

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
ANNUAL FACILITY INSPECTION REPORT
NPDES PERMIT FOR STORM WATER DISCHARGES
FROM MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4)**

Complete each section of this report.

REPORT PERIOD:	FROM: MARCH 2019	TO: MARCH 2020
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MS4 OPERATOR INFORMATION: (As it appears on the current permit)

NAME: City of Crystal Lake	TELEPHONE NUMBER: 815-459-2020	
MAILING ADDRESS: 100 Woodstock Street		
CITY: Crystal Lake	STATE: IL	ZIP: 60039
CONTACT PERSON: Michael Magnuson (Person responsible for Annual Report)		

NAME(S) OF GOVERNMENTAL ENTITY(IES) IN WHICH MS4 IS LOCATED: (As it appears on the current permit)

McHenry County	

THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. CHANGES TO BEST MANAGEMENT PRACTICES (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

1. Public Education and Outreach	"> <input type="checkbox"/>	4. Construction Site Runoff Control	"> <input type="checkbox"/>
2. Public Participation/Involvement	<input type="checkbox"/>	5. Post-Construction Runoff Control	<input type="checkbox"/>
3. Illicit Discharge Detection & Elimination	<input type="checkbox"/>	6. Pollution Prevention/Good Housekeeping	<input type="checkbox"/>


B.
Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.

C.
Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

D.
Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)

E.
Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).

F.
Attach a list of construction projects that your entity has paid for during the reporting period.

SIGNATURE: 	DATE: May 27, 2020
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Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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Part A. Changes to Best Management Practices

Note: X indicates BMPs performed that were proposed in your NPDES permit
 ✓ indicates changes to BMPs proposed in your NPDES permit

Year 16	Year 17	Year 18	Year 19	Year 20	
MS4					
A. Public Education and Outreach					
X	X	X	X	X	A.1 Distributed Paper Material
					A.2 Speaking Engagement
X	X	X	X	X	A.3 Public Service Announcement
X	X	X	X	X	A.4 Community Event
					A.5 Classroom Education Material
X	X	X	X	X	A.6 Other Public Education
B. Public Participation/Involvement					
					B.1 Public Panel
X	X	X	X	X	B.2 Educational Volunteer
X	X	X	X	X	B.3 Stakeholder Meeting
					B.4 Public Hearing
					B.5 Volunteer Monitoring
X	X	X	X	X	B.6 Program Coordination
X	X	X	X	X	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination					
X	X	X	X	X	C.1 Storm Sewer Map Preparation
X	X	X	X	X	C.2 Regulatory Control Program
X	X	X	X	X	C.3 Detection/Elimination Prioritization Plan
X	X	X	X	X	C.4 Illicit Discharge Tracing Procedures
X	X	X	X	X	C.5 Illicit Source Removal Procedures
X	X	X	X	X	C.6 Program Evaluation and Assessment
X	X	X	X	X	C.7 Visual Dry Weather Screening
X	X	X	X	X	C.8 Pollutant Field Testing
					C.9 Public Notification
					C.10 Other Illicit Discharge Controls

Year 16	Year 17	Year 18	Year 19	Year 20	
MS4					
D. Construction Site Runoff Control					
X	X	X	X	X	D.1 Regulatory Control Program
X	X	X	X	X	D.2 Erosion and Sediment Control BMPs
					D.3 Other Waste Control Program
X	X	X	X	X	D.4 Site Plan Review Procedures
X	X	X	X	X	D.5 Public Information Handling Procedures
X	X	X	X	X	D.6 Site Inspection/Enforcement Procedures
					D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control					
					E.1 Community Control Strategy
X	X	X	X	X	E.2 Regulatory Control Program
X	X	X	X	X	E.3 Long Term O&M Procedures
X	X	X	X	X	E.4 Pre-Const Review of BMP Designs
X	X	X	X	X	E.5 Site Inspections During Construction
					E.6 Post-Construction Inspections
					E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping					
X	X	X	X	X	F.1 Employee Training Program
X	X	X	X	X	F.2 Inspection and Maintenance Program
X	X	X	X	X	F.3 Municipal Operations Storm Water Control
X	X	X	X	X	F.4 Municipal Operations Waste Disposal
X	X	X	X	X	F.5 Flood Management/Assess Guidelines
X	X	X	X	X	F.6 Other Municipal Operations Controls

Part B. Status of Compliance with Permit Conditions

(Provide the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable [MEP], and your identified measurable goals for each of the minimum control measures.)

The status of BMPs and measurable goals performed in Year 17 are described below. The City submitted a new Notice of Intent during Year 16 that more accurately reflects the current program activities and subsequent Annual Reports are based on the new NOI.

1) PUBLIC EDUCATION AND OUTREACH

The City and McHenry County both perform a variety of activities that meet the requirements of the Public Education and Outreach minimum control measure. These activities include BMP's A.1, A.3, A.4 and A.6. A brief description and status is provided below.

