

# Illinois Environmental Protection Agency

Bureau of Water • 1021 N. Grand Avenue E. • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## **Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT**

for NPDES Permit for Storm Water Discharges from Separate Storm Sewer Systems (MS4)

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Compliance Assurance Section at the above address. Complete each section of this report.

Report Period: From March, 2016	To March, 2	017	Permit No. ILR40 0482
MS4 OPERATOR INFORMATION: (As it	appears on the	current permit)	
Name: City of Zion		Mailing Address 1: 28	28 Sheridan Rd
Mailing Address 2:			County: Lake
City: Zion	State:	IL Zip: 60099	Telephone: 847-746-4057
Contact Person: Ron Colangelo		Email Address: ronc@:	zion.il.us
(Person responsible for Annual Report)		=	
Name(s) of governmental entity(ies) in wh	ich MS4 is loc	ated: (As it appears on t	he current permit)
City of Zion			
THE FOLLOWING ITEMS MUST BE ADDR			
A. Changes to best management practices (	check approprie	ite BMP change(s) and att	ach information
regarding change(s) to BMP and measure	able goals.)		
1. Public Education and Outreach	□ 4	Construction Site Runoff	Control
2. Public Participation/Involvement	□ 5	Post-Construction Runof	ff Control
3. Illicit Discharge Detection & Eliminati	on 🗌 6	Pollution Prevention/God	od Housekeeping
B. Attach the status of compliance with perm management practices and progress towa MEP, and your identified measurable goal	rds achieving this for each of th	ne statutory goal of reducil e minimum control measu	res.
C. Attach results of information collected and	i analyzed, incl	uding monitoring data, if a	ny during the reporting period.
D. Attach a summary of the storm water activities implementation schedule.)	vities you plan t	o undertake during the ne	xt reporting cycle ( including an
E. Attach notice that you are relying on anoth	her government	entity to satisfy some of y	our permit obligations (if applicable).
F Attach a list of construction projects that y	our entity has p	aid for during the reporting	g period.
Any person who knowingly makes a false, flct commits a Class 4 felony. A second or subse	Hious or fraudi	lent material statement, or	ally or in writing, to the Illinois EPA
12 CL			5 - 4/-/> Date:
Owner Signature:		7	Date:
Ron Colangelo		Director Put	olic Works & Engineering
Printed Name:			Title:
MAIL COMPLETED FORM TO: epa.ms4ann	ualinsp@illinois	.gov	
	HOLL A OF NOV		

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

WATER POLLUTION CONTROL **COMPLIANCE ASSURANCE SECTION #19** 1021 NORTH GRAND AVENUE EAST

**POST OFFICE BOX 19276** 

SPRINGFIELD, ILLINOIS 62794-9276

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form WPC 691 Rev 6/10 has been approved by the Forms Management Center.

# Illinois Environmental Protection Agency Annual Facility Inspection Report for General Permit for Discharges from Small MS4s

# **CITY OF ZION**

Permit No. ILR40 0482 Permit Year 14: March 2016 to March 2017

# **Contents**

Part A. Changes to Best Management Practices	A-1
Part B. Status of Compliance with Permit Conditions	.B-1
Part C. Information and Data Collection Results	. <b>C-1</b>
Part D. Summary of Year 14 Stormwater Activities	.D-1
Part E. Notice of Qualifying Local Program	E-1
Part F. Construction Projects Conducted During Year 13	F-1

Table of Contents

# Part A. MS4 Changes to Best Management Practices, Year 14

Information regarding the status of all of the BMPs and measurable goals described in the MS4's NOI is provided in the following table.

Note: "X" indicates BMPs that were implemented in accordance with the MS4's NOI

✓ indicates BMPs that were changed during Year 14

Year 14	
MS4	
A. Public	Education and Outreach
X	A.1 Distributed Paper Material
	A.2 Speaking Engagement
	A.3 Public Service Announcement
X	A.4 Community Event
X	A.5 Classroom Education Material
Х	A.6 Other Public Education
	4
B. Public	Participation/Involvement
	B.1 Public Panel
	B.2 Educational Volunteer
	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 I	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
	C.5 Illicit Source Removal Procedures
	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
X	C.9 Public Notification
X	C.10 Other Illicit Discharge Controls

Year 14	
MS4	
D. Constr	uction Site Runoff Control
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	D.3 Other Waste Control Program
X	D.4 Site Plan Review Procedures
	D.5 Public Information Handling
X	Procedures
X	D.6 Site Inspection/Enforcement
^	Procedures
	D.7 Other Construction Site Runoff
	Controls
E. Post-Co	onstruction 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
X	E.6 Post-Construction Inspections
	E.7 Other Post-Const Runoff Controls
F. Pollution	on Prevention/Good Housekeeping
X	F.1 Employee Training Program
Х	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water
	Control
X	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
	F.6 Other Municipal Operations Controls

Additional information about the changes that were made to the BMPs described in the City of Zion's NOI during Year 14 is provided below.

#### B. Public Participation/Involvement

#### **B.6** Program Coordination

Measurable Goal(s): Continue to attend and participate in MAC meetings.

Due to scheduling conflicts, the City of Zion was unable to attend and participate in several of the MAC meetings facilitated by SMC during Year 14. Meeting materials were obtained and reviewed for all MAC meetings that were missed. During Year 15, the City of Zion anticipates that it will be able to resume its participation in MAC meetings.

# Part B. MS4 Status of Compliance with Permit Conditions, Year 14

#### Stormwater Management Activities, Year 14

Please note that IEPA issued a new version of its General NPDES Permit No. ILR40 (Permit), effective on March 1, 2016. The bulk of City of Zion's efforts during Year 14 consisted on reviewing and revising its NOI to comply with the new permit conditions. On behalf of all MS4s within the county, SMC performs activities related to each of the six minimum control measures which are described in detail in the SMPP. These BMPs, implemented at the county level, make significant strides in achieving the statutory goal of reducing the discharge of pollutants to the MEP as watershed boundaries are not constrained by municipal borders. The LCSMC SMPP can be viewed at the following link: [cityofzion.com].

The stormwater management activities that the MS4 performed during Year 14, including the MS4's BMPs and measurable goals, are described in detail in the MS4's NOI. A concise summary of the status of the MS4's stormwater management program, as of the end of Year 14, is provided below.

#### A. Public Education and Outreach

As part of its stormwater management program, the City of Zion conducts a number of Public Education and Outreach activities that educate and inform the public about the impacts of stormwater runoff on receiving water bodies and the steps that the public can take to reduce those impacts. In coordination and collaboration with the QLP, the City of Zion will continue to perform activities related to the Public Education and Outreach MCM, as described below.

### A.1 Distributed Paper Material

In addition to the QLP's efforts to distribute informational materials throughout Lake County, which are described in more detail in Attachment A, the City of Zion works to compile and distribute within the City of Zion a variety of materials related to stormwater management from a variety of sources, including the Lake County Stormwater Management Commission (i.e., QLP), IEPA, US EPA, the Center for Watershed Protection, and other agencies and organizations. The City of Zion maintains a list of the types of materials it has made available to the public and the methods through which such materials have been distributed.

Measurable Goal(s): Distribute informational materials from "take away" rack at City Hall, 2828 Sheridan Road.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

#### A.4 Community Event

In addition to the QLP's efforts to sponsor or co-sponsor workshops and provide educational presentations, which are described in more detail in Attachment A, the City of Zion supports the efforts of the Solid Waste Agency of Lake County (SWALCO) to implement programs throughout Lake County that increase reuse, recycling, and composting and reduce reliance on landfills. As part of these waste management efforts, SWALCO conducts dozens of household hazardous waste collection events each year at various locations throughout the county. The City of Zion publicizes these household hazardous waste collection events to encourage the public to participate in such events.

Measurable Goal(s): Sponsor and/or attend stormwater management-related community

outreach events, including meetings.

Provide notice of SWALCO household hazardous waste collection events

on City of Zion's website.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### A.5 Classroom Education Material

In addition to the QLP's efforts to educate local students, teachers, and other local stakeholders, which are described in more detail in Attachment A, upon request, the City of Zion will provide educational presentations on stormwater management-related topics to local students and teachers and/or other local stakeholders. The City of Zion maintains a list of the stormwater management-related educational presentations that it has provided at local schools. Additionally, upon request, the City of Zion will provide information and training to local students and teachers and/or other local stakeholders interested in conducting storm drain stenciling.

Measurable Goal(s): Upon request, provide stormwater management-related educational

presentation to local students and teachers and/or other local

stakeholders.

Upon request, provide information and training to local students and teachers and/or other local stakeholders interested in conducting storm

drain stenciling.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### A.6 Other Public Education

In addition to the QLP's efforts to distribute information via its website, which are described in more detail in Attachment A, the City of Zion maintains a website that contains materials and resources related to stormwater management. The website includes a webpage that provides information about IEPA's NPDES Stormwater Program, information about the City of Zion's stormwater management program, including its NOI, Permit, and Annual Reports, and links to a

number of other stormwater management-related resources, including the Lake County Stormwater Management Commission's (i.e., QLP's) website.

Measurable Goal(s): Maintain and update the portion of the City of Zion website dedicated to

its stormwater management program.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### B. Public Education and Outreach

As part of its stormwater management program, the City of Zion conducts a number of Public Participation/Involvement activities that involve and engage the public in the implementation of its stormwater management program. In coordination and collaboration with the QLP, the City of Zion will continue to perform activities related to the Public Education and Outreach MCM, as described below.

### **B.6** Program Involvement

SMC serves as a Qualifying Local Program (QLP) for all Lake County MS4s. In this role, in 2002, SMC proactively formed the Municipal Advisory Committee (MAC) to provide a forum for representatives of local MS4s to discuss, among other topics, the implementation of IEPA's NPDES Stormwater Program. SMC plans to continue to facilitate quarterly MAC meetings to bring Lake County MS4s together to discuss the implementation of IEPA's NPDES Stormwater Program. The City of Zion will continue to attend and participate in the quarterly MAC meetings.

Measurable Goal(s): Continue to attend and participate in MAC meetings.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### **B.7** Other Public Involvement

The City of Zion provides and publicizes a phone number that the public can use to submit information about stormwater-related problems and concerns. The City of Zion documents and tracks the resolutions of problems and complaints reported by the public, including reports of illicit discharges and illegal dumping.

Measurable Goal(s): Provide phone number that the public can use to submit information about

stormwater-related problems and concerns.

As needed, follow up on reports of stormwater-related problems and

concerns received from the public.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

## C. Illicit Discharge Detection and Elimination

As part of its stormwater management program, the City of Zion conducts a number of activities related to Illicit Discharge Detection and Elimination. In accordance with the current version of the Permit, the City of Zion's Illicit Discharge Detection and Elimination program includes:

- A storm sewer system map showing the locations of all outfalls and the names and locations of all waters that receive discharges from those outfalls;
- An ordinance or other regulatory mechanism that prohibits all non-stormwater discharges into the storm sewer system and provides the authority for appropriate enforcement procedures and actions;
- A plan to detect and address all non-stormwater discharges, including illegal dumping, into the storm sewer system;
- A program to educate public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste; and,
- Annual inspection of storm sewer outfalls for detection of non-stormwater discharges and illegal dumping.

