



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, 2017

Permit No. ILR40 0517

MS4 OPERATOR INFORMATION: (As it appears on the current permit)

Name: Lake County Mailing Address 1: 18 North County Street
Mailing Address 2: _____ County: Lake
City: Waukegan State: IL Zip: 60085 Telephone: 847-377-2216
Contact Person: Ben Gilbertson Email Address: BGilbertson@lakecountyil.gov
(Person responsible for Annual Report)

Name(s) of governmental entity(ies) in which MS4 is located: (As it appears on the current permit)

Lake County, Illinois

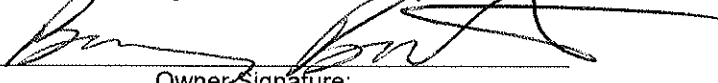
THE FOLLOWING ITEMS MUST BE ADDRESSED.

A. Changes to best management practices (check appropriate BMP change(s) and attach information regarding change(s) to BMP and measurable goals.)

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

- B. Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the minimum control measures.
- C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.
- D. Attach a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule.)
- E. Attach notice that you are relying on another government entity to satisfy some of your permit obligations (if applicable).
- F. Attach a list of construction projects that your entity has paid for during the reporting period.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))



Owner Signature:
Barry Burton

Printed Name:

5/23/17

Date:
County Administrator

Title:

EMAIL COMPLETED FORM TO: epa.ms4annualinsp@illinois.gov

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

IL 532 2585 WPC 691 Rev 6/10 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 has been approved by the Forms Management Center.

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

**Lake County (MS4)
Permit No. ILR400517
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	C-1
Part D. Summary of Year 15 Stormwater Activities	D-1
Part E. Notice of Qualifying Local Program	E-1
Part F. Construction Projects Conducted During Year 13	F-1

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 SMPP or NOI is provided in the following table.

Note: "X" indicates BMPs that were implemented in accordance with Lake County's SMPP
✓ indicates BMPs that were changed during Year 14

Year 14	
MS4	
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
	A.5 Classroom Education Material
	A.6 Other Public Education
B. Public Participation/Involvement	
X	B.1 Public Panel
X	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
X	B.4 Public Hearing
X	B.5 Volunteer Monitoring
X	B.6 Program Coordination
X	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
X	C.8 Pollutant Field Testing
X	C.9 Public Notification
	C.10 Other Illicit Discharge Controls

Year 14	
MS4	
D. Construction 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
X	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
X	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
X	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water Control
X	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

The IEPA has issued a new version of its General NPDES Permit No. ILR40 (Permit). The new version of the permit became effective on March 1, 2016.

In response to the new ILR40 permit, Lake County (MS4) has conducted a comprehensive third party evaluation of the Lake County Municipal Separate Storm Sewer (MS4) program as outlined in the Lake County Stormwater Management Program Plan (SMPP). The scope of this evaluation included a review of the County's existing MS4 program with respect to previous Illinois Environmental Protection Agency (IEPA) ILR40 permit requirements and also with respect to the new ILR40 permit that took effect on March 1, 2016. The specific recommendations outlined in that report are in the process of being fully implemented into Lake County's MS4 program. Commitments described for Year 15 are a reflection of the revised SMPP.

Lake County remains committed to maintaining its current stormwater management program and to continue to work to update and enhance its program, as needed, to comply with the requirements of the new Permit.

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

Stormwater Management Activities, Year 14

The IEPA issued a new version of its General NPDES Permit No. ILR40 (Permit), effective on March 1, 2016. The bulk of MS4 efforts during Year 14 consisted of reviewing and evaluating the Lake County Municipal Separate Storm Sewer (MS4) program. The scope of this evaluation included a review of the County's existing MS4 program with respect to previous Illinois Environmental Protection Agency (IEPA) ILR40 permit requirements and also the new ILR40 permit that took effect on March 1, 2016. This review produced a set of recommendations to the SMPP to comply with the new permit conditions. The current Lake County (MS4) Stormwater Management Program Plan (SMPP) can be viewed at the following link:

<http://lakecountyil.gov/DocumentCenter/View/8636>

The stormwater management activities that Lake County (MS4) performed during Year 14, including the BMPs and measurable goals, are described in detail in Part D. of Lake County's (MS4) previous Annual Facility Inspection Report for Permit Year 13 and as summarized below.