BMP No. A.1 – Distributed Paper Material

Brief Description of BMP:

The City of Crystal Lake (City) and McHenry County will continue to produce and make available brochures on a variety of stormwater related topics. These brochures and informational materials are made available for the public at the City facilities and events.

BMP No. A.3 – Public Service Announcement

Brief Description of BMP:

The City will continue to include a stormwater and/or ambient water quality related articles in the City's monthly newsletter at least once a year.

BMP No. A.4 – Community Event

Brief Description of BMP:

The City has designed and constructed a rain garden with the Wildflower Preservation and Propagation Committee. The City will continue to maintain the existing rain garden as an educational and demonstration tool and seek out additional partnerships as funding allows. The City has also attended and supported the annual Drug Take Back Initiative Program sponsored by the Police Department. This provides an opportunity to engage the public on stormwater related issues. The City will also continue this outreach activity.

BMP No. A.6 – Other Public Involvement

Brief Description of BMP:

The City will continue to utilize other available outlets such as the City website, library, etc. to reach residents regarding stormwater and water quality information. The City will update and modify their approach as need to stay current and keep residents informed.

2) PUBLIC PARTICIPATION AND INVOLVEMENT

The City and McHenry County both perform a variety of activities that meet the requirements of

the Public Participation and Involvement minimum control measure. These activities include BMP's B.2, B.3, B.6 and B.7. A brief description and status is provided below.

BMP No. B.2, – Educational Volunteer

Brief Description of BMP:

The City regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality. City staff will continue to perform these activities and work to increase participation from its staff and attendance by residents.

BMP No. B.3 – Stakeholder Meeting

Brief Description of BMP:

The City will work to conduct stakeholder meetings to connect directly with impacted residents and distribute information. The City will continue to hold the stakeholder meetings as needed with a goal of at least one per year as required by the permit.

BMP No. B.6 – Program Involvement

Brief Description of BMP:

The City has coordinated with other local municipalities and agencies on regional stormwater related issues. The City will continue to partner with the County and other agencies to coordinate efforts such as watershed studies and other regional issues impacting multiple jurisdictions.

BMP No. B.7 – Other Public Involvement

Brief Description of BMP:

The City has hosted elementary schools and other residents with tours through various City departments. These tours allow the City to educate the participants on various functions of the City, as well as educate them on issues pertaining to stormwater and water quality, such as what is the difference between stormwater and sanitary and why keeping them separate is important. The age groups for the tours ranged from elementary through college.

3) ILLICIT DISCHARGE DETECTION AND ELIMINATION

The City and McHenry County both perform a variety of activities that meet the requirements of the Illicit Discharge Detection and Elimination minimum control measure. These activities include BMP's C.1, C.2, C.3, C.4, C.5, C.6, C.7, and C.8. A brief description and status is provided below.

BMP No. C.1 – Storm Sewer Map Preparation

Brief Description of BMP:

The City is working to develop an extensive, GIS based storm sewer atlas map and inventory of the storm sewer system outfalls. The City will continue the work to update the system and

inventory as needed based on development and other stormwater improvements. The City is moving forward with the plans and commitment to develop the system and is currently updating the GIS to add additional outfall locations.

BMP No. C.2 – Regulatory Control Program

Brief Description of BMP:

The City and County both have ordinances in place to allow for enforcement action if an illicit discharge is observed, reported or discovered. The City will continue to enforce the ordinance to prevent or eliminate non-stormwater discharges from the municipal separate storm sewer system.

BMP No. C.3 – Detection/Elimination Prioritization Plan

Brief Description of BMP:

The City has policies and procedures to identify, trace, and eliminate illicit discharges, as well as addressing those potential illicit discharges reported by the public. The City will continue these activities to reduce or eliminate illicit discharges to the municipal separate storm sewer system. The City has implemented an Inflow and Infiltration (I/I) Program to identify and eliminate cross connections to the sanitary sewer system. These programs reduce the potential for surcharging of sanitary sewers and the potential discharge of sanitary waste into the MS4.

BMP No. C.4 – Illicit Discharge Tracing Procedures

Brief Description of BMP:

The City has existing policies and procedures in place to trace and eliminate illicit discharges to the municipal separate storm sewer system. These procedures include the utilization of the GIS outfall mapping system, existing design plans and other available data to locate the source of potential pollutants. The City will continue these tracing activities as needed to reduce or eliminate non-stormwater discharges to the MS4.

BMP No. C.5 – Illicit Source Removal Procedures

Brief Description of BMP:

The City and County both have regulatory mechanisms in place to allow for enforcement actions to eliminate illicit discharges. The City will continue to utilize these procedures as needed to eliminate non-stormwater discharges to the MS4.