In coordination and collaboration with the QLP, the City of Zion will continue to perform activities related to the Illicit Discharge Detection and Elimination MCM, as described below. Note that although the City of Zion intends to share responsibility for the implementation of the Illicit Discharge Detection and Elimination MCM with the QLP, as outlined in this NOI, the primary responsibility for the implementation of the Illicit Discharge Detection and Elimination MCM lies with the City of Zion.

# C.1 Sewer Map Preparation

The City of Zion has prepared a storm sewer system map showing the locations of all outfalls and the names and locations of all waters that receive discharges from those outfalls. The storm sewer system map is periodically maintained and updated to include outfalls associated with development projects and any previously unidentified outfalls.

Measurable Goal(s): Maintain and update storm sewer system map.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

# C.2 Regulatory Control Program

The City of Zion has adopted an illicit discharge ordinance that prohibits all non-stormwater discharges into the storm sewer system and provides the authority for appropriate enforcement procedures and actions. In addition, the Watershed Development Ordinance (WDO) includes provisions that prohibit illicit discharges to the storm sewer system during construction (i.e., prior to final site stabilization) on development sites.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with

the WDO.

Milestone(s):

The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

# C.3 Detection/Elimination Prioritization Plan

The City of Zion has developed and implemented a plan to detect and address all non-stormwater discharges, including illegal dumping, into the storm sewer system. Methods used to detect illicit discharges include annual visual dry weather screening, employee reporting, and public reporting. Outfalls with suspicious discharges are assessed to determine whether or not flow is observed and whether or not any indicators of an illicit discharge are present. The results of each inspection are recorded on a form, and based on such results, appropriate follow-up actions are prescribed. Such follow-up actions may include additional inspections, additional water quality sampling and analysis, source tracking, and source removal. Follow-up activities are generally prioritized based on the scope and magnitude of the associated illicit discharge.

Measurable Goal(s): Conduct annual inspections of storm sewer outfalls for detection of illicit discharges.

Continue to investigate potential illicit discharges identified by employees

conducting day-to-day activities and operations (e.g., storm sewer

cleaning and maintenance).

Continue to investigate potential illicit discharges identified through

public reporting.

Milestone(s):

The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

# C.4 Illicit Discharge Tracing Procedures

The City of Zion has developed procedures for tracking illicit discharges to their source. Methods that can be used to track illicit discharges to their source include drainage area investigations, storm sewer network investigations, and on-site investigations, which may involve smoke testing, dye testing, and/or video inspection to pinpoint the exact source of an illicit discharge. When an illicit discharge is identified, appropriate source tracking procedures are selected and used to track the discharge to its source.

Measurable Goal(s): As needed, implement procedures for tracking illicit discharges to their source.

Milestone(s):

The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### C.7 Visual Dry Weather Screening

In accordance with the current version of the Permit, the City of Zion conducts annual inspections of storm sewer outfalls for detection of non-stormwater discharges and illegal dumping. During such inspections, outfalls are assessed to determine whether or not flow is observed and whether or not any indicators of an illicit discharge are present. The results of each inspection are recorded on a form, and based on such results, appropriate follow-up actions are prescribed. Such follow-up actions may include additional inspections, additional water quality sampling and analysis, source tracking, and source removal. Follow-up activities are generally prioritized based on the scope and magnitude of the associated illicit discharge.

Measurable Goal(s): Conduct annual inspections of storm sewer outfalls for detection of illicit

discharges.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### C.9 Public Notification

The City of Zion provides and publicizes a phone number that the public can use to submit information about stormwater-related problems and concerns. The City of Zion documents and tracks the resolutions of problems and complaints reported by the public, including reports of illicit discharges and illegal dumping.

Measurable Goal(s): Provide phone number that the public can use to submit information about

stormwater-related problems and concerns, including illicit discharges. As needed, follow up on reports of illicit discharges and illegal dumping

received from the public.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

# C.10 Other Illicit Discharge Controls

As part of its Public Education and Outreach program, the City of Zion distributes informational materials to businesses and the general public about the hazards associated with illegal discharges and the improper disposal of waste.

Measurable Goal(s): Distribute informational materials about the hazards of illicit discharges

and illegal dumping from "take away" rack at City Hall and through the

City of Zion's website.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### D. Construction Site Runoff Control

Lake County has adopted a countywide Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County. The WDO, which is administered and enforced within the City of Zion by SMC, establishes standards for Construction Site Runoff Control. Although the City of Zion intends to share responsibility for the implementation of the Construction Site Runoff Control MCM with the QLP, as outlined in this NOI, the primary responsibility for the implementation of the Construction Site Runoff Control MCM lies with the SMC, as the City of Zion is currently a Non-Certified Community, as defined by the WDO.

#### D.1 Regulatory Control Program

The WDO is the regulatory mechanism that requires the use of soil erosion and sediment controls on development sites throughout Lake County. The soil erosion and sediment control provisions of the WDO are included in Article IV, Section B.1.j. of the ordinance. At a minimum, these standards apply to any development project that hydrologically disturbs 5,000 square feet of land or more. As a Non-Certified Community, SMC is responsible for the administration and enforcement of the WDO within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

#### D.2 Erosion and Sediment Control BMPs

Article IV, Section B.1.j of the WDO specifies the soil erosion and sediment control measures that must be used in conjunction with any land disturbing activities conducted on a development site. It specifies the use of a variety of soil erosion and sediment control BMPs including: minimize soil disturbance; protect adjoining properties from erosion and sedimentation; complete installation of soil erosion and sediment control features prior to commencement of hydrologic disturbance; stabilize disturbed areas within 7 days of active disturbance; avoid disturbance of streams whenever possible; use controls that are appropriate for the size of the tributary drainage area; protect functioning storm sewers from sediment; prevent sediment from being tracked onto adjoining streets; limit earthen embankments to slopes of 3H:1V; identify soil stockpile areas; and utilize statewide standards and specifications as guidance for soil erosion and sediment control. As a Non-Certified Community, SMC is responsible for the administration and enforcement of the WDO within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

### D.3 Other Waste Control Program

Article IV, Section B.1.j of the WDO includes provisions related to the control of waste and debris during construction on development sites. As a Non-Certified Community, SMC is responsible for the administration and enforcement of the WDO within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

#### **D.4** Site Plan Review Procedures

A community's designated enforcement officer is responsible for reviewing and permitting development plans and for administering and enforcing the provisions of the WDO. Within certified communities (i.e., communities certified by SMC to administer and enforce the provisions of the WDO), responsibility for reviewing and permitting development plans and for administering and enforcing the provisions of the WDO lies with the MS4; within non-certified communities, the designated enforcement officer is SMC's chief engineer. Since the City of Zion is a Non-Certified Community, SMC's Chief Engineer is responsible for reviewing and permitting development plans and for administering and enforcing the provisions of the WDO within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

# D.5 Public Information Handling Procedures

The City of Zion provides and publicizes a phone number that the public can use to submit information about stormwater-related problems and concerns. The City of Zion documents and tracks the resolutions of problems and complaints reported by the public, including reports of soil erosion and sediment control issues on development sites. Since the City of Zion is a Non-Certified Community, SMC's Chief Engineer is responsible for investigating reports of soil erosion and sediment control issues on development sites within the City of Zion and, consequently, all such reports are referred to SMC.

Measurable Goal(s): Provide phone number that the public can use to submit information about stormwater-related problems and concerns, including soil erosion and sediment control issues.

As needed, refer reports of soil erosion and sediment control issues received from the public to SMC.

Milestone(s):

The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### D.6 Site Inspection/Enforcement Procedures

Article VI of the WDO contains both recommended and minimum requirements for the inspection of development sites. Within certified communities, the community's designated enforcement officer is responsible for conducting these inspections; within non-certified communities, SMC's chief engineer is responsible for conducting these inspections. Per the ordinance, these inspections may be conducted by a community's designated enforcement officer at any stage in the construction process. For major developments, as defined by the WDO, the enforcement officer conducts site inspections, at a minimum, upon completion of installation of soil erosion and sediment controls, prior to the start of any other land disturbing activities, and after final stabilization and landscaping, prior to the removal of soil erosion and sediment controls. Since the City of Zion is a Non-Certified Community, SMC's Chief Engineer is responsible for conducting site inspections within the City of Zion.

Article VII of the WDO specifies the legal actions that may be taken and the penalties that may be imposed if the provisions of the WDO are violated. If development activities on a development site are not in compliance with the requirements of the WDO, the enforcement officer may issue a stop work order on all development activity on the development site or on the development activities that are in direct violation of the WDO. In addition, failure to comply with any of the requirements of the WDO constitutes a violation of the WDO, and any person convicted of violating the WDO may be fined.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with

the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### E. Post-Construction Runoff Control

As described above, Lake County has adopted a countywide Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County. The WDO, which is administered and enforced within the City of Zion by SMC, establishes standards for Post-Construction Runoff Control. Although the City of Zion intends to share responsibility for the implementation of the Post-Construction Runoff Control MCM with the QLP, as outlined in this NOI, the primary responsibility for the implementation of the Post-Construction Runoff Control MCM lies with SMC, as the City of Zion is currently a Non-Certified Community, as defined by the WDO.

#### **E.2** Regulatory Control Program

The WDO requires all applicants to adopt stormwater management strategies for controlling post-construction stormwater runoff on development sites. As outlined in Article IV, Section B.1 of the WDO, all applicants must adopt stormwater management strategies that minimize increases in stormwater runoff rates, volumes, and pollutant loads from development sites. Proposed stormwater management strategies must address the runoff volume reduction requirements described in Article IV, Section B.1.d of the WDO and must include appropriate stormwater BMPs to address the other applicable post-construction runoff control requirements of the WDO. As a Non-Certified Community, SMC is responsible for the administration and enforcement of the WDO within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

#### E.3 Long Term O&M Procedures

The City of Zion has developed long-term operation and maintenance procedures to help reduce the amount of pollution contained in post-construction stormwater runoff that enters the City of Zion's storm sewer system. The procedures address both new and existing development.

The City of Zion's long-term operation and maintenance procedures address new development via the WDO. The WDO requires that maintenance plans be developed for all stormwater management systems designed to serve major developments, as defined by the WDO. Such maintenance plans must include: a description of all maintenance tasks; an identification of the party or parties responsible for performing such maintenance tasks; a description of all permanent maintenance easements or access agreements, overland flow paths, and compensatory storage areas; and a description of dedicated sources of funding for the required maintenance. The WDO also requires that all stormwater management systems be located within a deed or plat restriction (e.g., easement) to ensure that the system remains in place in perpetuity and that access to the system is maintained in perpetuity for inspection and maintenance purposes. As a Non-Certified Community, SMC is responsible for the administration and enforcement of the WDO within the City of Zion.