A. Public Education and Outreach

Lake County remains committed to implementing the Public Education and outreach component of its Stormwater Management Program Plan (SMPP). Lake County's Public Education and outreach program includes the distribution of educational materials to the community, conducting equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce those impacts, supporting classroom education, supporting storm drain stenciling and watershed delineation and planning efforts, and supporting SWALCO events and programs.

Lake County, in cooperation with the Lake County Stormwater Management Commission (QLP), 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 specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.1 of the SMPP.

Measurable Goal(s): Implement Public Education and Outreach BMPs and track progress of BMP implementation, as described in Section 3.1 of the SMPP.

Lake County continues to implement the BMPs described in its SMPP and to track progress in implementing its stormwater management program.

B. Public Participation/Involvement

Lake County is committed to implementing the Public Participation/Involvement component of its SMPP. Lake County's Public Participation/Involvement Program includes maintaining

a process for receiving and processing citizen input, attending and publicizing stakeholder input meetings, presenting program-related information at public meetings throughout the year, and publicizing IDDE reporting contact numbers. The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.2 of the SMPP.

Measurable Goal(s): Implement Public Participation and Involvement BMPs and track progress of BMP implementation, as described in Section 3.2 of the SMPP.

Lake County continues to implement the public involvement activities described in its SMPP (copy attached) and to track progress in implementing its stormwater management program.

C. Illicit Discharge Detection and Elimination

Lake County recognizes that illicit discharges can contribute considerable pollutant loads to receiving waters and is committed to identifying and eliminating these sources of pollution from its storm sewer system. Lake County's Illicit Discharge Detection and Elimination Program includes development of a storm sewer map, prohibition of non-stormwater discharges into the storm sewer system with appropriate enforcement procedures, a plan to detect and address illicit discharges into the storm sewer system, education of employees, businesses and the public about the hazards associated with illegal discharges and the improper disposal of waste, and the identification and implementation of appropriate best management practices (BMPs) and measurable goals. The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.3 of the Lake County Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in Section 3.3 of the SMPP.

Lake County continues to implement the Illicit Discharge Detection and Elimination Program and BMPs described in its SMPP (copy attached) and to track progress in implementing its stormwater management program.

D. Construction Site Runoff Control

It is the goal of Lake County to minimize the discharge of pollutants for new development projects. Lake County has a well-established regulatory program and enforcement procedures in place to prevent the discharge of sediment from active construction sites, to protect receiving waters, natural areas and adjacent properties from damage, to reduce runoff volumes, and to ensure compliance with required erosion and sediment control practices. The specific program activities, regulatory requirements and Lake County Departments responsible are outlined and discussed in detail in Section 3.4 of the Lake County Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in detail in Section 3.4 of the SMPP. Enforce the Watershed Development

Ordinance (WDO) or assist SMC in ensuring that all applicable developments are in compliance with the WDO.

Lake County continues to implement the Regulatory Program and Construction Site Runoff Control BMPs described in its SMPP (copy attached) and to track progress in implementing its stormwater management program.

E. Post-Construction Runoff Control

Lake County complies with NPDES permit requirements by incorporating ordinance and BMP standards to minimize the discharge of pollutants for new development projects. The Lake County Watershed Development Ordinance (WDO) establishes the minimum stormwater management requirements for development in Lake County. The WDO establishes standards for post-construction site runoff control. These standards apply to any new development or redevelopment resulting in over 0.5 acres of new impervious area. In unincorporated areas of Lake County, the WDO has been incorporated into the Unified Development Ordinance (UDO) and is enforced by the Lake County Department of Planning, Building and Development. As an applicant, Lake County is responsible for the post-construction inspection of its own facilities, including the County Highway System for compliance with this post-construction portion of the program. The specific program activities, regulatory requirements and Lake County Departments responsible are outlined and discussed in greater detail in Section 3.5 of the Lake County Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in detail in Section 3.5 of the SMPP. Enforce the Watershed Development Ordinance (WDO) or assist SMC in ensuring that all applicable developments are compliant with the WDO.