BMP No. C.6 – Program Evaluation and Assessment

Brief Description of BMP:

The City will continue to conduct the annual program evaluation and assessment for the IDDE program. The evaluation and assessment provides awareness and opportunity for improvement to the policies and procedures based on experience and staff feedback.

BMP No. C.7 – Visual Dry Weather Screening

Brief Description of BMP:

The City regularly performs dry weather screening of the municipally owned outfalls for potential stormwater concerns as part of its maintenance activities. The City will continue to perform these activities and has developed a form for formalizing this process. The City will continue to perform these activities and utilize the inspection form for future permit years.

BMP No. C.8 – Pollutant Field Testing

Brief Description of BMP:

The City regularly samples, tests, analyzes and documents the results of influent and effluent flow to various waterbodies throughout the community as part of an ongoing monitoring and assessment program. These procedures provide a baseline condition for these natural resources in the event of a potential illicit discharge. The City will continue these procedures in future permit years as funding allows. Additional information is provided in Part C of this report.

4) CONSTRUCTION SITE RUNOFF CONTROL

The City and McHenry County both have ordinances and activities in place that meet the requirements of the Construction Site Runoff Control minimum control measure. These activities include BMP's D.1, D.2, D.4, D.5, and D.6. A brief description and status is provided below.

BMP No. D.1 – Regulatory Control Program

Brief Description of BMP:

The City and County have ordinances in place to require the review, inspection and enforcement of construction site runoff controls. The City will continue with these policies/procedures and update as needed based on the impending MS4 permit.

BMP No. D.2 – Erosion and Sediment Control BMPs

Brief Description of BMP:

The City and County have ordinances in place to require the review, inspection and enforcement of soil erosion and sediment control best management practices. The City will continue these procedures to reduce or prevent the discharge of soil and other potential pollutants from construction sites and amend as needed based on the impending permit.

BMP No. D.4 – Site Plan Review Procedures

Brief Description of BMP:

The City has procedures that require the review of site plan for proposed developments for compliance. The City will continue the review procedures for developments to verify compliance with applicable NDPES regulations.

BMP No. D.5 – Public Information Handling Procedures

Brief Description of BMP:

The City has procedures in place to receive, log and address publicly reported issues. The City will continue these procedures and respond and/or investigate as needed.

BMP No. D.6 – Site Inspection/Enforcement Procedures

Brief Description of BMP:

The City and County regulatory control programs all for the inspection and enforcement for construction site runoff control. The City and County will continue the inspection and enforcement program to prevent the discharge of pollutants from construction sites.

5) POST-CONSTRUCTION RUNOFF CONTROL

The City and McHenry County both have ordinances and activities in place that meet the requirements of the Post-Construction Runoff Control minimum control measure. These activities include BMP's E.2, E.3, E.4, and E.5. A brief description and status is provided below.

BMP No. E.2 – Regulatory Control Program

Brief Description of BMP:

The City and County have ordinances in place that require the review, inspection and enforcement of post-construction runoff control measures. The City will continue to enforce the ordinances and verify compliance of all developments following construction to reduce or prevent the discharge of pollutants to the MS4.

BMP No. E.3 – Long Term O&M Procedures

Brief Description of BMP:

The City has procedures for assisting and evaluating long term maintenance of stormwater best management practices. The City will continue to assist developers, residents and other target audiences by providing sample maintenance plans and conducting inspections as needed.

BMP No. E.4 – Pre-Construction Review of BMP Designs

Brief Description of BMP:

The City's existing practices include the pre-construction review of BMP designs. These procedures include pre-application meetings for large scale developments. The City will continue the review procedures and modify as necessary to maintain compliance.

BMP No. E.5 – Site Inspections During Construction

Brief Description of BMP:

The City performs site inspections during and after construction at new development and redevelopment projects to verify compliance with the runoff control requirements. The City will continue these procedures aimed at preventing the discharge of pollutants to the MS4.

6) POLLUTION PREVENTION AND GOOD HOUSEKEEPING

The City and McHenry County perform a number of activities that meet the requirements of the Pollution Control and Good Housekeeping minimum control measure. These activities include BMP's F.1, F.2, F.3, F.4, F.5 and F.6. A brief description and status is provided below.

BMP No. F.1 – Employee Training Program

Brief Description of BMP:

The City has procedures that provide guidance and training for employees to reduce or eliminate the discharge of pollutants from City owned facilities to the storm sewer system. The City will continue the training program and maintains current certifications for pesticide applications.

BMP No. F.2 - Inspection and Maintenance Program

Brief Description of BMP:

The City has an inspection and maintenance program in place to evaluate and maintain the municipal stormwater facilities. These activities include the City's extensive street sweeping program and storm sewer inspection and maintenance program. During permit Year 17, the City staff cleaned approximately 1000 LF of storm sewer. The City will continue this program which reduced the amount of debris and other potential pollutants entering the municipal separate storm sewer system.

