

**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 2014	TO: MARCH 2015
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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: Victor Ramirez (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"/>

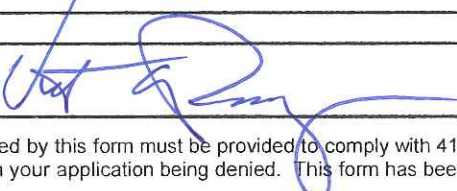
B.
Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum 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 29, 2015
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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 11	Year 12	Year 13	Year 14	Year 15	
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 11	Year 12	Year 13	Year 14	Year 15	
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 12 are described below.

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. During the current permit year a number of informational materials were produced and distributed to the public relating to the updated and revised McHenry County Stormwater Management Ordinance.

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. During the current permit year an article on flooding was included in the City newsletter in the June 2014 issue.

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. The City has also constructed a bio-swale at the Cove Pond Wetland.

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. This year's activities included tours of the City's wastewater and drinking water treatment plants by approximately 340 people.

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. The City is actively involved in the newly formed Silver and Sleepy Hollow Creeks Watershed Coalition including attending the monthly meetings.

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. This year's activities included coordinating with the County Stormwater Commission and updating the Hazard Mitigation Plan

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. Staff changes in the current permit year delayed this process, but the City is still moving forward with the plans and commitment to develop the system.

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. This year 10 illegal cross connections were identified. 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. 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.

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. During the current permit year, the City Engineer attended 5 seminars, two staff engineers attended 14 seminars combined and three staff inspectors attended 8 training seminars combined.

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. The City will continue this program aimed at reducing 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:

1) Businesses and Commercial Areas

- Storm Water Discharge at Sky Ridge & Alexandria (September 24, 2014)

City Public Works personal observed a work truck from National Power Rodding Corporation, discharging storm water into a sanitary manhole connected to the Crystal Lake sanitary sewer system. This was a violation of the City's Sewer Use Ordinance and the practice was stopped. The City required that National Power Rodding Corporation respond in writing to this issue and document how this practice will be prevented in the future. The City informed this company that permission for this practice may be authorized 48 hours in advance if it is deemed not to cause interference or pass through at the POTW.

- Potential Storm Water Discharge at Merlin Auto Service (February 27, 2015)

The City conducted two site inspections (October 21, 2014 & February 10, 2015), based on complaints received by the USEPA and notifications to the City. The facility inspected was located at Merlin Auto Service (191 West Virginia Street). The facility does not have a triple catch basin, therefore floor washings have allegedly been discharged into storm water basins in the parking lot or adjacent street drains. The materials may have contained oily residues or antifreeze coolant. The management indicated that the floors will no longer be washed down with water. The dumping of mop water into the parking lot storm drain could not be verified. The facility did respond in writing to these issues including the improvement of drum containment storage areas.

2) Storm Water Receiving Bodies – Monitoring

- Crystal Lake – samples were collected once per month at the following locations:
 - Cove Pond discharge pipe into the lake off of North Shore Drive
 - Lake influent into Crystal Creek at Riverside Dr. and Lake Avenue
 - Pinewood and Honeysuckle Dr. inlet 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)
 - Lippold Park – East, Center, and West (all are adjacent to Route 176)
- Cove Pond – samples are collected every other week at the following locations:
 - Influent culvert pipe into Cove Pond near Green Oaks Drive / Crystal Lake Avenue

- Effluent discharge pipe from Cove Pond along North Shore Drive
- Groundwater Monitoring
 - Six (6) watershed wells northwest of Crystal Lake are monitored quarterly.

Note: Water elevations are recorded at some of the above locations during the monitoring events. Water volumes and depths are recorded at each well location.

The parameters analyzed at the above locations include the following:

- Total Suspended Solids (TSS)
- Carbonaceous Biological Oxygen Demand (CBOD)
- Ammonia-N
- Total Phosphorous
- Fecal Coliform
- Total Coliform
- Chlorides
- Zinc

The following locations from the wastewater plants are sampled weekly.

- 1) Drainage Ditch to Squaw Creek /unnamed ditch to Sleepy Hollow along railroad tracks, downstream from Sanitary Treatment Plant #3 (collected once per week). Parameters include the following:

- Temperature
- pH

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

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 once per month.

- 1) Effluent to Drainage Ditch (Squaw Creek / unnamed ditch to Sleepy Hollow)
- 2) Terra Cotta Road downstream of drainage pond

- 3) Illinois Route 31 north of east Brighton Lane
- 4) Illinois Route 31 between Squaw Creek Road and Half Mile Road
- 5) Along Ames Road downstream of Thunderbird Lake
- 6) Where Sleepy Hollow crosses on Colby Point Road

Note: As of January 1, 2015 monitoring at this location has been reduced to quarterly.

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

The following location is sampled from Silver Creek once per month as part of the Fox River Study and managed by the Friends of the Fox.

- 1) Lake Shore Drive and East Park Lane

Three Oaks Recreation Area (TORA)

- ❖ Three samples are collected from the South Lake for clarity (Secchi Disks) and analyzed for the same parameters as the Crystal Lake samples.
- ❖ Three samples are collected from the North Lake for clarity (Secchi Disks) and analyzed for the same parameters as the Crystal Lake samples.

Note: the monitoring at TORA is part of the Volunteer Lake Management Program (VLMP), which is managed through the Illinois Environmental Protection Agency (IEPA)

Other Receiving Waters with no Documented Monitoring

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

Pollution Prevention /Good Housekeeping (March 2014 thru March 2015)

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, quarterly 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.

Education and Outreach The City has been attending and participating in the Silver Creek and Sleepy Hollow Creek Watershed planning coalition meetings, which are held quarterly. School groups are also given tours and conduct water monitoring for their science classes at Sanitary Treatment Plant #2 in the receiving stream (Crystal Creek).

Part D. Summary of Year 13 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 13. Specific BMPs and measurable goals for Year 13 program development activities are presented in the sections following the table.

Note: X indicates BMPs committed to for Year 13.

Year 13	
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 13	
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 13:** The City will continue to distribute the educational materials and will work to increase distribution by 10%.

BMP No. A.3

Brief Description of BMP:

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

Measurable Goal(s), including frequencies:

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

Milestones: **Year 13:** 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 13:** 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 13:** 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.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 13:** 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 13:** The City will work to hold one stakeholder meeting.

BMP No. B.6

Brief Description of BMP:

The City has coordinated with other local municipalities and agencies on regional stormwater related issues.

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 13:** 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.

Milestones: **Year 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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.

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 13:** The City will continue the testing program and expand by 5% or as funding allows.

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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** 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 13:** The City will continue the evaluation and monitoring program.

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.

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.

Part F. Construction Projects Conducted During Year 12

(Provide a list of construction projects your entity has paid for during the reporting period.)

Project Name	Project Size (acres)	Construction Start Date	Construction End Date
Country Club Watermain Stage 2	1.8	3/2014	7/2014
S Main Street	5.4	2/2015	Ongoing