The City of Zion's long-term operation and maintenance procedures address existing development via an inspection and maintenance program. The City of Zion periodically inspects all existing post-construction stormwater management facilities (e.g., detention facilities), including those that have a maintenance plan (i.e., facilities located within developments regulated by the WDO) as well as those that do not (i.e., facilities located within developments pre-dating, and therefore not regulated by, the WDO), to identify any maintenance tasks and/or any repairs that need to be completed. Responsible parties are notified of the inspection results and of the need to complete any maintenance tasks or repairs.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Conduct inspections of existing stormwater management facilities on a five year basis to identify the need for maintenance and/or repairs.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will

continue to implement it on an annual basis.

#### **E.4** Pre-Construction Review of BMP Designs

As described above, a community's designated enforcement officer is responsible for reviewing and permitting development plans and for administering and enforcing the provisions of the WDO. This includes a review of the stormwater BMPs that will be used to meet the post-construction runoff control requirements of the WDO. Since the City of Zion is a Non-Certified Community, SMC's Chief Engineer is responsible for reviewing and permitting development plans and for administering and enforcing the provisions of the WDO within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

#### **E.5** Site Inspections During Construction

As described above, Article VI of the WDO contains both recommended and minimum requirements for the inspection of development sites. Per the ordinance, these inspections may be conducted by a community's designated enforcement officer at any stage in the construction process. For major developments, as defined by the WDO, the enforcement officer conducts site inspections, at a minimum, upon completion of installation of soil erosion and sediment controls, prior to the start of any other land disturbing activities, and after final stabilization and landscaping, prior to the removal of soil erosion and sediment controls. Since the City of Zion is Non-Certified Community, SMC's Chief Engineer is responsible for conducting site inspections within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and will continue to implement it on an annual basis.

#### **E.6** Post-Construction Inspections

As described above, Article VI of the WDO contains both recommended and minimum requirements for the inspection of development sites. Per the ordinance, these inspections may be conducted by a community's designated enforcement officer at any stage in the construction

process, including after final stabilization and landscaping, after the removal of soil erosion and sediment controls. For major developments, as defined by the WDO, the enforcement officer conducts site inspections, at a minimum, upon completion of installation of soil erosion and sediment controls, prior to the start of any other land disturbing activities, and after final stabilization and landscaping, prior to the removal of soil erosion and sediment controls. Since the City of Zion is a Non-Certified Community, SMC's Chief Engineer is responsible for conducting site inspections within the City of Zion.

Measurable Goal(s): Assist SMC in ensuring that development projects are in compliance with

the WDO.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### F. Pollution Prevention/Good Housekeeping

In accordance with the current version of the Permit, the City of Zion has developed and implemented a Pollution Prevention/Good Housekeeping program to reduce the amount of pollution generated by municipal activities and operations. The program includes: an operation and maintenance program that incorporates pollution prevention and good housekeeping into day-to-day activities and operations; spill prevention and response procedures; and, an employee training program.

In coordination and collaboration with the QLP, the City of Zion will continue to perform activities related to the Pollution Prevention/Good Housekeeping minimum control measure, as described below. Note that although the City of Zion intends to share responsibility for the implementation of the Pollution Prevention/Good Housekeeping MCM with the QLP, as outlined in this NOI, the primary responsibility for the implementation of the Pollution Prevention/Good Housekeeping MCM lies with the City of Zion.

#### F.1 Employee Training Program

The city of Zion has developed and implemented an employee training program to help educate employees about the impacts of the pollution generated by municipal activities and operations and the steps that they can take to reduce those impacts. The employee training program teaches employees about the following: the impacts of stormwater runoff on receiving water bodies; the activities and operations that may be sources of stormwater pollution and/or non-stormwater discharges; the roles and responsibilities of each department and each individual employee in reducing the amount of pollution generated by municipal activities and operations; selecting and implementing stormwater best management practices; and, managing and maintaining green infrastructure practices.

Employees are subjected to a software-based employee training program, which provides baseline training on municipal pollution prevention/good housekeeping and are encouraged to attend relevant training opportunities that appear on the list of known employee training resources and opportunities provided by the QLP. Additionally, the City of Zion works to

identify and develop employee training resources and opportunities that contain educational materials tailored to those activities and operations conducted by specific departments and employees.

Measurable Goal(s): Continue to develop and implement employee training program.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

### F.2 Inspection and Maintenance Program

The City of Zion regularly inspects and maintains municipally owned or operated properties and infrastructure, including streets, parking lots, stormwater management facilities, storm sewers, landscaped areas, and maintenance facilities. A primary goal of the operation and maintenance program is to address municipal infrastructure repair and maintenance needs in a way that reduces the amount of pollution that collects or that is generated on municipally owned or operated properties. Consequently, the City of Zion works to incorporate pollution prevention and good housekeeping into its day-to-day activities and operations.

Measurable Goal(s): Continue to implement inspection and maintenance program.

Continue to incorporate pollution prevention and good housekeeping

practices into day-to-day activities and operations.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### F.3 Municipal Operations Stormwater Control

As part of its pollution prevention/good housekeeping efforts, the City of Zion has identified municipal activities and operations with the potential to cause storm water pollution or result in a non-stormwater discharge (e.g., vehicle maintenance, winter roadway maintenance). Through its employee training and operation and maintenance programs, the City of Zion works to incorporate pollution prevention and good housekeeping practices into these activities and operations.

Measurable Goal(s): Continue to incorporate pollution prevention and good housekeeping

practices into day-to-day activities and operations.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

#### F.4 Municipal Operations Waste Disposal

Waste management consists of implementing non-structural (i.e., procedural) and structural pollution prevention and good housekeeping practices for handling, storing, and disposing of wastes generated by municipal activities and operations. Through its employee training and

operation and maintenance programs, the City of Zion works to incorporate these waste management practices into its day-to-day activities and operations to prevent the release of waste into the storm sewer system.

Measurable Goal(s): Continue to incorporate waste management practices into day-to-day

activities and operations.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

## F.6 Other Municipal Operations Controls

The City of Zion has developed spill prevention, control, and cleanup procedures to prevent and respond to spills that result from municipal activities and operations. Through its employee training and operation and maintenance programs, the City of Zion works to incorporate these spill prevention, control, and cleanup procedures into its day-to-day activities and operations to prevent the release of spills into the storm sewer system.

Measurable Goal(s): Continue to incorporate spill prevention, control, and cleanup procedures

into day-to-day activities and operations.

Milestone(s): The City of Zion began implementation of this BMP in March 2003 and

will continue to implement it on an annual basis.

# Storm water Management Program Assessment, Year 14

An overall assessment of the City of Zion's storm water management program and the appropriateness of its BMPs is provided below.

The QLP section of the report describes the Status of Lake County waters using information gathered by active workgroups and the Lake County Health Department along with a discussion on TMDL status within the County. The Status of Lake County Waters provides insight as to the overall effectiveness of countywide efforts to improve water quality. As an active MS4 within the County, the countywide findings are a reflection of the individual efforts of each MS4. Additionally, the QLP SMPP identified impaired waters based on the July 2016 303(d) list. The inclusion or exclusion of water bodies on the IEPAs 303(d) list, published bi-annually, is a direct reflection of the program's effectiveness. This comparison is expected to be provided in the Year 16 annual report (after the next 303(d) list is published).

#### Part C. MS4 Information and Data Collection Results, Year 14

# **Annual Monitoring and Data Collection, Year 14**

Information and data that the MS4 collected to meet the monitoring requirement of the version of IEPA's General NPDES Permit No. ILR40 that applied to the reporting period are summarized below.

Visual water quality inspections were conducted within the receiving waters, both upstream and downstream of the City of Zion's stormwater discharges. A total of 30 discharges were inspected. No noticeable pollutants of odors were observed. However, 5 outfalls were found and documented to be in need of repair.

### IDDE Monitoring and Data Collection, Year 14

Information and data that the MS4 collected as part of its illicit discharge detection and elimination program are summarized below.

A total of 2 dry weather flows were investigated at stormwater outfalls and catch basins. No potential illicit discharges were identified at any of these locations.

# Part D. MS4 Summary of Year 15 Stormwater Activities

The table below indicates the stormwater management activities that the City of Zion plans to undertake during Year 15. Additional information about the stormwater management activities that the MS4 will perform is provided in the section following the table.

Note: "X" indicates BMPs that will be implemented during Year 15

Year 15	
MS4	
A. Public	Education and Outreach
X	A.1 Distributed Paper Material
	A.2 Speaking Engagement
	A.3 Public Service Announcement
X	A.4 Community Event
X	A.5 Classroom Education Material
X	A.6 Other Public Education
B. Public	Participation/Involvement
	B.1 Public Panel
	B.2 Educational Volunteer
	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 I	Discharge Detection and Elimination
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
Х	C.4 Illicit Discharge Tracing Procedures
	C.5 Illicit Source Removal Procedures
	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
X	C.9 Public Notification
X	C.10 Other Illicit Discharge Controls

Year 15	
MS4	
D. Constr	uction Site Runoff Control
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	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-C	onstruction 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
X	E.6 Post-Construction Inspections
	E.7 Other Post-Const Runoff Controls
F. Polluti	on Prevention/Good Housekeeping
X	F.1 Employee Training Program
Х	F.2 Inspection and Maintenance Program
Х	F.3 Municipal Operations Storm Water Control
X	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

#### Stormwater Management Activities, Year 15

On behalf of all MS4s within the county, SMC performs activities related to each of the six minimum control measures which are described in detail in the SMPP. These BMPs, implemented at the county level, make significant strides in achieving the statutory goal of reducing the discharge of pollutants to the MEP as watershed boundaries are not constrained by municipal borders. As such, a significant portion of the stated City of Zion's measurable goals are to "support QLP efforts."

During Year 15, the MS4 plans to continue to support and supplement QLP efforts, as described in detail in the brief below. The LCSMC's SMPP can be viewed at [cityofzion.com].

#### A. Public Education and Outreach

In additional to the extensive QLP efforts, the MS4 utilizes a variety of methods to educate and provide outreach to the public about the importance of managing pollutants that potentially could enter the stormwater system. The MS4's Public Education and Outreach program includes: the distribution of educational material via take-away racks, website, at outreach events and by supporting efforts of the Solid Waste Agency of Lake County (SWALCO).

#### Measurable Goal(s):

- Support OLP efforts.
- Implement BMPs and track progress of BMP implementation.

#### B. Public Participation/Involvement

In additional to the extensive QLP efforts, The City of Zion's Public Participation/Involvement program includes: maintaining a process for receiving and processing citizen input/complaints; attending and publicizing stakeholder meetings and the Lake County Municipal Advisory Committee, identification of environmental justice areas, and presenting program information at a public meeting at least once annually.

#### Measurable Goal(s):

- Support QLP efforts.
- Implement BMPs and track progress of BMP implementation.