BMP No. F.3 – Municipal Operations Storm Water Control

Brief Description of BMP:

The City has procedures and policies to prevent the discharge of pollutants to the MS4 from municipal operations. These policies include dewatering procedures, pumping activities and waste disposal. The City will continue these operations and re-evaluate and/or modify as needed to prevent the discharge of pollutants to the MS4.

BMP No. F.4 – Municipal Operations Waste Disposal

Brief Description of BMP:

The City has procedures that require the appropriate disposal of all wastes generated during municipal operations. The City will continue these procedures as needed to maintain compliance with the disposal program.

BMP No. F.5 – Flood Management/Assess Guidelines

Brief Description of BMP:

The City, County, and State have development procedures related to floodplain management and the evaluation of potential development in these areas. The City will continue to enforce these requirements in special flood hazard areas and update as needed to maintain compliance.

BMP No. F.6 – Other Municipal Operations Controls

Brief Description of BMP:

The City regularly evaluates their municipal activities for additional ways to reduce or eliminate pollutants from entering the stormwater system including salt reduction, additional de-icing techniques and other actions. The City will continue to analyze their existing practices and methods for potential alternatives that may reduce or eliminate potential pollutants.

Part C. Information and Data Collection Results

(Provide information and water quality sampling/monitoring data related to illicit discharge detection and elimination collected during the reporting period.)

Illicit Discharge Detection and Elimination: (March 2019 thru March 2020)

1) Businesses and Commercial Areas

No reports during the current permit year.

2) Domestic Sources

No reports during the current permit year.

3) Storm Water Receiving Bodies – Monitoring

- Crystal Lake – samples are collected at a minimum of a quarterly basis at the following locations:
 - Cove Pond discharge pipe into the lake off of North Shore Drive
 - North Shore storm sewer discharge (mooring beach)
 - North Shore storm sewer discharge (swim beach)
 - Lake influent into Crystal Creek at Riverside Dr. and Lake Avenue
 - Pinewood manhole (tile line discharge into Crystal Lake.)
 - Effluent discharge manhole from Lippold Park wetlands (off Thornwood Lane)
 - Influent discharge manhole adjacent to Lippold Park golf driving range and wetlands (collected quarterly)

At a minimum, the following parameters are analyzed at the above locations:

- Total Suspended Solids (TSS)
- Biological Oxygen Demand (CBOD)
- Ammonia-N
- Total Phosphorous
- Chlorides

The following locations from the wastewater plants are sampled as required or weekly:

- 1) Drainage Ditch to Squaw Creek /unnamed ditch to Sleepy Hollow along railroad tracks, downstream from Sanitary Treatment Plant #3 (**collected when chlorine residual is tested at the Plant Effluent**).^{*} Parameters include the following:

- Temperature
- pH
- Chlorine residual*

2) Sanitary Treatment Plant #2 (collected once per week) – Crystal Creek (Upstream), (Cooling Pond Outfall to Crystal Creek), and Downstream

Note: This will be changed to monthly after the new NPDES Permit takes affect

The parameters analyzed in the receiving stream include the following:

- Dissolved Oxygen (DO)
- Ammonia-N
- Total Phosphorous
- Total Suspended Solids (TSS)
- TKN (Monthly)

The following locations into Sleepy Hollow Creek from Wastewater Plant #3 are sampled quarterly:

- 1) Effluent to Drainage Ditch (Squaw Creek / unnamed ditch to Sleepy Hollow)
- 3) Terra Cotta Road downstream of drainage pond
- 4) Illinois Route 31 north of east Brighton Lane
- 5) Illinois Route 31 between Squaw Creek Road and Half Mile Road
- 6) Along Ames Road downstream of Thunderbird Lake
- 7) Where Sleepy Hollow crosses on Colby Point Road

The parameters analyzed for Sleepy Hollow Creek include the following:

- Total Phosphorous
- Sulfate
- Chloride
- Total Dissolved Solids (TDS)
- Total Suspended Solids (TSS)
- Hardness
- pH
- Temperature
- Total Nitrogen

Water samples are collected once per month from Silver Creek and Sleepy Hollow Creek as part of the Fox River Study and managed by the Friends of the Fox

- 1) Silver Creek - Lake Shore Drive and East Park Lane
- 2) Sleepy Hollow Creek – Colby Point Road

Other Receiving Waters with no Documented Monitoring

- Kishwaukee River
- Hampton Hills Unnamed Wetlands
- Woods Creek – North & South Branches
- Veterans Acres Pond

Part D. Summary of Year 18 Stormwater Activities

(Present a summary of the storm water activities you plan to undertake during the next reporting cycle, including an implementation schedule in the sections following the table.)