Lake County continues to implement the BMPs described in its SMPP and to track progress in implementing its stormwater management program. One example is the Detention Basin Retrofit Program which was completed during Year 14. This program evaluated the 44 detention basins that are owned and operated by the Lake County Division of Transportation and identified 21 of those basins that presented opportunities for improvements to enhance water quality. All 21 of these identified basins have now been retrofit with upgrades to enhance their water quality functions. Lake County continues to enforce the Watershed Development Ordinance (WDO) or assist the Stormwater Management Commission (SMC) in ensuring that all applicable developments are compliant with the minimum required standards of the WDO

F. Pollution Prevention/Good Housekeeping

Lake County is responsible for the implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. Lake County is committed to implementing the Pollution Prevention/Good Housekeeping component of its Stormwater Management Program Plan (SMPP). Lake County'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. The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.6 of the Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in the SMPP.

Lake County continues to implement the program, procedures and BMPs described in its SMPP and to track progress in implementing its stormwater management program.

Stormwater Management Program Assessment, Year 14

An overall assessment of the MS4's stormwater management program and the appropriateness of its BMPs is provided below.

During Year 10, Lake County adopted a Stormwater Management Program Plan (SMPP) to provide both a framework and additional guidance for staff in addressing the annual program requirements of the IEPA's General NPDES Permit No. ILR40. The SMPP represents an organized approach to achieving compliance with the requirements of the NPDES Phase II program for both private and public activities taking place within the county. The SMPP both documents and organizes the previously existing procedures and incorporates the objectives of the Watershed Development Ordinance (WDO) to create one cohesive program addressing the pre-development, construction, post-development activities and municipal operations. A copy of Lake County's Stormwater Management Program Plan (SMPP) is available at this link:

<http://lakecountyil.gov/DocumentCenter/View/8636>

In consideration of current and anticipated future water quality monitoring needs, Lake County has partnered with Publicly Owned Treatment Works (POTWs) operators, Municipal Separate Storm Sewer System (MS4) communities, environmental advocacy groups, consultants and other interested stakeholders located within the Des Plaines River Watershed to form the Des Plaines River Watershed Workgroup. The primary purpose of the workgroup is to design and implement a stormwater monitoring program within the watershed for the collection of water quality data that will meet current and anticipated future monitoring and wet weather sampling requirements. These monitoring activities began during Year 13 and it is hoped that this watershed-based approach will serve as a model for future water quality monitoring in the three remaining watersheds in Lake County (i.e. North Branch of the Chicago River Watershed).

MS4 program evaluation is performed on an annual basis. The primary mechanism for evaluating the program and ensuring that staff has adequate knowledge is supervision by responsible department managers. Management support tasks include observing and evaluating design, construction and field personnel as they implement the requirements of the SMPP on both municipal and private projects, and operations/maintenance personnel as they conduct their assigned activities.

The IEPA issued a new version of its General NPDES Permit No. ILR40 (Permit), effective on March 1, 2016. A significant portion of Lake County's efforts during Year 14 consisted of reviewing and evaluating the Lake County Municipal Separate Storm Sewer (MS4) program. The scope of this evaluation included a comprehensive third party review of the County's existing MS4 program with respect to previous Illinois Environmental Protection Agency (IEPA) ILR40 permit requirements and the new ILR40 permit that took effect on March 1, 2016. This review produced a set of recommendations to the SMPP to comply with the new permit conditions. Lake County continues to implement recommended measures and to revise their SMPP to incorporate these recommendations during Year 15.