#### C. Illicit Discharge Detection and Elimination

In additional to the extensive QLP efforts, the City of Zion will conduct activities toward the identification and removal of direct connections of pollutants into the storm water management systems (including wetlands and receiving waters). The program includes the following primary components.

A outfall map showing the locations of outfalls and the names and locations of all waters that receive discharges from those outfalls;

- An ordinance that prohibits all non-storm water discharges into the storm sewer system and provides the authority for appropriate enforcement procedures and actions;
- A plan to detect and address all non-stormwater discharges, into the storm sewer system:
- Periodic inspection of outfalls for detection of non-stormwater discharges and illegal dumping (5-yr rescreening schedule).
- Annual inspection of all High Priority Outfalls.

#### Measurable Goal(s):

- Support QLP Efforts.
- Implement BMPs and track progress of BMP implementation.

#### D. Construction Site Runoff Control

Lake County has adopted a countywide <u>Watershed Development Ordinance (WDO)</u> that establishes the minimum stormwater management requirements for development in Lake County. The WDO establishes countywide standards for runoff maintenance, detention sites, soil erosion and sediment control, inspections, water quality, wetlands and floodplains. The WDO, which is administered and enforced within the community by SMC establishes standards for construction site runoff control.

#### Measurable Goal(s):

- Implement BMPs and track progress of BMP implementation.
- Assist SMC in ensuring that all applicable developments are in compliance with the WDO.

#### E. Post-Construction Runoff Control

As described above, the countywide WDO establishes the minimum stormwater management requirements for development in Lake County. BMP standards are incorporated into the WDO to implement stormwater management strategies that minimize increases in stormwater runoff rates, volumes, and pollutant loads from development sites. The SMPP also includes support of adopted Watershed Plan recommendations and inspection procedures for pre-WDO developments, stream banks and shorelines, streambeds, and detention/retention ponds.

#### Measurable Goal(s):

- Implement BMPs and track progress of BMP implementation.
- Assist SMC in ensuring that all applicable developments are in compliance with the WDO.

#### F. Pollution Prevention/Good Housekeeping

In addition to the QLP efforts to provide training materials and opportunities, the MS4 is committed to implementing the Pollution Prevention/Good Housekeeping component of its SMPP. The MS4\_is responsible for the care and upkeep of the general facilities, municipal roads, its general facilities and associated maintenance yards. The City of Zion's Pollution Prevention/Good Housekeeping program includes: the evaluation and

improvement of municipal policies and procedures to reduce the discharge of pollutants from municipal activities and operations; and, a training program for municipal employees.

### Measurable Goal(s):

- Support QLP efforts.
- Implement BMPs and track progress of BMP implementation.

# Part E. Notice of Qualifying Local Program

The Lake County Stormwater Management Commission (SMC) serves as a Qualifying Local Program (QLP) for MS4s in Lake County. In accordance with IEPA's General NPDES Permit No. ILR40, as a QLP, SMC performs activities related to each of the six minimum control measures. This part of the Annual Report, which summarizes the stormwater management activities performed by SMC as a QLP, consists of the following five sections:

- Part E1 identifies changes to Best Management Practices (BMPs) that occurred during Year 14 and includes information about how these changes affected the QLP's stormwater management program.
- Part E2 describes the stormwater management activities that the QLP performed during Year 14.
- Part E3 summarizes the information and data collected by the QLP during Year 14.
- Part E4 describes the stormwater management activities that the QLP plans to undertake during Year 15.
- Part E5 lists the construction projects conducted by the QLP during Year 14.

# Part E1. QLP Changes to Best Management Practices, Year 14

Note: "X" indicates BMPs that were implemented as planned
✓ indicates BMPs that were changed during Year 14

Year 14	
QLP	
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
X	A.5 Classroom Education Material
X	A.6 Other Public Education
B. Public	Participation/Involvement
X	B.1 Public Panel
	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
	B.4 Public Hearing
	B.5 Volunteer Monitoring
X	B.6 Program Coordination
	B.7 Other Public Involvement
C Illicit	Discharge Detection and Elimination
O, masa	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
	C.3 Detection/Elimination Prioritization Plan
	C.4 Illicit Discharge Tracing Procedures
	C.5 Illicit Source Removal Procedures
	C.6 Program Evaluation and Assessment
	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
	C.9 Public Notification

Year 14	
QLP	
D. Constr	uction Site Runoff Control
X	D.1 Regulatory Control Program
X	D.2 Erosion and Sediment Control BMPs
X	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-C	Construction Runoff Control
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
Х	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
X	E.7 Other Post-Const Runoff Controls
F. Pollut	ion Prevention/Good Housekeeping
X	F.1 Employee Training Program
	F.2 Inspection and Maintenance Program
	F.3 Municipal Operations Storm Water Control
	F.4 Municipal Operations Waste Disposal
	F.4 Mullicipal Operations Waste Disposar
X	F.5 Flood Management/Assess Guidelines

# Part E2. QLP Status of Compliance with Permit Conditions, Year 14

IEPA issued a new version of its General NPDES Permit No. ILR40 effective March 1, 2016 (the first day of Year 14). SMC has reviewed the new permit, compared it to the previous permit, summarized the changes, and evaluated what the changes appear to mean for Lake County MS4s. Based on these findings, SMC revised its SMPP template and provided it to communities in August 2016; the final draft was provided in November 2016.

The Lake County Stormwater Management Commission (SMC) serves as a Qualifying Local Program (QLP) for MS4s in Lake County. In accordance with IEPA's NDPES General Permit No. ILR40, as a QLP, SMC performs activities related to each of the six minimum control measures. The stormwater management activities that the QLP performed during Year 14 are described below.

#### A. Public Education and Outreach

#### A.1 Distributed Paper Material

### Measurable Goal(s):

 Distribute informational materials from "take away" rack at SMC. Upon request, distribute materials directly to municipalities for local distribution.

#### Year 14 QLP activities:

- SMC distributes a variety of informational materials related to stormwater management through its "take away" rack and website.
- Upon request, informational materials are distributed directly to Lake County MS4s in PDF format for use on community websites, in community newsletters, and in community "take away" racks.
- In 2016, SMC developed "Living on the Water's Edge" which included prevention pollution and bio infiltration practices for riparian landowners. This was widely distributed electronically (<a href="https://lakecountyil.gov/DocumentCenter/View/11146">https://lakecountyil.gov/DocumentCenter/View/11146</a>) as well as in print form.
- Provided NPDES related information via Facebook

#### A.3 Public Service Announcement

#### Measurable Goal(s):

- Include public service announcement highlighting community accomplishments related to IEPA's NPDES Stormwater Program in "Mainstream" once annually;
- Post watershed identification signage with LCDOT;
- Upon request or download "<u>The Big Picture: Water Quality, Regulations & NPDES</u>" to Lake County MS4s.

### Year 14 QLP activities:

- SMC includes announcements highlighting community accomplishments related to IEPA's NPDES Stormwater Program on its website, in its newsletter, and through other media outlets.
- Watershed identification signage is located throughout the county.
- SMC continues to make available "The Big Picture: Water Quality, Regulations & NPDES" presentation to Lake County MS4s,

Permit Year 14: Mar. 2016 to Mar. 2017

(url: https://lakecountyil.gov/DocumentCenter/View/16533).

#### A.4 Community Event

#### Measurable Goal(s):

 Sponsor or co-sponsor workshop on a topic related to IEPA's NPDES Stormwater Program.

#### Year 14 QLP activities:

- SMC sponsored or co-sponsored many workshops and events on stormwater-related topics between March 1, 2016 and February 28, 2017, including:
  - o Municipal Pollution Prevention/Good Housekeeping: Indiana & California Indiana Perspectives at April 2016 MAC meeting
  - o Presentations at April, June, September 2016 MAC meetings regarding new ILR40 permit, its implications and SMCs guidance on compliance.
  - o Center for Watershed Protection stormwater webinars (March, May, June, September, October, November 2016)
  - Homeowners Association Workshop on maintaining stormwater BMPs at CLC May 2016
  - o Fox River/Chain O'Lakes river clean-up in Fox Lake, Port Barrington & Antioch, IL on May 7, 2016
  - Chicago River clean-up (Chicago River Day) in Lincolnshire, Highland Park, Lake Forest & Deerfield, IL on May 14, 2016
  - Buffalo Creek clean-up (Rylko Community Park Workday) in Buffalo Grove, IL on May 20, 2016
  - Rain Barrel, Compost Bin, and Native Plant Sale held in Libertyville, IL on May 7, 2016
  - o Roadway De-Icing Workshop held in Libertyville, IL on Oct. 3 & 5, 2016
  - Parking Lots & Sidewalks De-Icing Workshop held in Libertyville, IL on October 4, 2016
  - Green Infrastructure workshop for Highland Park District Supervisors and Staff February 11, 2016
  - Des Plaines River Watershed Presentation at Adlai Stevenson Center on Democracy Oct. 13, 2016
  - o SMC sponsored a Designated Erosion Control Inspector (DECI) Workshop held on Jan. 5/2017

#### A.5 Classroom Education

#### Measurable Goal(s):

- Develop and compile information for stormwater educational kit for distribution upon request.
- Provide materials and training on storm sewer inlet stenciling kits to teachers upon request.

#### Year 14 QLP activities

- Stormwater educational materials were compiled for use at several public education events that were held between March 1, 2016 and March 31, 2017, including:
  - o Riparian Landowner Open House held in Beach Park, IL on May 25, 2016

Permit Year 14: Mar. 2016 to Mar. 2017

- Loch Lomond Property Owners Association's Loch Fest held in Mundelein,
   IL on July 30, 2016
- o Rain Barrel, Compost Bin, and Native Plant Sale held in Libertyville, IL on May 7, 2016
- o Developed Deicing Residential & Commercial Informational Brochure
- Developed "Living on the Water's Edge" Brochure used for multiple events, including Des Plaines River watershed planning meetings, watershed meetings, LCHD lakes committee meetings, etc.

#### A.6 Other Public Education

#### Measurable Goal(s):

- Maintain and update the portion of the SMC website dedicated to IEPA's NPDES Stormwater Program with resource materials such as model ordinances, case studies, brochures and web links.
- Make "<u>The Big Picture: Water Quality, Regulations & NPDES</u>" presentation available to Lake County MS4s.