The table shown below summarizes the BMPs committed to for Year 18. Specific BMPs and measurable goals for Year 18 program development activities are presented in the sections following the table. **The City submitted a new Notice of Intent during Year 16 to more accurately reflect the current program activities and subsequent Annual Reports are based on the new NOI.**

Note: X indicates BMPs committed to for Year 18.

Year 18	
MS4	
A. Public Education and Outreach	
X	A.1 Distributed Paper Material
	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
	A.5 Classroom Education Material
X	A.6 Other Public Education
B. Public Participation/Involvement	
	B.1 Public Panel
X	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
	B.4 Public Hearing
	B.5 Volunteer Monitoring
X	B.6 Program Coordination
X	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
X	C.8 Pollutant Field Testing
	C.9 Public Notification
	C.10 Other Illicit Discharge Controls

Year 18	
MS4	
D. Construction Site Runoff Control	
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
X	D.5 Public Information Handling Procedures
X	D.6 Site Inspection/Enforcement Procedures
	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
	E.6 Post-Construction Inspections
	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
X	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water Control
X	F.4 Municipal Operations Waste Disposal
X	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

1. Public Education and Outreach

The City is committing to conduct Public Education and Outreach as part of its permit. Public Education and Outreach requires implementation of a program to distribute educational material 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 to stormwater runoff. The City commits to implementation of BMPs related to A.1, A.3, A.4 and A.6 as described below.

BMP No. A.1

Brief Description of BMP:

The City and McHenry County distribute a variety of paper materials from a number of sources informing the public about stormwater or water quality and why they are important.

Measurable Goal(s), including frequencies:

The materials chosen will be targeted toward residents, businesses and other potential pollutant sources to create better awareness and knowledge of the issue.

Milestones: **Year 18:** The City will continue to distribute the educational materials and will work to increase distribution by 5%.

BMP No. A.3

Brief Description of BMP:

The City publishes information about stormwater or water quality in the City newsletter and on the City website.

Measurable Goal(s), including frequencies:

The articles chosen will be selected to increase the resident's knowledge and awareness regarding stormwater and water quality.

Milestones: **Year 18:** Publish information articles in the City newsletter at least once a year.

BMP No. A.4

Brief Description of BMP:

The City has designed and constructed a rain garden with the Wildflower Preservation and Propagation Committee (WPPC). The City will also continue its presence and support for the annual Drug Take Back Initiative Program sponsored by the Police Department. This activity provides another opportunity to engage the public on stormwater related issues and why they are important to all residents and businesses.

Measurable Goal(s), including frequencies:

The City will continue to maintain and enhance the rain garden as an education tool for residents and to demonstrate their value for managing stormwater runoff.

Milestones: **Year 18:** Maintain existing rain garden and seek additional partnerships as funding allows.

BMP No. A.6

Brief Description of BMP:

The City will utilize other means such as the City website, library, etc. as conduits for reaching additional residents.

Measurable Goal(s), including frequencies:

The City will provide specific information to the targeted residents on stormwater and water quality issues.

Milestones: **Year 18:** The City will update and modify the information provided as needed to stay current and informative.

2. Public Participation/Involvement

The City will perform activities and services related to the Public Participation/Involvement minimum control measure. BMPs will be implemented under BMP numbers B.2, B.3, B.4, B.6 and B.7 as described below.

BMP No. B.2

Brief Description of BMP:

City staff regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality.

Measurable Goal(s), including frequencies:

City staff will continue to perform these activities and work to increase participation from its staff and attendance by residents.

Milestones: **Year 18:** The City will participate in at least one volunteering activity each year and work to increase attendance by 5%.

BMP No. B.3

Brief Description of BMP:

The City will work to conduct stakeholder meetings as needed to connect directly with impacted residents and to distribute information.

Measurable Goal(s), including frequencies:

Stakeholder meetings offer direct input on issues impacting residents and provide an opportunity to gather feedback as well as disseminate stormwater related information.

Milestones: **Year 18:** The City will work to hold one stakeholder meeting.

BMP No. B.4

Brief Description of BMP:

The City will hold a public meeting to discuss topics including steps the public can take to reduce pollutants to stormwater runoff or the impacts of stormwater runoff on local water bodies.

Measurable Goal(s), including frequencies:

The goal is to increase public education and involvement regarding the City's stormwater management and NDPES program and their knowledge on ways they can help.

Milestones: **Year 18:** The City will work to hold one public meeting each permit year.

BMP No. B.6

Brief Description of BMP:

The City has coordinated with other local municipalities and agencies on regional stormwater related issues. The City has been attending and participating in the Fox River Study Group monthly meetings. The City is also a member of the Silver Creek and Sleepy Hollow Creek Watershed planning coalition.

Measurable Goal(s), including frequencies:

The City will continue to partner with the County and other agencies to coordinate efforts such as watershed studies and other issues that impact more than one individual municipality.

