicit Discharge Received from the Public to the City via email, phone call, or visit to the City Hall:
 - An appropriate City Staff member from the Public Works or Parks Department or a Consultant will be dispatched to inspect the site. The IDDE Checklist will be used to evaluate the suspected IDDE and determine the next steps.
 - A response to the person(s) making the initial report will be made within 5 regular business days of the report being received.
 - Reports of Illicit Discharge Received from Emergency Responders (e.g. Fire or Police) 911 report:
 - The report will be forwarded to the Public Works non-work hours emergency on-call.
 - The on-call Staff member will use the IDDE Checklist to evaluate the suspected IDDE and determine the next steps.
 - Reports of Illicit Discharge Received from City Staff that are not related to an emergency response action:
 - The Field Staff will report the suspected IDDE to their immediate supervisor. The Supervisor will determine the urgency of the report and refer it accordingly.
 - report and determine using the IDDE Checklist if further investigation is necessary.
 - An appropriate City Staff member from the Public Works or Parks Department or a Consultant will be dispatched to inspect the site. The IDDE Checklist will be used to evaluate the suspected IDDE and determine the next steps.
- **Available Tools and Methods to Detect and Track the Source of an Illicit Discharge:**
 - When possible, the person inspecting the suspected IDDE will attempt to track the source by visually inspecting and following suspected IDDE upstream to determine the source and type of discharge.
 - When visual inspection is not possible, or if the source cannot be easily identified, the City may use stormsewer televising, water sampling and testing, smoke tests, dye tests, or other methods. The City Manager will determine with Consultant services are appropriate to assist with these actions.
 - Maps of the City stormwater collection system will be utilized to identify the upstream structure locations.
- **IDDE Containment and Cleanup Methods:**
 - IDDE Containment and Cleanup may require specialized training and equipment. City Staff will not attempt to contain or cleanup material if those actions would interfere with an emergency responder or if it would put themselves into a situation that requires PPE that they do not have training to use or availability at the site.
 - Cleanup methods for IDDE will depend on the source and composition.
 - When possible, City Staff will attempt to stop a suspected illicit discharge from entering a receiving water by containing the material by placing a sandbag or other block in the municipal storm conveyance system downstream of the suspected IDDE.
 - The City Manager will be notified as soon as possible about the extent and potential impacts of identified IDDE.
 - The City Manager will direct the reporting of the identified IDDE to the State Duty Officer and determine if Consultant assistance is appropriate.
 - The City will follow the directions of the State Duty Officer.

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

- A clean-up plan will be developed and implemented.
- The City will implement the appropriate Enforcement Response Procedures depending on the IDDE.

Spill Response:

The following written procedure will be followed for responding to spills, including emergency response procedures to prevent spills from entering the MS4.

- Spill Avoidance:
 - Field Staff will be trained on spill avoidance for the duties assigned to them.
- Spill Response Checklist:
 - Field Staff will be trained on Spill Response and provided a Spill Response Checklist.
 - The Checklist includes:
 - How to identify a spill,
 - Steps to contain a spill,
 - Who and when to notify about a spill,
 - All spills that meet the criteria listed on the Spill Response Checklist will be reported to the City Manager.
 - The City Manager will:
 - Direct the reporting of the Spill to the State Duty Officer,
 - Direct any City Cleanup Response, and
 - Determine if Enforcement Response Procedures are appropriate

Receipt of Stormwater Reports, Complaints, and Concerns:

The following written procedure will be followed for receipt of reports, complaints, and concerns.

- The contact information for the City will be posted on the City Website.
- Complaints that are received will be forwarded to the City Manager.
- The City Manager will review the complaint and determine next steps, including but not limited to initiating action under the City's ERPs.

Written Enforcement Response Procedures (ERPs):

The City maintains written ERPs as described in this SWPPP and the City Code.

BMP Documentation:

Document all training:

- Date,
- Attendees' names and departments, and
- General subject matter covered.

Document Stormwater Reports and Complaints:

- Date and source of the report, and
- City response to the report.