Lake County remains committed to maintaining its current stormwater management program and to continue to work to update and enhance its program, as needed, to comply with the requirements of the new Permit.

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

Annual Monitoring and Data Collection, Year 14

Lake County (MS4) is located within and participates in both the Des Plaines River Watershed Workgroup (DRWW) and the Fox River Study Group (FRSG). Lake County also provides for Lake County Health Department (LCHD) monitoring and data collection efforts across Lake County. The QLP section of the report describes the status of Lake County waters using information gathered by these workgroups, the LCHD and IEPA. Following is a brief summary of these efforts:

Des Plaines River Watershed

- The Des Plaines River Watershed Workgroup (DRWW) has been established to monitor water quality in the Des Plaines River and tributaries, prioritize and implement water quality improvement projects, and secure grant funding to help offset the cost. Monitoring data will help to provide a better understanding of the water quality impairments, identify priority restoration activities, and track the performance of water quality improvements over time. 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 good data and 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. Lake County (MS4) is an active DRWW member for the reporting year (url: <http://www.drww.org/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

Lower Fox River Watershed

- **Lake County Health Department Lake Reports:** Lake County, through its Lake County Health Department Lakes Management Unit has been collecting water quality data on Lake County lakes since the late 1960s. Since 2000, 176 different lakes have been studied with data collected on temperature, dissolved oxygen, phosphorus, nitrogen, solids, pH, alkalinity, chloride, conductivity, water clarity, the plant community and shoreline characteristics. Each year, a number of lakes are selected for the detailed data collection and study which qualifies as “site specific monitoring” as outlined in the ILR40 General Permit. If requested by the IEPA, the Health Department could potentially complete an assessment of this data over time. Lake summary reports can be found at the following link:

<https://www.lakecountyil.gov/2400/Lake-Reports>

Inland Beaches located in Lake County are monitored bimonthly from May to September by the Lake County Health Department’s Lake Management Unit (LMU). Bacteria

concentrations at inland beaches and recreational areas resulting in high concentrations of E coli bacteria are typically the basis for swim bans. The IEPA uses the number and duration of swim bans to assess whether the beaches support designated uses for primary contact recreation.

- Fox River Study Group: This group is completing monitoring and modeling of the Lower Fox River and has a cooperative gage with the USGS at Algonquin Dam. The Fox River Implementation Plan (FRIP) takes the place of a traditional TMDL for dissolved oxygen and nuisance algae in the Fox River. The FRSG directly coordinates with the IEPA on the efforts described in the FRIP.

Upper Fox River Watershed

- Lake County Health Department Lake Reports: Lake County, through its Lake County Health Department Lakes Management Unit has been collecting water quality data on Lake County lakes since the late 1960s. Since 2000, 176 different lakes have been studied with data collected on temperature, dissolved oxygen, phosphorus, nitrogen, solids, pH, alkalinity, chloride, conductivity, water clarity, the plant community and shoreline characteristics. Each year, a number of lakes are selected for the detailed data collection and study which qualifies as “site specific monitoring” as outlined in the ILR40 General Permit. If requested by the IEPA, the Health Department could potentially complete an assessment of this data over time. Lake summary reports can be found at the following link:

<https://www.lakecountyiil.gov/2400/Lake-Reports>

Inland Beaches located in Lake County are monitored bimonthly from May to September by the Lake County Health Department’s Lake Management Unit (LMU). Bacteria concentrations at inland beaches and recreational areas resulting in high concentrations of E coli bacteria are typically the basis for swim bans. The IEPA uses the number and duration of swim bans to assess whether the beaches support designated uses for primary contact recreation.