Milestones: **Year 18:** The City will work to coordinate with other local agencies regarding stormwater related issues.

BMP No. B.7

Brief Description of BMP:

The City has hosted elementary schools and other residents with tours through various departments of the City.

Measurable Goal(s), including frequencies:

The tours allow the City to educate the participants on the various functions of the City, as well as specifically provide them with knowledge of stormwater vs sanitary, why we treat sanitary and why keeping stormwater is important. This year school groups were given tours and conduct water monitoring for their science classes at Sanitary Treatment Plant #2 in the receiving stream (Crystal Creek). The City of Crystal Lake has previously made monetary contributions to the Friends of the Fox so they can continue these environmental education practices.

School Group Participation 2019-2020:

- **345 Students – Typical school locations include Bernotas Middle School and Lundahl Middle School**

Milestones: **Year 18:** The City will continue with the education tour program for students ranging from elementary to college ages.

3. Illicit Discharge Detection and Elimination

The City commits to performing some activities related to the Illicit Discharge Detection and Elimination minimum control. BMPs will be implemented under BMP numbers C.1, C.2, C.3, C.4, C.5, C.6, C.7 and C.8 as described below.

BMP No. C.1

Brief Description of BMP:

The City has a GIS based mapping system of the receiving streams and outfalls.

Measurable Goal(s), including frequencies:

The City will work to finalize the GIS system and outfall inventory mapping.

Milestones: **Year 18:** The City will complete 20% more of the mapping and outfall inventory.

BMP No. C.2

Brief Description of BMP:

The City and County have ordinances in place to allow for regulatory action if an illicit discharge is observed, reported or discovered.

Measurable Goal(s), including frequencies:

The City will continue to enforce the existing ordinances that prevent non-stormwater discharges to reduce or eliminate pollutants from entering the municipal separate storm sewer system.

Milestones: **Year 18:** The City will continue to enforce the existing ordinances.

BMP No. C.3

Brief Description of BMP:

The City utilizes various departments to identify and report potential illicit discharges. The City also investigates reports of illicit discharges.

Measurable Goal(s), including frequencies:

The City will continue to identify and investigate potential illicit discharges to reduce or eliminate the impact on local stormwater systems and receiving streams.

Milestones: **Year 18:** The City will continue to identify and investigate potential illicit discharges.

BMP No. C.4

Brief Description of BMP:

The City uses all information available including development plans and the GIS system to trace and eliminate illicit discharges.

Measurable Goal(s), including frequencies:

The City will track, investigate and eliminate illicit discharges as reported, observed or identified

Milestones: **Year 18:** The City will trace and eliminate illicit discharges as needed.

BMP No. C.5

Brief Description of BMP:

The City and County both have enforcement procedures in place to assist with the removal of an identified illicit discharge.

Measurable Goal(s), including frequencies:

The City will utilize enforcement procedures as needed to eliminate illicit discharges to reduce or eliminate the amount of pollutants entering the municipal separate storm sewer system.

Milestones: **Year 18:** The City will utilize enforcement procedures as needed to eliminate illicit discharges.

BMP No. C.6

Brief Description of BMP:

The City will evaluate the illicit discharge and detection program for effectiveness and possible improvements.

Measurable Goal(s), including frequencies:

Regular evaluation of the program can provide valuable input and opportunity for improvement.

Milestones: **Year 18:** The City will evaluate the program at least once a year.

BMP No. C.7

Brief Description of BMP:

The City regularly performs dry weather screening as part of its maintenance activities.

Measurable Goal(s), including frequencies:

The City will work to utilize inspection forms while performing the dry weather screening inspections.

Milestones: **Year 18:** The City will evaluate its dry weather inspection form and procedures.

BMP No. C.8

Brief Description of BMP:

The City regularly samples, test and documents the results of influent and effluent flow to various lakes and streams throughout the community. The City will continue or expand the program as needed to meet the ILR40 permit requirements and conditions.

Measurable Goal(s), including frequencies:

The City analyzes the stormwater quality to determine acceptable levels of water quality of its lakes and streams.

Milestones: **Year 18:** The City will continue the testing program and expand by 5% or as funding allows. Crystal Lake Outlet (DTZR-01) is identified on the IEPAs 303d list as impaired for primary recreational contact (fecal coliform).

BMP No. C.10

Brief Description of BMP:

The City has developed a monitoring and assessment program to evaluate the effectiveness of the BMPs on the receiving streams through the use of water quality sampling and testing provided by local watershed groups. To date, no TMDLs have been identified for the receiving streams in the City. The City will monitor the progress of watershed work groups and the establishment of any applicable TMDLs or other Watershed Management Plans. The City will continue the monitoring and assessment program.