Document all Enforcement Actions required under this BMP:

- name of the person responsible for violating the terms and conditions of the permittee's regulatory mechanism(s)
- date(s) and location(s) of the observed violation(s)
- description of the violation(s),
- corrective action(s) (including completion schedule) issued by the City,
- referrals to other regulatory organizations (if any), and
- date(s) violation(s) resolved.

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Review and Update:	
<p>This BMP will be reviewed each calendar year in advance of the MS4 Annual Report. The annual review will include an assessment of program compliance, and the measurable goals, and determine any necessary or desirable BMP improvements.</p> <p>Necessary changes to the BMP will be documented as part of the MS4 Annual Reporting. Changes to the BMP will be implemented within 60-calendar days of the MS4 Annual Report being submitted.</p>	
Schedule:	
Annually	Field Staff Training (Training may be broken up to be seasonally appropriate.)
Annually	BMP, Written Procedure, Checklist, and ERPs review and update as needed.
Ongoing	BMP Documentation
Responsible Party for this BMP:	
Title:	City Manager
Department:	City Administration
Contact Phone:	320-589-3141
Contact E-mail:	cityhall@ci.morris.mn.us

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Summary Sheet

Unique BMP MCM 4: Construction Site Stormwater Runoff Control

MS4 Name:	City of Morris
Minimum Control Measure:	MCM4 Construction Site Stormwater Runoff Control
BMP Title:	MCM4 Construction Site Stormwater Runoff Control
MNR040000 Permit Reference:	Lines 19.1 – 19.16

BMP Description:

A Construction Site Stormwater Runoff Control program for construction activity with a land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale

The permit requires that the permittee must develop, implement, and enforce a regulatory mechanism(s) that establishes requirements for erosion, sediment, and waste controls that is at least as stringent as the Agency's most current permit. The City Code requires projects to meet or exceed the requirements of the MN Construction Stormwater General Permit to Discharge Stormwater Associated with Construction Activity No. MNR100001.

The permit requires that the permittee's regulatory mechanism(s) to require site plans be submitted for review before the beginning of construction. §11.41 of the City Code meets this requirement.

City Staff performing site plan reviews and site inspections will receive training at least once per year for these duties. The type and level of training will be determine based on the work duties and responsibilities. Previously trained individuals will receive a refresher-training at least every three calendar years following the initial training.

BMP Written Procedures for this BMP:

Site Plan Reviews:

The following written procedure will be followed for Site Plan Review before the start of all construction activity.

- Sites that disturb 1.0 acres or more/Projects less than one acre that are part of a larger common plan of development or sale:
 - A written notice will be provided to the party that submitted the application to the City and the Property Owner of the need to apply for and obtain coverage under the CSW Permit,
 - A written checklist, consistent with the CSW and the City Code will be used to document the plan review. The checklist is based on the MPCA checklist (wq-strm2-47) modified to fit the needs of the City.
 - A copy of the checklist will be kept with the permit application for a period of not less than 3-calendar years from the date of all City permits being closed.
- Sites that disturb less than 1.0 acres and are not part of a larger common plan of development or sale:
 - A checklist will be used for the plan review.
 - The checklist may be discarded once the permit is approved.

Site Inspections:

The following written procedure will be followed for Site Inspections during construction activity.

- Sites that disturb 1.0 acres or more/Projects less than one acre that are part of a larger common plan of development or sale:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

- A written checklist, consistent with the CSW and the City Code will be used during site inspections. The checklist is based on the MPCA checklist (wq-strm2-36) modified to fit the needs of the City.
- Sites will be spot inspected. All items on the checklist may not be included in each inspection.
- Sites that disturb less than 1.0 acres and are not part of a larger common plan of development or sale:
 - No checklist will not typically be required or used for sites that fall into this category.
 - Erosion and sediment control on these sites will be inspected:
 - During routine inspections by the building inspector, and
 - In response to complaints or concerns reported to the City.

High-Priority/Low-Priority Sites for Inspections:

The following written procedure will be followed to determine high and low priority sites for inspections.

- Sites that do not require a CSW and area not located in the Shoreland Area will be considered Low Priority.
 - The City goal is to inspect all high-priority sites every 7 calendar days, but no less than every 14 calendar days.
- All other sites will be considered high priority.
 - The City will inspect low-priority sites during routine inspections by the building inspector, but no less than every 30 calendar days.
- All complaints or concerns reported to the City will be inspected within 5 regular business days of the City receiving the complaint or concern.