#### Year 14 QLP activities:

- As new information and resource materials become available, they are posted to the SMC website and/or distributed directly to Lake County MS4s, (url:https://lakecountyil.gov/2479/NPDES-Phase-II).
- SMC continues to make available "The Big Picture: Water Quality, Regulations & NPDES" presentation to Lake County MS4s, (url:https://lakecountyil.gov/DocumentCenter/View/16533).
- SMC developed an ArcGIS geospatial web tool for Lake County that indicates TMDL statuses, 303(b), 305(d), watershed and urbanized area information within an MS4.
  - (url: <a href="https://lakecountyil.maps.arcgis.com/apps/InformationLookup/index.html?appid=09ab978957e7499f9926805d29e9394a">https://lakecountyil.maps.arcgis.com/apps/InformationLookup/index.html?appid=09ab978957e7499f9926805d29e9394a</a>).
- SMC developed an ArcGIS geospatial web tool for Lake County within the Des Plaines River watershed, allowing the public to see an <u>Inventory of Stream and Detention Basin</u> Information, (url: <a href="https://lakecountyil.maps.arcgis.com/apps/webappviewer/index.html?id=918c4042dcec431ba46b5c1a7030b46c&extent=-9835848.6057,5176480.893,-9738009.2095.5239847.1894.102100).</a>
- SMC maintains reference documents for stormwater best practices, BMPs and green infrastructure practices on its website, (url: <a href="https://lakecountyil.gov/2261/Stormwater-Best-Practices">https://lakecountyil.gov/2261/Stormwater-Best-Practices</a>).

# B. Public Participation/Involvement

#### **B.1** Public Panel

#### Measurable Goal(s):

Provide notice of public meetings on SMC website. Track number of meetings conducted.

#### Year 14 QLP activities:

Notice of all public meetings continues to be provided on the SMC website and though direct mailings and e-mailings to distribution lists.

SMC tracked the number of Stormwater Management Committee Board (SMC) meetings, Technical Advisory Committee (TAC) meetings, Municipal Advisory Committee (MAC), and Watershed Management Board (WMB) meetings conducted during Year 14, between March 1, 2016 and March 31, 2017.

o Per records, there were 10 SMC meetings, 0 TAC meetings, 4 MAC meetings, and 1 WMB meeting conducted during this reporting period.

#### **B.3** Stakeholder Meeting

### Measurable Goal(s):

- Provide notice of stakeholder meetings on SMC website.
- Track number of watershed planning committee meetings conducted.
- Establish watershed planning committees for each new watershed planning effort.

### Year 14 QLP activities:

- Notice of all stakeholder meetings continues to be provided on the SMC website and through direct mailings and e-mailings to stakeholder lists.
- SMC tracked the number of stakeholder meetings conducted for the various watershed planning committees during the reporting period. The list below summarizes the watershed planning committee meetings that were conducted during Year 14:
  - o North Branch Chicago River Planning Committee 3
  - o Bull Creek/Bull's Brook Watershed Council 2
  - o Buffalo Creek Clean Water Partnership 1
  - o Des Plaines Watershed Planning Committee 10
  - Des Plaines River Watershed Workgroup 15 (excluding executive board meetings)
- SMC continues to establish and/or assist watershed planning committees for each new watershed planning effort.

# **B.6** Program Coordination

#### Measurable Goal(s):

- Track number of MAC meetings conducted during Year 14.
- Prepare annual report on Qualifying Local Program activities at end of Year 14.

# Year 14 QLP activities:

- SMC tracked the number of Municipal Advisory Committee (MAC) meetings conducted during Year 14: According to records, there were 3 MAC meetings conducted during this reporting period. 4/6/16, 6/8/16, 9/14/16
- The stormwater management activities that SMC performed as a QLP during Year 14 are described in the Annual Facility Inspection Report (i.e., Annual Report) template provided to Lake County MS4s.
- The stormwater management activities that SMC plans to perform as a QLP during Year 15 are described in Part E4 of the Annual Report template.
- A detailed QLP section was added to the SMPP template describing the QLP commitments related to the implementation of the program.

#### C. Illicit Discharge Detection and Elimination

#### C.2 Regulatory Control Program

#### Measurable Goal(s):

Continue to enforce the countywide WDO.

#### Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.
- Lake County continues to provide the Lake County Illicit Discharge Detection and Elimination (IDDE) Manual on the SMC website, (url: https://lakecountyil.gov/DocumentCenter/View/17264)

#### C.10 Other Illicit Discharge Controls

#### Measurable Goal(s):

Sponsor or co-sponsor and track the number of attendees at an Illicit Discharge Detection and Elimination workshop or other training workshop related to IEPA's NPDES Stormwater Program.

## Year 14 QLP activities:

SMC sponsored or co-sponsored many workshops and events on stormwater-related topics between March 1, 2016 and February 28, 2017. Such workshops and events are described above.

#### D. Construction Site Runoff Control

#### **D.1** Regulatory Control Program

#### Measurable Goal(s):

- Continue to enforce the countywide WDO.
- Administer the Designated Erosion Control Inspector (DECI) program outlined by the WDO.

#### Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.
- SMC continues to administer the Designated Erosion Control Inspector (DECI) program as outlined by the WDO, (url: <a href="https://lakecountyil.gov/2470/Designated-Erosion-Control-Inspector-Pro">https://lakecountyil.gov/2470/Designated-Erosion-Control-Inspector-Pro</a>).
- Total DECIs who have passed the exam (to date): 1,356.
- DECIs who have passed the exam between 03/01/2016 02/28/2017: 34.
- Total listed DECIs (to date): 139 (DECI completed certification process).
- DECIs have a recertification process every (3) years. Current cycle 2017-2020.

#### D.2 Erosion and Sediment Control BMPs

#### Measurable Goal(s):

- Continue to enforce the countywide WDO.
- Complete TRM update and work toward final approval and publication of the document.

#### Year 14 QLP activities:

SMC continues to enforce the countywide WDO.

SMC continues to provide technical guidance and reference materials to support the administration and enforcement of the countywide WDO.

# **D.3** Other Waste Control Program

Measurable Goal(s):

Enforce WDO provisions regarding the control of waste and debris at construction sites.

#### Year 14 QLP activities:

SMC continues to enforce the countywide WDO.

#### D.4 Site Plan Review Procedures

Measurable Goal(s):

- Track number of enforcement officers who have passed the exam.
- Track number of communities that undergo a performance review.
- Complete ordinance administration and enforcement chapter of TRM.

Year 14 QLP activities:

- SMC continues to track the number of enforcement officers (EOs) who have passed the EO exam and have become EOs. Per records, as of the end of Year 14, there are 57 EOs certified in Lake County.
- The list of EOs representing Certified Communities is continually updated and maintain on the SMC website:

(url:https://lakecountyil.gov/DocumentCenter/View/14412).

- SMC last completed a cycle of the community re-certification process, which included a performance review of all 53 certified and non-certified communities, during a previous reporting period (i.e., Year 9). In accordance with the amended countywide WDO, the certification process is every 5 years the next cycle of the community re-certification process is scheduled to begin in fall/winter 2017. (url: <a href="https://lakecountyil.gov/2459/Community-Certification">https://lakecountyil.gov/2459/Community-Certification</a>)
- The website includes guidance information to supplement the TRM related to WDO interpretation as well as ordinance administration and enforcement.

# D.5 Public Information Handling Procedures

Measurable Goal(s):

 Track number of complaints received and processed related to soil erosion and sediment control.

Year 14 QLP activities:

- SMC continues to track the number of complaints received and processed related to soil erosion and sediment control.
- According to records, between March 1, 2016 and March 31, 2017, 2 SE/SC complaints were received and processed by SMC staff.

# D.6 Site Inspection/Enforcement Procedures

Measurable Goal(s):

Track number of site inspections conducted by SMC.

Year 14 OLP activities:

SMC continues to track the number of site inspections conducted by SMC staff.

 According to records, between March 1, 2016 and March 31, 2017, 756 site inspections were conducted by SMC staff.

#### E. Post-Construction Runoff Control

#### **E.2** Regulatory Control Program

Measurable Goal(s):

Continue to enforce the countywide WDO.

Year 14 QLP activities:

SMC continues to enforce the countywide WDO.

#### E.3 Long Term O&M Procedures

Measurable Goal(s):

Continue to enforce the countywide WDO.

Year 14 OLP activities:

SMC continues to enforce the countywide WDO.

### **E.4** Pre-Construction Review of BMP Designs

Measurable Goal(s):

Continue to enforce the countywide WDO.

Year 14 QLP activities:

SMC continues to enforce the countywide WDO.

# **E.5** Site Inspections During Construction

Measurable Goal(s):

Continue to enforce the countywide WDO.

Year 14 QLP activities:

SMC continues to enforce the countywide WDO.

#### **E.6** Post-Construction Inspections

Measurable Goal(s):

Continue to enforce the countywide WDO.

Year 14 QLP activities:

SMC continues to enforce the countywide WDO.

#### **E.7** Other Post-Construction Runoff Controls

Measurable Goal(s):

- Conduct annual Watershed Management Board (WMB) meeting.
- Contribute funding to flood reduction and water quality improvement projects, including stormwater retrofits, through the WMB.

Year 14 QLP activities:

- The annual WMB meeting was held on Dec. 8, 2016.
- At the annual WMB meeting 13 Projects were selected to receive \$177,000 of funding through the SMC grant program. These projects including planning and in the ground project efforts that support flood reduction, water quality improvement, and stormwater retrofit projects.

- o 11 WMB project grants awarded
- o 1 Stormwater Infrastructure Repair Fund (SIRF) project grant awarded
- o 1 Watershed Management Assistance (WMAG) project grant awarded

### F. Pollution Prevention/Good Housekeeping

# F.1 Employee Training Program

#### Measurable Goal(s):

- Provide list of available resources to MS4s.
- Sponsor or co-sponsor employee training workshops or events.
  - Make available the Excal Visual Municipal Storm Water Pollution Prevention Storm Watch Everyday Best Management Practices training video and testing.

#### Year 14 QLP activities:

- SMC continues to provide information on training opportunities and training resources to Lake County MS4s.
- SMC sponsored or co-sponsored a number of workshops and events on stormwater-related topics between March 1, 2016 and February 28, 2017. Such workshops and events are described above.
- SMC continues to make available the Excal Visual Storm Watch Municipal Stormwater Pollution Prevention software to Lake County MS4s. According to records, between March 1, 2016 and February 28, 2017, 1 MS4 borrowed the Excal Visual software. (url: <a href="http://lakecountyil.gov/2479/NPDES-Phase-II">http://lakecountyil.gov/2479/NPDES-Phase-II</a>)
- SMC staff participated in Pollution Modeling Workshop Dec 12, 2016 at CMAP

# F.5 Flood Management/Assess Guidelines

#### Measurable Goal(s):

Track number of projects that are reviewed for multi-objective opportunities.

#### Year 14 QLP activities:

SMC continues evaluate all SMC-sponsored projects for multi-objective opportunities, such as flood control and water quality.