Measurable Goal(s), including frequencies:

The goal of this activity is to monitor receiving streams for potential changes due to the discharge of stormwater and ensure compliance with applicable TMDLs and Watershed Management Plans to reduce waste loads.

Milestones: **Year 18:** The City will continue the monitoring and assessment program.

4. Construction Site Runoff Control

The City will perform activities and services related to the Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP numbers D.1, D.2, D.4, D.5 and D.6 as described below.

BMP No. D.1

Brief Description of BMP:

The City and County have ordinances in place to allow for review, inspection, and enforcement of construction site runoff controls.

Measurable Goal(s), including frequencies:

The City will continue to review, inspect and enforce the ordinance regulations to prevent or reduce the discharge of sediment or other pollutants from construction sites.

Milestones: **Year 18:** The City will enforce the regulatory procedures.

BMP No. D.2

Brief Description of BMP:

The City and County have ordinances in place to allow for review, inspection, and enforcement of construction site runoff control BMP's.

Measurable Goal(s), including frequencies:

The City will continue to review, inspect and enforce the ordinance regulations to prevent or reduce the discharge of sediment or other pollutants from construction sites as it relates to BMP's.

Milestones: **Year 18:** The City will enforce the regulatory procedures.

BMP No. D.4

Brief Description of BMP:

The City has procedures that proposed development plans to be reviewed for compliance.

Measurable Goal(s), including frequencies:

The City will continue to require all developments to be reviewed for compliance with NPDES regulations and other City ordinance standards.

Milestones: **Year 18:** The City will enforce the review procedures.

BMP No. D.5

Brief Description of BMP:

The City has produces in place for receiving, logging and addressing publicly reported issues.

Measurable Goal(s), including frequencies:

The City will continue to respond to publicly reported issues in a timely manner and investigate as needed to address them.

Milestones: **Year 18:** The City will respond accordingly.

BMP No. D.6

Brief Description of BMP:

The City and County regulatory programs allow for inspection and enforcement procedures for construction site runoff control.

Measurable Goal(s), including frequencies:

The City will continue to inspect all new developments for compliance with the City and County ordinances.

Milestones: **Year 18:** The City will enforce the ordinance.

5. Post-Construction Runoff Control

The City will perform activities and services related to the Post-Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP number E.2, E.3, E.4, and E.5 as described below.

BMP No. E.2

Brief Description of BMP:

The City and County have ordinances in place that allow for the review, inspection and enforcement of post-construction runoff control measures.

Measurable Goal(s), including frequencies:

The City will continue to enforce the ordinances for compliance with post construction runoff controls to prevent or reduce the discharge of contaminants from construction sites.

Milestones: **Year 18:** The City will enforce the ordinances.

BMP No. E.3

Brief Description of BMP:

The City has procedures in place for assisting and evaluating the long term maintenance of stormwater best management practices.

Measurable Goal(s), including frequencies:

The City will continue to assist developers, residents and other target audiences by providing sample maintenance plans and conducting inspections.

Milestones: **Year 18:** The City will increase distribution of the sample maintenance by 10% and conduct approximately 20% of the inspections.

BMP No. E.4

Brief Description of BMP:

The City has procedures in place for the pre-construction review of BMP designs. These procedures include pre-application meetings for large scale developments.

Measurable Goal(s), including frequencies:

The City will continue the review procedures and modify or evaluate as needed to maintain compliance.

Milestones: **Year 18:** The City will continue the BMP review procedures.

BMP No. E.5

Brief Description of BMP:

The City has procedures in place to perform site inspections during construction by qualified personnel.

Measurable Goal(s), including frequencies:

The City will continue with the site inspections procedures to verify compliance of BMP's in reducing and/or preventing the discharge of contaminants to local waterways and storm sewers.

Milestones: **Year 18:** The City will continue with the site inspection procedures.

6. Pollution Prevention/Good Housekeeping

This minimum control measure involves the development and implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. This program must include a training program for municipal employees. The City will perform BMPs under BMP numbers F.1, F.2, F.3, F.4, F.5 and F.6 as described below.

BMP No. F.1

Brief Description of BMP:

The City regularly provides training to staff regarding a variety of topics aimed at reducing or preventing the discharge of contaminants from municipal operations.

Measurable Goal(s), including frequencies:

The City will continue with the training program aimed at educating City staff on ways to reduce or prevent stormwater pollution from City activities.

Milestones: **Year 18:** The City will continue with the training program..

BMP No. F.2

Brief Description of BMP:

The City has an inspection and maintenance program in place to evaluate and maintain stormwater facilities. These activities include the City's extensive street sweeping program.

Measurable Goal(s), including frequencies:

The City will continue the inspection and maintenance program of stormwater facilities to reduce the amount of debris and pollutants that enter the stormwater system.

Milestones: **Year 18:** The City will continue the inspection program and evaluate approximately 20% of the stormwater system.