Receipt of Stormwater Reports, Complaints, and Concerns:

Refer to the written procedures section of MCM3 Illicit Discharge Detection And Elimination of this SWPPP for the written procedure for receipt of receipt of stormwater reports, complaints, and concerns.

Written Enforcement Response Procedures (ERPs):

The City maintains written ERPs as described in this SWPPP and the City Code.

BMP Documentation:

Document all Plan Reviews:

- Project name and Location,
- Total acreage to be disturbed,
- Property Owner and Construction Contractor (if known),
- For sites that are required to obtain coverage under the CSW Permit
 - Proof of coverage under the CSW Permit,
 - Calculations for the permanent stormwater treatment system,
 - Water quality volume treated compared to required water quality volume,
 - Any “higher level of engineering” used to justify deviation from the CSW or MS4 Permit Requirements.
 - All legal agreements related to stormwater:

Refer to the BMP Documentation section of MCM3 Illicit Discharge Detection and Elimination of this SWPPP for the items required to be documented for:

- Training,
- Receipt of Stormwater Reports, Complaints, and Concerns, and
- Enforcement Actions

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Review and Update:

This BMP will be reviewed each calendar year in advance of the MS4 Annual Report. The annual review will include an assessment of program compliance, and the documented information, and determine any necessary or desirable BMP improvements.

Necessary changes to the BMP will be documented as part of the MS4 Annual Reporting. Changes to the BMP will be implemented within 60-calendar days of the MS4 Annual Report being submitted.

Schedule:

Annually	Staff Training
Annually	BMP, Written Procedure, Checklist, and ERPs review and update as needed.
Ongoing	BMP Documentation

Responsible Party for this BMP:

Title: City Manager
 Department: City Administration
 Contact Phone: 320-589-3141
 Contact E-mail: cityhall@ci.morris.mn.us

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Summary Sheet

Unique BMP MCM5: Post-Construction Stormwater Management

MS4 Name:	City of Morris
Minimum Control Measure:	MCM5 Post-Construction Stormwater Management
BMP Title:	MCM5 Post-Construction Stormwater Management
MNR040000 Permit Reference:	Lines 20.1 – 20.23

BMP Description:

A Post-Construction Stormwater Management program that prevents or reduces water pollution after construction activity is completed for construction activity with land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, within the permittee's jurisdiction and that discharge to the permittee's MS4.

The City ordinance requires the submittal of site plans with post- construction stormwater management BMPs designed with accepted engineering practices for review before permit approval. Construction may not begin until permit approval is received.

The City Code requires owners of construction activity to treat the water quality volume to meet or exceed the current CSW requirements. The City Code includes wording to meet the requirements of the 2013 MS4 General Permit.

The City maintains a mapped inventory of structural stormwater BMPs owned by the City.

A legal agreement such as a Development Agreement or similar document will be required for:

- New structural stormwater BMPs constructed that are intended to be owned and operated by a non-government party. The document will lay out requirements for long-term maintenance and provide access for City inspection.
- When cash payment or donation of land is made in lieu of construction of required structural BMPs, and
- When construction of required structural BMPs will not be completed within 24 calendar months of the start of the construction activity.

City Staff performing site plan reviews and inspecting structural BMPs will receive training at least once per year for these duties. The type and level of training will be determine based on the work duties and responsibilities. Previously trained individuals will receive a refresher-training at least every three calendar years following the initial training.

BMP Written Procedures for this BMP:

Refer to the written procedures section of MCM4 Construction Site Stormwater Control of this SWPPP for the written procedure for site plan reviews.

Written Enforcement Response Procedures (ERPs):

The City maintains written ERPs as described in this SWPPP and the City Code.