Lake Michigan Watershed

- Lake County Health Department Beach Sampling: A significant portion of the Lake Michigan Beaches located in Lake County are listed as impaired. The Lake County Health Department (LCHD) regularly samples beaches (for E. coli 4 days a week) from approximately Memorial Day to Labor Day. This activity is included as “site specific monitoring” of a high value resource. These results are used by the LCHD, in concert with other data collected by IEPA, to determine if TMDL implementation recommendations have resulted in load reductions and improved overall beach health.

North Branch Chicago River Watershed

- North Branch Chicago River Watershed Workgroup: There are currently limited data collection activities occurring in this watershed. The Lake County Health Department has performed a lake assessment of eight (8) lakes within the watershed. The North Shore

Sanitary District completes quarterly monitoring at seven (7) locations for a wide range of parameters including nutrients, metal, chlorides, etc. They also complete bio-assessments at two (2) locations.

Efforts are currently underway to formalize a watershed workgroup using the DRWW as a model for water quality data collection in Year 15. Lake County (MS4) intends to actively participate as a member in this process and activities.

Part D. MS4 Summary of Year 15 Stormwater Activities

The table below indicates the stormwater management activities that Lake County (MS4) plans to undertake during Year 15. Additional information about the stormwater management activities that Lake County (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
X	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
	A.5 Classroom Education Material
	A.6 Other Public Education
B. Public Participation/Involvement	
X	B.1 Public Panel
X	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
X	B.4 Public Hearing
X	B.5 Volunteer Monitoring
X	B.6 Program Coordination
X	B.7 Other Public Involvement
C. Illicit Discharge Detection and Elimination	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
X	C.8 Pollutant Field Testing
X	C.9 Public Notification
	C.10 Other Illicit Discharge Controls

Year 15	
MS4	
D. Construction 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
X	D.7 Other Construction Site Runoff Controls
E. Post-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
X	E.7 Other Post-Const Runoff Controls
F. Pollution Prevention/Good Housekeeping	
X	F.1 Employee Training Program
X	F.2 Inspection and Maintenance Program
X	F.3 Municipal Operations Storm Water Control
X	F.4 Municipal Operations Waste Disposal
	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

Stormwater Management Activities, Year 15

The IEPA issued a new version of its General NPDES Permit No. ILR40 (Permit), effective on March 1, 2016. The bulk of Lake County's (MS4) efforts during Year 14 consisted of reviewing and evaluating the Lake County Municipal Separate Storm Sewer (MS4) program. The scope of this evaluation included a comprehensive review of the County's existing MS4 program with respect to previous Illinois Environmental Protection Agency (IEPA) ILR40 permit requirements and the new ILR40 permit that took effect on March 1, 2016. This review produced a set of recommendations to the SMPP to comply with the new permit conditions. The Lake County (MS4) Stormwater Management Program Plan (SMPP) can be viewed at the following link:

<http://lakecountyil.gov/DocumentCenter/View/8636>

The stormwater management activities that Lake County (MS4) will perform during Year 15, will include working to implement the remaining recommendations included in the Year 14 program review and to ensure the Lake County (MS4) program is in full compliance with the requirements of the new ILR40 permit.

A. Public Education and Outreach

Lake County is committed to implementing the Public Education and outreach component of its SMPP. Lake County's Public Education and outreach program includes the distribution of educational materials to the community, conducting equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce those impacts, supporting classroom education, supporting storm drain stenciling and watershed delineation and planning efforts, and supporting SWALCO events and programs.

Lake County, in cooperation with the Lake County Stormwater Management Commission (QLP), 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.

One example of a planned work item for Year 15 is to transfer the location of the MS4 website for the Lake County (MS4) SMPP from the Lake County Division of Transportation website to the SMC website, which already hosts a considerable amount of NPDES information and is a more logical location for this information.

The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.1 of the SMPP.

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in the Stormwater Management Program Plan (SMPP).

B. Public Participation/Involvement

Lake County is committed to implementing the Public Participation/Involvement component of its SMPP. Lake County's Public Participation/Involvement Program includes maintaining a process for receiving and processing citizen input, attending and publicizing stakeholder

input meetings, presenting program-related information at public meetings throughout the year, and publicizing IDDE reporting contact numbers. The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.2 of the SMPP.