# F.6 Other Municipal Operations Controls

#### Winter Roadway Deicing

Measurable Goal(s):

Advise MS4 communities of watershed groups addressing issues associated with the use of chlorides (i.e. road salt)

Year 14 OLP activities:

- SMC co-sponsored 2 de-icing workshops:
  - o Deicing for Parking Lots and Sidewalks 10/4/2016
  - o Deicing Roads 10/5/2016
- A de-icing certification process to promote trained vendors is offered
  - O Preferred Providers that successfully completed a Lake County Deicing Training Workshop and passed the Course Exam can be referenced on a Preferred Provider List (url:
    - https://www.lakecountyil.gov/DocumentCenter/Home/View/10767)
  - o Certification is through a third-party vendor, Fortin Consulting, Inc
- SMC continues to make available chloride reduction documents
  - Too Much Salt in Our Winter Maintenance Recipe Tips for Managing Snow and Ice at Home (PDF) (url: https://lakecountyil.gov/DocumentCenter/Home/View/3047)
  - Lake County Winter Parking Lot and Sidewalk Maintenance Manual (2015)
     (PDF) (url: <a href="https://lakecountyil.gov/DocumentCenter/Home/View/3044">https://lakecountyil.gov/DocumentCenter/Home/View/3044</a>)
  - Less Salt Equals Less Money, Clean Water, Safe Conditions Tips for Effective Road Salting (PDF) (url: https://lakecountyil.gov/DocumentCenter/Home/View/3045)

# Part E3. QLP Information and Data Collection Results, Year 14

The QLP did not collect any monitoring data on behalf of Lake County's MS4s during Year 14. However, SMC has reviewed information presented by the <u>Illinois EPA (IEPA) in the 2016</u> <u>Illinois Integrated Water Quality Report and 303(d) List</u> and has developed the brief "State of Lake County's Waters" report provided below.

### State of Lake County's Waters March 2017

This brief report is based on information contained in the <u>Illinois EPA's 2016 Illinois Integrated</u> <u>Water Quality Report (IIWQR) and Section 303(d) List</u>, dated July 2016. Its purpose is to provide basic information to Lake County's MS4 communities on the condition of surface waters within Lake County. More detailed information about the condition of surface waters in Lake County can be found in the Illinois EPA's 2016 Illinois Integrated Water Quality Report and Section 303(d) List.

The Illinois EPA's 2016 IIWQR and Section 303(d) List assesses the condition of surface water within streams, inland lakes and Lake Michigan waters. The IEPA assessment of surface water conditions is based on a degree of support (attainment) of a designated use within a stream segment, inland lake or within Lake Michigan. Determination designation is through an analysis of various types of information: including biological, physicochemical, physical habitat, and toxicity data. Illinois waters are designated for various uses including aquatic life, wildlife, agricultural use, primary contact (e.g., swimming, water skiing), secondary contact (e.g., boating, fishing), industrial use, public and food-processing water supply, and aesthetic quality. When sufficient data is available the IEPA assesses each applicable designation as Fully Supporting (Good resource quality), Not Supporting (Fair or Poor resource quality), Not Assessed or Insufficient Information. Uses determined to be Not Supporting are called "impaired," and waters that have at least one use assessment as Not Supporting are also called impaired as designated within the 303(d) list.

#### **Streams**

An analysis of data accompanying the Illinois EPA's 2016 IIWQR and Section 303(d) List shows that 179.68 stream miles in Lake County have been assessed by the Illinois EPA for attainment of at least one designated use per the IIWQR Appendix B-2. Specific Assessment Information for Streams, 2016.

An analysis of data accompanying the Illinois EPA's 2016 Illinois Integrated Water Quality Report and Section 303(d) List shows that <u>157.84</u> stream miles (of the 179.68 stream miles that have been assessed) in Lake County are considered impaired by the Illinois EPA. These stream segments have been mapped and are shown in Figure E3.1.

An analysis of the 2014 impaired streams to the 2016 impaired streams, indicates 8 stream miles previously listed in the 2014 303(d) list have new data indicating aquatic life is now "Fully Supported" and applicable water quality standards have been attained; these water are no longer

included in the 2016 303(d) list. The IIWQR mentions there is no specified reason for the recovery.

Table E3.1 2014 :	303(d) streams removed from	2016 303(d	) list		
Assessment ID	Name	Miles	Assessment ID	Name	Miles
IL G-08	Des Plaines River	0.98	IL QE-01	Dead Dog Creek	4.02
IL GV-01	Bull Creek	2.33	IL_DTZS-01	Flint Creek	9.66
IL RGZB	Hastings Lake	0.34	IL_RTJ	Long Lake	2.85
IL DT-35	Fox River	5.03	IL_RHK	Eleanor Lake	0.36
IL HCCB-05	West Fork North Branch	5.73	IL_GWA	North Mill Creek	6.62
IL GST	Buffalo Creek	8.77	IL_RGZE	Slough Lake	0.42
IL RGZA	Crooked Lake	1.00			

An analysis of the 2014 impaired streams to the 2016 impaired streams indicates 27 stream miles previously not listed in the 2014 303(d) list are now considered impaired in the 2016 303(d) list as new data indicates impairments.

Table E3.2 Stream	n Segments added to 2016 303	(d) list not pre	viously listed in 2014		
Assessment ID	Name	Miles	Assessment ID	Name	Miles
IL_HCCB-05	West Fork North Branch Chicago River	0.002	IL_QC-03	Waukegan River	1.47
IL_DTRA-W- C1	Fiddle Creek	0.003	IL_GU-02	Indian Creek	11.32
IL_GW-02	Mill Creek	12.96	IL_QA-C4	Pettibone Creek	1.24

#### Lakes

An analysis of data accompanying the Illinois EPA's 2016 IIWQR and Section 303(d) List shows that 170 inland lakes in Lake County have been assessed by the Illinois EPA for attainment of at least one designated use per the IIWQR Appendix B-3. Specific Assessment Information for Lakes, 2016.

An analysis of data accompanying the Illinois EPA's 2016 IIWQR and Section 303(d) List shows that 140 inland lakes, of the 170 assessed, in Lake County are considered impaired by the Illinois EPA. These lakes have been mapped and are shown in Figure E3.1.

An analysis of the 2014 impaired lakes to the 2016 impaired lakes indicates 5 lakes previously not listed in the 2014 303(d) list are now considered impaired in the 2016 303(d) list as new data indicates impairments.

Table E3.3 Inland	Lakes added to 201	6 303(d) list	not previously listed in	2014	THE S
Assessment ID	Name	Acres	Assessment ID	Name	Acres
IL RGZD	Miltmore	83.1	IL_VGW	Rollins Savanna #1	8
IL_RGK	Grays	80	IL_VGX	Rollins Savanna #2	53
IL_SGZ	Briarcrest Pond	4			i

## Lake Michigan

Lake Michigan is monitored by the Illinois EPA through the Lake Michigan Monitoring Program. Bordering Cook and Lake Counties, the State of Illinois has jurisdiction over approximately 1,526 square miles of open water, 13 harbors, and 64 shoreline miles of Lake Michigan.

Located within Illinois is 196 square miles of open water of Lake Michigan, or about thirteen percent of the total open water located within Illinois. These waters were assessed for the 2016 IIWQR and Section 303(d) List, and all 196 assessed square miles were rated as Fully Supporting for the following uses: aquatic life use, primary contact use, secondary contact use, and public and food processing water supply use. However, fish consumption use in all 196 assessed square miles of open water was rated as Not Supporting due to contamination from polychlorinated biphenyls (PCBs) and mercury. Additionally, aesthetic quality use in all 196 assessed square miles of open water was rated as Not Supporting due to exceedances of the Lake Michigan open water standard for total phosphorus. It should be noted that such exceedances do not necessarily indicate that there are offensive conditions in Lake Michigan due to exceedances algal or aquatic plant growth.

Along Illinois' Lake Michigan coastline, four of the 13 harbors are currently assessed in the 2016 IIWQR and Section 303(d) List, for several different designated uses. The Illinois EPA uses data collected from the Lake Michigan Monitoring Program harbor component to assess water quality for the following designated uses:

- <u>Aesthetic Quality</u>, a 0.18 sq. mi area was assessed, with 0.12 sq. mi fully supporting and 0.06 sq. mi Not Supporting (poor).
- Aquatic Life, a 3.88 sq. mi area was assessed, with 3.82 sq. mi fully supporting and 0.06 sq. mi Not Supporting (poor).
- <u>Fish Consumption</u>, a 2.62 sq. mi area was assessed, with 2.62 sq. mi Not Supporting (poor).
- Primary and Secondary Contact were not assessed.

Table C-10 of the IIWQR, lists potential causes of impairment in the harbors of Lake Michigan that can include Pesticides, Organic Pollutants, Metal Pollutants as well as polychlorinated biphenyls (PCBs), mercury, bottom deposits, lead, zinc, cadmium, arsenic, phosphorus, copper, and chromium.

Along Illinois' Lake Michigan coastline, a portion of all 64 shoreline miles of Lake Michigan located in Illinois were assessed for the Illinois EPA's 2016 IIWQR and Section 303(d) List for several different designated uses. Contamination sources for Not Supporting is due to polychlorinated biphenyls (PCBs) and mercury and bacterial contamination from Escherichia coli (E. coli) bacteria.

- Aesthetic Quality and Aquatic Life were not assessed.
- Fish Consumption, 64 mi area was assessed, with 64 mi Not Supporting (poor).
- Primary Contact, 64 mi area was assessed, with 5.5 mi fully supporting and 58.5 mi Not Supporting (poor).
- Secondary Contact, 5.5 mi area was assessed, with 5.5 mi fully supporting

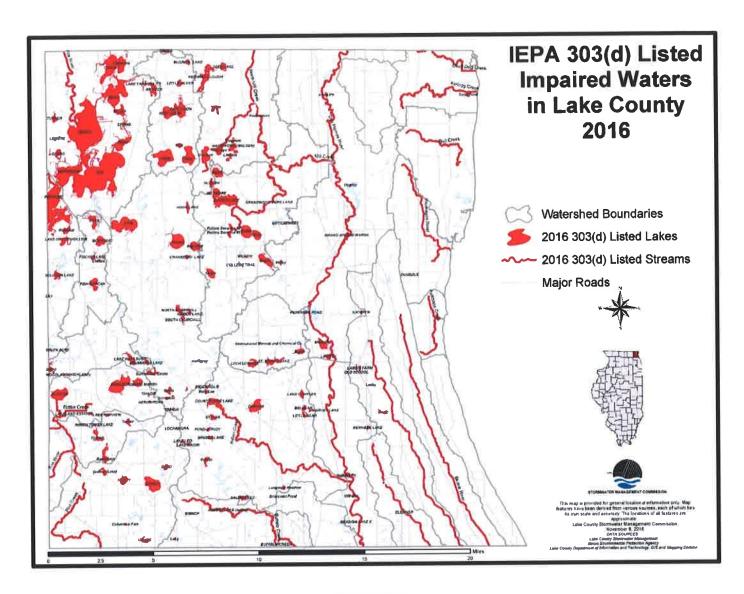


Figure E3.1

In addition to the information contained within the 303(b) and 303(d) reports, the Des Plaines River Watershed Workgroup (DRWW) founded in 2014, on behalf of its members, monitors water quality in the Des Plaines River and tributaries, prioritize and implement water quality improvement projects, and secure grant funding to offset the cost. Monitoring data will allow for a greater understanding of the water quality impairments, identify priority restoration activities, and track water quality improvements. The Workgroup is committed to an approach for attaining water quality standards that focuses on stakeholder involvement, monitoring, and locally led decision-making based on sound science. Comprehensive baseline monitoring has been completed at 69 sites for water chemistry, sediment chemistry and biology. Flow monitoring began in late 2016. An annual water chemistry monitoring report was submitted to IL EPA in March 2017, which covers the NPDES II monitoring requirements for MS4 communities that are DRWW members. A Des Plaines River Watershed monitoring strategy was completed in February 2016 and updated in March 2017; a monitoring program report is intended to be submitted to IEPA by January 31, 2018.