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Documentation:	
<p>Refer to the BMP Documentation section of MCM3 Illicit Discharge Detection and Elimination of this SWPPP for the items required to be documented for:</p> <ul style="list-style-type: none"> • Training, and • Enforcement Actions <p>Refer to the BMP Documentation section of MCM4 Construction Site Stormwater Control of this SWPPP for the items required to be documented for site plan reviews.</p>	
BMP Review and Update:	
<p>This BMP will be reviewed each calendar year in advance of the MS4 Annual Report. The annual review will include an assessment of program compliance, and the measurable goals, and determine any necessary or desirable BMP improvements.</p> <p>Necessary changes to the BMP will be documented as part of the MS4 Annual Reporting. Changes to the BMP will be implemented within 60-calendar days of the MS4 Annual Report being submitted.</p>	
Schedule:	
Sept. 2022	<ul style="list-style-type: none"> • The City Code will be updated to match the 2020 MS4 General Permit. • The mapped inventory of BMPs will be updated to add those not owned or operated by the City.
Ongoing	BMP Documentation
Annual	BMP Review and update as needed.
Responsible Party for this BMP:	
Title:	City Manager
Department:	City Administration
Contact Phone:	320-589-3141
Contact E-mail:	cityhall@ci.morris.mn.us

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Summary Sheet

Unique BMP MCM6: Pollution Prevention/Good Housekeeping for Municipal Operations

MS4 Name:	City of Morris
Minimum Control Measure:	MCM6 Pollution Prevention/Good Housekeeping for Municipal Operations
BMP Title:	MCM6 Pollution Prevention/Good Housekeeping
MNR040000 Permit Reference:	Lines 21.1 – 21.15

BMP Description:
<p>An operations and maintenance program that prevents or reduces the discharge of pollutants to the MS4 from City owned/operated facilities and operations.</p> <p>The City maintains a mapped inventory of City owned/operated facilities that may contribute pollutants to stormwater discharges.</p> <p>The City reviews good housekeeping BMPs and implements new BMPs when feasible to prevent or reduce pollutants in stormwater discharges. Sample good housekeeping BMPs implemented by the City include:</p> <ul style="list-style-type: none"> • Waste disposal and storage, including dumpsters protected from contact with stormwater. • Management of temporary and permanent stockpiles of materials such as street sweepings, snow, sand and sediment removal piles <ul style="list-style-type: none"> ○ When feasible stockpiles are protected from contact with stormwater, and ○ Sediment controls at the base of stockpiles on the down gradient perimeter. • Vehicle fueling, washing, and maintenance in designated areas only. • Routine sweeping of municipal streets and parking lots. • Annual Training for City Staff commensurate with individual's responsibilities as they relate to the permittee's SWPPP, including: <ul style="list-style-type: none"> ○ to recognize illicit discharge risks and implement controls to avoid them during normal duties. (e.g. park maintenance, pothole repair, paving activity, etc.) ○ use and location of Spill Kits ○ use of appropriate erosion and sediment controls during soil disturbing activity ○ proper use of herbicides, pesticides, fertilizers, and deicing materials ○ reporting and assessment activities ○ address the importance of protecting water quality <p>The City owned/operated salt storage areas are covered and on an impervious surface. Material loading and unloading is done in a designated area and spilled salt is swept up to avoid loss of salt.</p>
BMP Written Procedures for this BMP:
<p>Refer to the BMP written procedures section of MCM3 Illicit Discharge Detection and Elimination of this SWPPP for the written procedure for:</p> <ul style="list-style-type: none"> • Investigating, Locating, and Eliminating the Source of Illicit Discharge, and • Spill Response

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

Determining TSS and TP Treatment Effectiveness

The following written procedure is for the purpose of determining the Total Suspended Solids (TSS) and Total Phosphorus (TP) treatment effectiveness of all permittee owned/operated ponds constructed and used for the collection and treatment of stormwater. These procedures are not used to determine stormwater credits.