BMP No. F.3

Brief Description of BMP:

The City has procedures in place to reduce or prevent the discharge of contaminants to the stormwater system from municipal operations

Measurable Goal(s), including frequencies:

The City will continue to be proactive in evaluating municipal activities that could potentially introduce pollutants to the stormwater system and develop methods to reduce or prevent them.

Milestones: **Year 18:** The City will continue with the municipal control measures and evaluate additional methods as needed.

BMP No. F.4

Brief Description of BMP:

The City has procedures that require appropriate disposal of all wastes generated during municipal operations.

Measurable Goal(s), including frequencies:

The City will continue with the disposal program and requirements to reduce or eliminate the release of pollutants from municipal operations.

Milestones: **Year 18:** The City will continue with the municipal operations disposal program.

BMP No. F.5

Brief Description of BMP:

The City, County and State have strict development regulations related to floodplain management and the evaluation of potential development in these areas.

Measurable Goal(s), including frequencies:

The City will continue to enforce the requirements for potential development in special flood hazard areas.

Milestones: **Year 18:** The City will continue to enforce the flood management requirements.

BMP No. F.6

Brief Description of BMP:

The City regularly evaluates their municipal activities for additional ways to reduce or eliminate pollutants from entering the stormwater system including salt reduction, additional de-icing alternatives and other actions.

Measurable Goal(s), including frequencies:

The City will continue to evaluate and develop methods or changes to existing practices that can reduce or eliminate pollutants from entering the stormwater system from municipal activities.

Milestones: **Year 18:** The City will continue the evaluation and monitoring program.

Specific Pollution Prevention /Good Housekeeping activities during permit Year 17 were as follows:

- 1) The City has a Storm Water Management Ordinance (No. 6535). The Storm Water Ordinance documents an illicit discharge and connection section.**
- 2) All public works divisions have prepared and implemented Spill Prevention Control and Countermeasure Plans (SPCC). As a requirement of the SPCC Plan, inspections are conducted and documented at each of the facility divisions.**
- 3) All employees in Public Works are trained in spill and clean-up procedures. This includes storm water control and flood management practices.**
- 4) Chemicals and waste products in each division are stored following the SPCC guidelines.**
- 5) Crystal Lake businesses with the potential for accidental or illicit discharges are required at a minimum to fill out a Wastewater Discharge Questionnaire, and in some cases a Slug Control Plan or Accidental Spill Plan. The Plans document the potential for spills and the prevention of pollutants into both sanitary and storm water sources.**

6) All employees are trained in observing the potential for illicit discharges from industrial, commercial, and residential sources.

7) An Annual Phosphorous Optimization Reduction Report is sent to the IEPA. The report details practices taken by the City's wastewater treatment plants and businesses in Crystal Lake to reduce the use and discharge of Phosphorus.

Part E. Notice of Qualifying Local Program

The City of Crystal Lake established an efficient and effective stormwater management program that is well beyond the minimum requirements of the federally mandated NPDES Phase II program during the previous 10-year permit period. The City will continue to monitor the existing program and modify it as necessary to continue to maintain compliance with the NPDES requirements. The City also partners with McHenry County and Friends of the Fox for various activities related to their NPDES program. Information related to the activities is attached.

1. Public Education and Outreach:

The City of Crystal Lake developed a comprehensive program during the previous 10 year NOI permit period that provides Public Education and Outreach resources to its residents through printed materials and the City website. The City will continue this program and the associated activities.

This program relates to BMP numbers A.1, A.3, A.4 and A.6.

2. Public Participation/Involvement:

The City and McHenry County developed a comprehensive program to address the Public Participation/Involvement requirement developed during the initial 10 years of the NPDES Phase II permit. The details are outlined in the previous sections of this annual report.

These programs relate to BMP numbers B.2, B.3, B.6 and B.7.

3. Illicit Discharge Detection and Elimination:

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Illicit Discharge Detection and Elimination requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP numbers C.1, C.2, C.3, C.4, C.5, C.6, C.7 and C.8.

4. Construction Site Runoff Control:

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Construction Site Runoff Control requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP numbers D.1, D.2, D.4, D.5 and D.6.

5. Post-Construction Runoff Control:

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Post-Construction Runoff Control requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP numbers E.2, E.3, E.4, and E.5.

6. Pollution Prevention/Good Housekeeping:

The City developed a comprehensive program during the previous 10 year NOI permit period that addresses the Pollution Prevention/Good Housekeeping requirements of the NPDES Phase II program. The goal of this BMP is to identify current practices that contribute to stormwater pollution and implement programs and procedures for municipal activities that curtail the discharge of pollutants to storm sewer systems. The applicable program details are outlined in the previous sections of this report.

These programs relate to BMP number F.1, F.2, F.3, F.4, F.5 and F.6.