One example of a planned enhancement for Year 15 is to provide website links of the environmental justice areas within the County on the County NPDES website so that these areas can be adequately addressed by the MS4 program.

Measurable Goal(s): Implement Public Participation and Involvement BMPs and track progress of BMP implementation, as described in Section 3.2 of the SMPP.

C. Illicit Discharge Detection and Elimination

Lake County recognizes that illicit discharges can contribute considerable pollutant loads to receiving waters and is committed to identifying and eliminating these sources of pollution from its storm sewer system. Lake County will conduct activities related to the Illicit Discharge Detection and Elimination (IDDE) minimum control measure. According to IEPA's General NPDES Permit No. ILR40, the MS4's IDDE program must include:

- 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-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, 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,
- Periodic inspection of storm sewer outfalls for detection of non-stormwater discharges and illegal dumping.

The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.3 of the Lake County Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in Section 3.3 of the SMPP.

D. Construction Site Runoff Control

It is the goal of Lake County to minimize the discharge of pollutants for new development projects. Lake County has a well established regulatory program and enforcement procedures in place to prevent the discharge of sediment from active construction sites, to protect receiving waters, natural areas and adjacent properties from damage, to reduce runoff volumes, and to ensure compliance with required erosion and sediment control practices. The specific program activities, regulatory requirements and Lake County Departments responsible are outlined and discussed in detail in Section 3.4 of the Lake County

Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in detail in Section 3.4 of the SMPP. Enforce the Watershed Development Ordinance (WDO) or assist SMC in ensuring that all applicable developments are compliant with the WDO.

E. Post-Construction Runoff Control

Lake County complies with NPDES permit requirements by incorporating ordinance and BMP standards to minimize the discharge of pollutants for new development projects. The Lake County Watershed Development Ordinance (WDO) establishes the minimum stormwater management requirements for development in Lake County. The WDO establishes standards for post-construction site runoff control. These standards apply to any new development or redevelopment resulting in over 0.5 acres of new impervious area. In unincorporated areas of Lake County, the WDO has been incorporated into the Unified Development Ordinance (UDO) and is enforced by the Lake County Department of Planning, Building and Development. As an applicant, Lake County is responsible for the post-construction inspection of its own facilities, including the County Highway System for compliance with this post-construction portion of the program. The specific program activities, regulatory requirements and Lake County Departments responsible are outlined and discussed in greater detail in Section 3.5 of the Lake County Stormwater Management Program Plan (SMPP).

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in detail in Section 3.5 of the SMPP. Enforce the minimum standards of the Watershed Development Ordinance (WDO) or assist SMC in ensuring that all applicable developments are in compliance with the WDO.

F. Pollution Prevention/Good Housekeeping

Lake County is responsible for the implementation of an operation and maintenance program to reduce the discharge of pollutants from municipal operations. Lake County is committed to implementing the Pollution Prevention/Good Housekeeping component of its Stormwater Management Program Plan (SMPP). Lake County'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. The specific program activities and Lake County Departments responsible are outlined and discussed in detail in Section 3.6 of the Stormwater Management Program Plan (SMPP).

An example of a work activity planned for Year 15 is the construction of a chloride collection/retention basin immediately downstream of Lake County DOT's winter de-icing materials handling and storage facilities.

Measurable Goal(s): Implement BMPs and track progress of BMP implementation, as described in Section 3.6 of the SMPP.