- The City will use a literature-based approach to assess stormwater pond effectiveness.
 - Pollutant removal percentages for stormwater pond BMPs vary. Values for TP and TSS include a range of values, from lowest to highest percent removal, observed in the literature. (*Pollutant Removal Percentages for Stormwater Pond BMPs. Minnesota Pollution Control Agency, 15 July 2015*)
 1. TSS (Low-median-high): 60-84-90
 2. TP (Low-median-high): 34-50-73
- Staff will evaluate the pond's design, construction and maintenance before assigning TSS and TP effectiveness. Staff will use their best judgement when records or data is not available.
 - New ponds will be assigned an estimated effectiveness based on the design and construction of the pond. Ponds will be reevaluated during subsequent inspection cycles for reduced effectiveness.
 - Existing ponds that have reduced detention times due to sediment build up, but are receiving regular maintenance and still effectively functioning in removing sediment will be assigned median effectiveness.
 1. TSS – 84%
 2. TP – 50%
- Existing ponds that have substantial reduction in detention times due to sediment build up (50%) and are receiving regular maintenance, but sediment removal is significantly diminished by the buildup, will be assigned low effectiveness.
 1. TSS – 60%
 2. TP – 34%
- Existing ponds that have substantial reduction in detention times due to sediment build up such that there is no sediment removal after precipitation events will be assigned zero effectiveness.
- Existing ponds that that have been dredged to remove sediment build up and restored to original design parameters will be assigned their original expected effectiveness.
 1. TSS – 90%
 2. TP – 73%
- In any situation above, staff may assign a lower pond effectiveness if they determine that the original design and/or construction and/or existing maintenance preclude the pond from effectively removing sediments. Assigned values can range anywhere from 0-90% for TSS and 0-73% for TP.
- Staff will use the Minnesota Stormwater Manual wiki - Design Criteria for Stormwater Ponds (http://stormwater.pca.state.mn.us/index.php/Design_criteria_for_stormwater_ponds) as a guide during pond evaluation.
- Staff will complete a visual inspection to ensure that there is not significant sediment buildup, hydrologic short circuiting or repairs/maintenance needed that would affect sediment or nutrient removal effectiveness.
- Pond effectiveness will be conducted in conjunction with the City's stormwater pond inspection cycle which runs concurrent with the MS4 General Permit cycle.
- Based on inspection findings, repair, replacement, or maintenance measures will be scheduled as necessary are necessary in order to ensure the structural integrity and proper function of structural stormwater BMPs and outfalls. The City will complete necessary maintenance as soon as possible. If necessary, maintenance cannot be completed within one year of discovery, the permittee must document a schedule(s) for completing the maintenance.

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

BMP Documentation:	
<p>Refer to the BMP Documentation section of MCM3 Illicit Discharge Detection and Elimination of this SWPPP for the items required to be documented for:</p> <ul style="list-style-type: none"> • Training, • Investigating, Locating, and Eliminating the Source of Illicit Discharge, and • Spill Response <p>Document the following information associated with the operations and maintenance program:</p> <ul style="list-style-type: none"> • date(s) and a description of maintenance conducted as a result of inspection findings, including whether or not an illicit discharge is detected, and • schedule(s) for maintenance of structural stormwater BMPs and outfalls, <p>Document pond sediment excavation and removal activities, including:</p> <ul style="list-style-type: none"> • a unique ID number and geographic coordinates of each stormwater pond from which sediment is removed, • the volume of sediment removed from each stormwater pond, • results from any testing of sediment from each removal activity, and • location(s) of final disposal of sediment from each stormwater pond. 	
BMP Review and Update:	
<p>This BMP will be reviewed each calendar year in advance of the MS4 Annual Report. The annual review will include an assessment of program compliance, and the measurable goals, and determine any necessary or desirable BMP improvements.</p> <p>Necessary changes to the BMP will be documented as part of the MS4 Annual Reporting. Changes to the BMP will be implemented within 60-calendar days of the MS4 Annual Report being submitted.</p>	
Schedule:	
Sept. 2022	<ul style="list-style-type: none"> • The City Code will be updated to match the 2020 MS4 General Permit. • Develop and implement a written Snow and Ice Policy including training for City Staff on the new policy. • Update training
Ongoing	BMP Documentation
Annual	Inspect structural stormwater BMPs (other than ponds)
Annual	Inspect and observe City Staff operations and facilities <ul style="list-style-type: none"> • Implement training, BMPs, written procedures to correct or reduce potential sources of illicit discharge.
Each Permit Cycle	Inspect all both City owned/operated and privately owned/operated basins at least one time per Permit Cycle.
Responsible Party for this BMP:	
Title:	City Manager
Department:	City Administration
Contact Phone:	320-589-3141
Contact E-mail:	cityhall@ci.morris.mn.us

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.