The LCHD Lakes Management Unit has been collecting water quality data on Lake County lakes since the late 1960s. Since 2000, 176 different lakes each year have been studied and data collected on temperature, dissolved oxygen, phosphorus, nitrogen, solids, pH, alkalinity, chloride, conductivity, water clarity, the plant community and shoreline characteristics. Lake summary reports can be found <a href="https://www.lakecountyil.gov/2400/Lake-Reports.">https://www.lakecountyil.gov/2400/Lake-Reports.</a>. This data is used as part of ongoing watershed planning efforts throughout the county, which result in specific programmatic and site specific recommendations throughout the county. SMC is currently developing an application to assist communities in identifying potential site specific recommendations within their jurisdictional boundaries.

# Part E4. QLP Summary of Year 15 Stormwater Activities

The table below indicates the stormwater management activities that the QLP plans to undertake during Year 15. Additional information about the BMPs and measurable goals that the QLP will implement during Year 15 is provided in the section following the table.

Note: X indicates BMPs that will be implemented during Year 15

Year 15				
OLP				
A. Public	Education and Outreach			
X	A.1 Distributed Paper Material			
X	A.2 Speaking Engagement			
X	A.3 Public Service Announcement			
X	A.4 Community Event			
X	A.5 Classroom Education Material			
X	A.6 Other Public Education			
B. Public	Participation/Involvement			
X	B.1 Public Panel			
	B.2 Educational Volunteer			
X	B.3 Stakeholder Meeting			
	B.4 Public Hearing			
	B.5 Volunteer Monitoring			
X	B.6 Program Coordination			
	B.7 Other Public Involvement			
C. Illicit I	Discharge Detection and Elimination			
	C.1 Storm Sewer Map Preparation			
X	C.2 Regulatory Control Program			
	C.3 Detection/Elimination Prioritization Plan			
	C.4 Illicit Discharge Tracing Procedures			
	C.5 Illicit Source Removal Procedures			
	C.6 Program Evaluation and Assessment			
	C.7 Visual Dry Weather Screening			
	C.8 Pollutant Field Testing			
	C.9 Public Notification			
X	C.10 Other Illicit Discharge Controls			

Year 15				
QLP				
D. Constru	uction Site Runoff Control			
X	D.1 Regulatory Control Program			
X	D.2 Erosion and Sediment Control BMPs			
X	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-Co	onstruction 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			
X	E.6 Post-Construction Inspections			
X	E.7 Other Post-Const Runoff Controls			
F. Pollutio	on Prevention/Good Housekeeping			
X	F.1 Employee Training Program			
	F.2 Inspection and Maintenance Program			
	F.3 Municipal Operations Storm Water			
	Control			
	F.4 Municipal Operations Waste Disposal			
X	F.5 Flood Management/Assess Guidelines			
X	F.6 Other Municipal Operations Controls			

The Lake County Stormwater Management Commission (SMC) is a Qualifying Local Program for MS4s in Lake County. SMC has been providing services under four of the six minimum control categories since it began implementing a comprehensive, countywide stormwater program in 1991. The revised SMPP template clarifies and emphasizes the significant efforts by SMC related to each of the six minimum control measures. These QLP commitments provide

Lake County with a baseline Countywide stormwater management program that can be built upon by each of the individual MS4s.

During Year 15, SMC remains committed to performing a variety of stormwater management activities across the County, these commitments are now specifically outlined in the SMPP template. SMC program is continually evolving, to better assist Lake County MS4s in meeting the requirements of the new 2016 MS4 Permit.

# A. Public Education and Outreach

SMC will continue to support Lake County MS4s in the development and implementation of their stormwater management programs by performing activities related to the Public Education and Outreach minimum control measure, as described below.

A.1 Distributed Paper Material

SMC compiles, develops, and distributes throughout Lake County a variety of materials related to stormwater management.

#### Measurable Goal(s):

- Develop and Distribute informational materials from "take away" rack at SMC.
- Upon request, distribute informational materials directly to Lake County MS4s for local distribution.

A.2 Speaking Engagement

SMC provides educational presentations related to IEPA's NPDES Stormwater Program on a regular basis at Municipal Advisory Committee (MAC) meetings. Upon request, SMC will provide educational presentations related to IEPA's NPDES Stormwater Program to Lake County MS4s.

## Measurable Goal(s):

- Provide educational presentations related to IEPA's NPDES Stormwater Program at MAC meetings.
- Upon request, provide educational presentations related to IEPA's NPDES Stormwater Program (e.g., "The Big Picture: Water Quality, Regulations & NPDES") to Lake County MS4s.

#### A.3 Public Service Announcement

SMC performs extensive Social Media Outreach & Announcement Activities. Public service announcement related to IEPA's NPDES Stormwater Program or Stormwater BMPs are included in SMC's watershed E-News. SMC also utilizes social media and coordinates with the Lake County Department of Transportation (LCDOT) to post watershed identification signage in watersheds where watershed planning activities have occurred or are occurring.

#### Measurable Goal(s):

• Include public service announcements related to IEPA's NPDES Stormwater Program or stormwater BMPs in watershed E-News at least once each year.

- Post watershed identification signage in cooperation and collaboration with LCDOT.
- Provide information via social media (Facebook and Twitter).

# A.4 Outreach Events

SMC sponsors and co-sponsors educational and technical training workshops on a variety of stormwater management-related topics. Each year, SMC will sponsor or co-sponsor at least one workshop on a topic related to IEPA's NPDES Stormwater Program, such as soil erosion and sediment control, illicit discharge detection and elimination, or stormwater best management practices (BMPs) that can be used to protect and improve water quality.

# Measurable Goal(s):

- Sponsor or co-sponsor workshop on stormwater-related topics.
- Track workshops and events.

# A.5 Classroom Education Material

Upon request, SMC will contribute to the development and compilation of material for inclusion in a stormwater education kit that can be distributed to local students and teachers and/or other local stakeholders. Additionally, upon request, SMC will provide information, materials, and training to local students and teachers and/or other local stakeholders interested in conducting storm drain stenciling.

# Measurable Goal(s):

- Upon request, develop and compile materials for inclusion in a stormwater education kit.
- Upon request, provide information, materials, and training to local students and teachers and/or stakeholders interested in conducting storm drain stenciling.

# A.6 Other Public Education

SMC maintains a website that contains a variety of materials and resources related to stormwater management. The website provide information about IEPA's NPDES Stormwater Program, provide information about stormwater best management practices (BMPs), allow for download of stormwater management-related publications and documents, provide notices of upcoming meetings and ongoing projects, includes watershed plans and watershed workgroup information, and provide links to a number of other stormwater management-related resources

# Measurable Goal(s):

- Maintain and update the portion of the SMC website dedicated to IEPA's NPDES Stormwater Program with resources such as model ordinances, case studies, brochures, and links including information related to climate change.
- Make "The Big Picture: Water Quality, Regulations & NPDES" presentation available to Lake County MS4s.

# B. Public Participation/Involvement

SMC will continue to support Lake County MS4s in the development and implementation of their stormwater management programs by performing activities related to the Public Participation/Involvement minimum control measure, as described below.

#### **B.1** Public Panel

SMC provides procedural guidance and implements its Citizen Inquiry Response System (CIRS) for receiving and taking action on information provided by the public regarding post-construction stormwater runoff control. SMC coordinates and conducts public meetings as well as committee meetings that are open to the public.

# Measurable Goal(s):

- Implement and provide guidance on existing CIRS procedures.
- Provide notice of public meetings on SMC website.
- Track number of meetings conducted

# **B.3** Stakeholder Meeting

SMC is actively involved in watershed planning throughout Lake County. SMC believes that the watershed planning process cannot happen and will not be successful without the input, interest, and commitment of the watershed stakeholders. Watershed stakeholders may include municipalities, townships, drainage districts, homeowner associations, lakes management associations, developers, landowners, and local, county, state, and federal agencies.

# Measurable Goal(s):

- Provide notice of stakeholder meetings on SMC website.
- Track number of watershed committee meetings conducted.
- Establish watershed planning committees for each new watershed planning effort.

# **B.6** Program Involvement

Consistent with Lake County's comprehensive, countywide approach to stormwater management, SMC serves as a Qualifying Local Program (QLP) for all Lake County MS4s. In this role, in 2002, SMC proactively formed the Municipal Advisory Committee (MAC) to provide a forum for representatives of local MS4s, which include municipalities, townships, and drainage districts, to discuss, among other topics, the implementation of IEPA's NPDES Stormwater Program. SMC will continue to facilitate quarterly MAC meetings and will continue to provide general support to Lake County MS4s as they continue to develop and implement their stormwater management programs. SMC will prepare an annual report on its stormwater management activities and will provide guidance to Lake County MS4s in preparing their own annual reports.

# Measurable Goal(s):

- Track number of MAC meetings conducted.
- Prepare annual report template for use by Lake County MS4s including a description of the Qualifying Local Program stormwater management activities.

• Prepare/maintain SMPP template for use by Lake County MS4s in creating their own SMPP.

# C. Illicit Discharge Detection and Elimination

SMC will continue to support Lake County MS4s in the development and implementation of their stormwater management programs by performing activities related to the Illicit Discharge Detection and Elimination minimum control measure, as described below. Note, however, that the primary responsibility for the implementation of the Illicit Discharge Detection and Elimination minimum control measure lies with the MS4.

## Measurable Goal(s):

- Continue to make available information regarding prioritization of outfalls for illicit discharge screening activities.
- Continue to make available compiled GIS data related to the County's existing stormwater infrastructure (e.g. storm sewer atlases, stream inventories and detention basin inventories).

# C.2 Regulatory Control Program

SMC provides local MS4s with model and example illicit discharge ordinances that prohibit all non-stormwater discharges, including illegal dumping, to the storm sewer system. Additionally, the WDO includes provisions that prohibit illicit discharges to the storm sewer system during construction (i.e., prior to final site stabilization) on development sites.

#### Measurable Goal(s):

- Provide model and example illicit discharge ordinances to Lake County MS4s.
- Continue to administer and enforce the WDO.

### **C.10** Other Illicit Discharge Controls

SMC regularly sponsors and co-sponsors educational and technical training workshops on a variety of stormwater management-related topics.

## Measurable Goal(s):

- Sponsor or co-sponsor and track the number of attendees at an Illicit Discharge Detection and Elimination workshop or other training workshop related to IEPA's NPDES Stormwater Program.
- Distribute informational materials about the hazards of illicit discharges and illegal dumping from "take away" rack at SMC and SMC website.