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	
	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 14	
QLP	
D. Construction 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-Construction Runoff Control	
	E.1 Community Control Strategy
X	E.2 Regulatory Control Program
X	E.3 Long Term O&M Procedures
X	E.4 Pre-Const Review of BMP Designs
X	E.5 Site Inspections During Construction
X	E.6 Post-Construction Inspections
X	E.7 Other Post-Const Runoff Controls
F. Pollution 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
✓	F.6 Other Municipal Operations Controls

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 NPDES 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 (<https://lakecountyiil.gov/DocumentCenter/View/11146>) 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 “[The Big Picture: Water Quality, Regulations & NPDES](#)” 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, (url: <https://lakecountyiil.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:
 - Municipal Pollution Prevention/Good Housekeeping: Indiana & California Indiana Perspectives at April 2016 MAC meeting
 - Presentations at April, June, September 2016 MAC meetings regarding new ILR40 permit, its implications and SMCs guidance on compliance.
 - Center for Watershed Protection stormwater webinars (March, May, June, September, October, November 2016)
 - Homeowners Association Workshop on maintaining stormwater BMPs at CLC May 2016
 - 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
 - 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
 - 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:
 - Riparian Landowner Open House held in Beach Park, IL on May 25, 2016
 - Loch Lomond Property Owners Association's Loch Fest held in Mundelein, IL on July 30, 2016

- Rain Barrel, Compost Bin, and Native Plant Sale held in Libertyville, IL on May 7, 2016
- 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 “[The Big Picture: Water Quality, Regulations & NPDES](#)” 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:<https://lakecountyil.maps.arcgis.com/apps/InformationLookup/index.html?appid=09ab978957e7499f9926805d29e9394a>).
- SMC developed an ArcGIS geospatial web tool for Lake County within the Des Plaines River watershed, allowing the public to see an [Inventory of Stream and Detention Basin](#) Information, (url: <https://lakecountyil.maps.arcgis.com/apps/webappviewer/index.html?id=918c4042dcec431ba46b5c1a7030b46c&extent=-9835848.6057,5176480.893,-9738009.2095,5239847.1894,102100>).
- SMC maintains reference documents for stormwater best practices, BMPs and green infrastructure practices on its website, (url: <https://lakecountyil.gov/2261/Stormwater-Best-Practices>).

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 through 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.
 - 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:
 - North Branch Chicago River Planning Committee – 3
 - Bull Creek/Bull's Brook Watershed Council – 2
 - Buffalo Creek Clean Water Partnership – 1
 - 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://lakecountyiil.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: <https://lakecountyiil.gov/2470/Designated-Erosion-Control-Inspector-Pro>).
- Total DECI's who have passed the exam (to date): 1,356.
- DECI's who have passed the exam between 03/01/2016 – 02/28/2017: 34.
- Total listed DECI's (to date): 139 (DECI completed certification process).
- DECI's 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://lakecountyl.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: <https://lakecountyl.gov/2459/Community-Certification>)
- 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 QLP 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 QLP 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.

- 11 WMB project grants awarded
- 1 Stormwater Infrastructure Repair Fund (SIRF) project grant awarded
- 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: <http://lakecountyil.gov/2479/NPDES-Phase-II>)
- 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 QLP activities:

- SMC co-sponsored 2 de-icing workshops:
 - Deicing for Parking Lots and Sidewalks 10/4/2016
 - Deicing Roads 10/5/2016
- A de-icing certification process to promote trained vendors is offered
 - 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>)

- 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: <https://lakecountyil.gov/DocumentCenter/Home/View/3044>)
 - 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 [Illinois EPA \(IEPA\) in the 2016 Illinois Integrated Water Quality Report and 303\(d\) List](#) 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 Illinois EPA's 2016 Illinois Integrated Water Quality Report (IIWQR) and Section 303(d) List, 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 157.84 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 Segments added to 2016 303(d) list not previously 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 2016 303(d) list not previously listed in 2014						
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				

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 excessive 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:

- Aesthetic Quality, 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).
- Fish Consumption, 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