## D. Construction Site Runoff Control

Lake County has adopted a countywide Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County, including requirements for construction site runoff control.

#### **D.1** Regulatory Control Program

The WDO is the regulatory mechanism that requires the use of soil erosion and sediment controls on development sites throughout Lake County. SMC has also created a Designated Erosion Control Inspector (DECI) program, a program designed to closely mirror the inspection requirements of IEPA's General NPDES Permit No. ILR10.

#### Measurable Goal(s):

- Continue to administer and enforce the WDO.
- Continue to administer the Designated Erosion Control Inspector (DECI) program outlined by the WDO.

## D.2 Erosion and Sediment Control BMPs

§600 of the WDO specifies the soil erosion and sediment control measures that must be used in conjunction with any land disturbing activities conducted on a development site. SMC has maintains technical guidance documents to accompany the WDO.

# Measurable Goal(s):

- Continue to administer and enforce the WDO.
- Continue to maintain technical guidance documents.

# D.3 Other Waste Control Program

The WDO includes several provisions that address illicit discharges generated by construction sites. The applicant is required to prohibit the dumping, depositing, dropping, throwing, discarding or leaving of litter and construction material and all other illicit discharges from entering the stormwater management system.

#### Measurable Goal(s):

Continue to administer and enforce the provisions of the WDO related to the control of waste and debris during construction on development sites.

#### D.4 Site Plan Review Procedures

A community's designated enforcement officer is responsible for reviewing and permitting development plans and for administering and enforcing the provision of the WDO. Within certified communities the responsibility lies with the MS4; within non-certified communities the designated enforcement officer is SMC's chief engineer. SMC administers this enforcement officer program, providing training on an as-needed basis to all enforcement officers to assist them in passing the exam, and maintains an up-to-date list identifying each community's designated enforcement officer. In addition to administering the enforcement officer program, SMC periodically reviews each community's WDO administration and enforcement records, using the results of such review to evaluate the performance of certified communities and designated enforcement officers.

# Measurable Goal(s):

- Administer the Enforcement Officer (EO) program outlined by the WDO.
- Maintain an up-to-date list identifying each community's designated enforcement officer. (url:https://lakecountyil.gov/2467/Enforcement-Officers)
- Periodically review each community's WDO administration and enforcement records. Re-Certification Procedure. url: (url:https://lakecountyil.gov/DocumentCenter/Home/View/4244)
- Continue to maintain technical guidance documents.

# D.5 Public Information Handling Procedures

SMC provides a number of opportunities for the receipt and consideration of information submitted by the public.

#### Measurable Goal(s):

 Document and track the number of soil erosion and sediment control-related complaints received and processed by SMC.

# **D.6** Site Inspection/Enforcement Procedures

Article 11 of the WDO contains both recommended and minimum requirements for the inspection of development sites. Within certified communities, the community's designated enforcement officer is responsible for conducting these inspections; within certified communities, SMC's chief engineer is responsible for conducting these inspections. Article 12 of the WDO specifies the legal actions that may be taken and the penalties that may be imposed if the provisions of the WDO are violated

#### Measurable Goal(s):

Document and track the number of site inspections conducted by SMC.

# E. Post-Construction Runoff Control

As described above, Lake County has adopted a countywide Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County, including requirements for post-construction runoff control.

## **E.2** Regulatory Control Program

Proposed stormwater management strategies must address the runoff volume reduction requirements described in §503 of the WDO and must include appropriate stormwater BMPs to address the other applicable post-construction runoff control requirements of the WDO.

## Measurable Goal(s):

Continue to administer and enforce the WDO.

#### E.3 Long Term O&M Procedures

§401 of the WDO requires that maintenance plans be developed for all stormwater management systems and, §500 further details deed or plat restriction requirements for all stormwater management systems.

#### Measurable Goal(s):

Continue to administer and enforce the WDO.

# E.4 Pre-Construction Review of BMP Designs

As described above, a community's designated enforcement officer is responsible for reviewing and permitting development plans and for administering and enforcing the provisions of the WDO. This includes a review of the stormwater BMPs that will be used to meet the post-construction runoff control requirements of the WDO and adherence to the Runoff Volume Reduction standards of §503.

### Measurable Goal(s):

Continue to administer and enforce the WDO.

#### E.5 Site Inspections During Construction

As described above in MCM D.6 Article 11 of the WDO contains both recommended and minimum requirements for the inspection of development sites.

### Measurable Goal(s):

Continue to administer and enforce the WDO.

### **E.6** Post-Construction Inspections

SMC has collaborated on a number of watershed based plans throughout the County. These watershed plans included a stream and detention basin inventories. The plans also include a list of site specific best management practices within various communities based on an assessment of these inventories and other data. SMC is currently developing an application to assist communities in identifying potential project sites, recommended in adopted watershed plans, within their jurisdictional boundaries.

#### Measurable Goal(s):

- Continue to administer and enforce the WDO.
- Develop an application, for use by MS4s, to identify adopted watershed plan recommendations within their communities.

# **E.7** Other Post-Construction Runoff Controls

Through the Watershed Management Board (WMB), SMC provides partial funding for flood damage reduction and surface water quality improvement projects. The WMB, which includes representatives from the Lake Michigan, North Branch of the Chicago River, Fox River, and Des Plaines River watersheds, meets annually to review potential projects and to make recommendations on stormwater BMP project funding. Members of the WMB include chief municipal elected officials, township supervisors, drainage district chairmen, and county board members from each district found within each of Lake County's four major watersheds. The goal of the WMB program is to maximize

opportunities for local units of government and other groups to have input and influence on the solutions used to address local stormwater management problems. Previous WMB-funded projects have reduced flooding, improved surface water quality, and enhanced existing stormwater management facilities throughout Lake County.

# Measurable Goal(s):

- Conduct annual WMB meeting.
- Contribute funding to flood damage reduction and water quality improvement projects through the WMB.

URL: http://www.lakecountyil.gov/3635/Watershed-Management-Board-WMB

# F. Pollution Prevention/Good Housekeeping

SMC will continue to support Lake County MS4s in the development and implementation of their stormwater management programs by performing activities related to the Pollution Prevention/Good Housekeeping minimum control measure, as described below. Note, however, that the primary responsibility for the implementation of the Pollution Prevention/Good Housekeeping minimum control measure lies with the MS4.

# F.1 Employee Training Program

SMC will assist Lake County MS4s with the development and implementation of their employee training programs by maintaining a list of known employee training resources and opportunities, making available a software-based employee training program, and providing technical assistance to local MS4s. In addition, each year, SMC will sponsor or co-sponsor training workshops.

### Measurable Goal(s):

- Maintain a list of known employee training resources and opportunities.
- Make available the Excal Visual Storm Watch: Municipal Storm Water Pollution Prevention software-based employee training program.
- Sponsor or co-sponsor a training workshop related to pollution prevention/good housekeeping or other training workshop related to IEPA's NPDES Stormwater Program.

## F.5 Flood Management/Assess Guidelines

In working toward meeting its primary goals of flood damage reduction and surface water quality improvement, SMC follows a set of stormwater management policies that were created to define its roles and responsibilities for stormwater management in Lake County. One of these policies is to integrate multi-objective opportunities (e.g., flood damage reduction, surface water quality improvement, environmental enhancement) into SMC-sponsored projects. In accordance with this policy, SMC will evaluate all SMC-sponsored projects for multi-objective opportunities.

#### Measurable Goal(s):

 Track number of SMC-sponsored projects that are reviewed for multi-objective opportunity.

# F.6 Other Municipal Operations Controls

SMC develops and distributes chloride reduction documents and materials. Each year, SMC will sponsor or co-sponsor at least one workshop on a topic related to winter deicing. Lake County also publishes a "Lake County Winter Maintenance Preferred Providers" list. Providers included on this list have successfully completed a Lake County Deicing Training Workshop and passes the associated course exam.

## Measurable Goal(s):

- Advise MS4 communities of watershed groups addressing issues associated with the use of chlorides (i.e. road salt).
- Sponsor or co-sponsor at least one workshop on a topic related to winter de-icing.
- Make available chloride reduction documents on take-away racks and the website.

Part E5. QLP Construction Projects Conducted During Year 14

Project Name	Project Size (acres)	Construction Start Date	Construction End Date
Bull Creek Restoration Project - Beach Park, IL	1.87	5/2016	11/2017
Strawberry Condo Drainage Improvements - North Chicago, IL	0.25	6/2016	10/2016
Floodplain Home Buyout - FMA FY14, 98 Keystone Dr., Fox Lake, IL	0.22	8/1/2016	8/31/2016
Floodplain Home Buyout - FMA FY15, 37 Medinah, Fox Lake, IL	0.15	8/1/2016	8/31/2016
Floodplain Home Buyout - HMGP 1935, 103 Lindenhurst, Lindenhurst, IL	0.21	10/15/2016	10/31/2016
Floodplain Home Buyout - HMGP 1935, 105 Lindenhurst, Lindenhurst, IL	0.26	10/15/2016	10/31/2016
Floodplain Home Buyout - HMGP 1935, 109 Lindenhurst, Lindenhurst, IL	0.53	10/15/2016	10/31/2016
Floodplain Home Buyout - HMGP 1935, 2000 Old Elm, Lindenhurst, IL	0.26	10/15/2016	10/31/2016
Floodplain Home Buyout - HMGP 1935, 2002 Old Elm, Lindenhurst, IL	0.25	10/15/2016	10/31/2016
Floodplain Home Buyout - HMGP 4116, 24655 River Shore, Cary, IL	0.44	9/1/2016	9/30/2016
Floodplain Home Buyout - HMGP 4116, 24762 N. Lagoon, Cary, IL	0.54	9/1/2016	9/30/2016
Floodplain Home Buyout - HMGP 4116, 1018 Kilbourne Rd, Gurnee, IL	0.42	9/1/2016	9/30/2016
Floodplain Home Buyout - HMGP 4116, 1001 Kilbourne Rd, Gurnee, IL	2.03	9/1/2016	9/30/2016
Floodplain Home Buyout - HMGP 4116, 26970 N. Grace, Wauconda, IL	0.22	9/1/2016	9/30/2016
Floodplain Home Buyout - HMGP 4116, 200 Park, Ingleside, IL	0.22	9/1/2016	9/30/2016
Floodplain Home Buyout - HMGP 4116, 26195 W. Mattalina, Ingleside, IL	0.45	9/1/2016	9/30/2016

Permit Year 14: Mar. 2016 to Mar. 2017

# Part F. MS4 Construction Projects Conducted During Year 14

Project Name	Project Size (acres)	Construction Start Date	Construction End Date
2016 City of Zion Street Program	1.6	6-6-2016	7-6-2016
2016 FAU Street Resurfacing Project	2.3	5-2-2016	8-5-2016
Hebron watermain replacement	.5	5-1-2016	6-21-2016
			<u> </u>