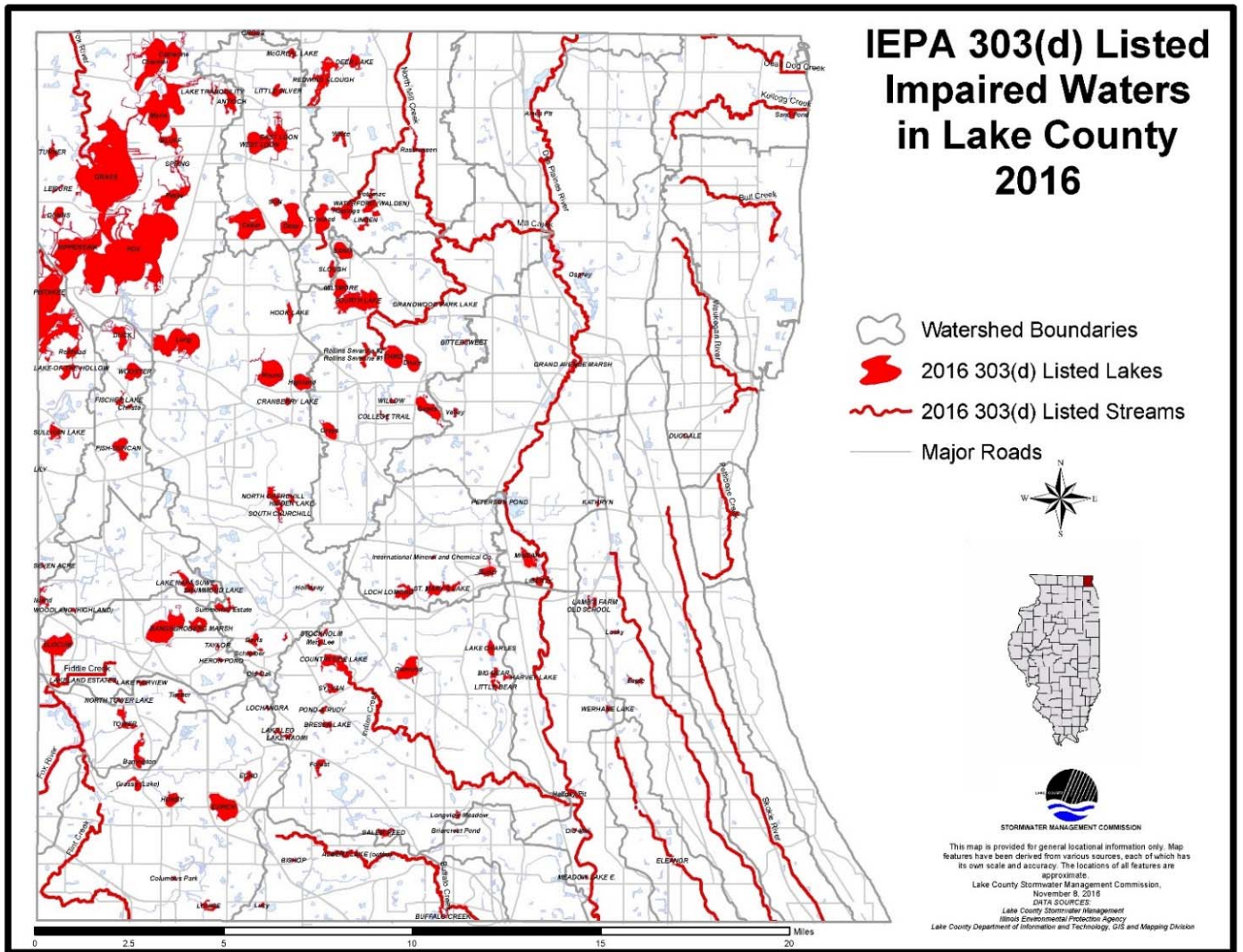


Figure E3.1

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 <https://www.lakecountyil.gov/2400/Lake-Reports>. 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		Year 15	
QLP		QLP	
A. Public Education and Outreach		D. Construction Site Runoff Control	
X	A.1 Distributed Paper Material	X	D.1 Regulatory Control Program
X	A.2 Speaking Engagement	X	D.2 Erosion and Sediment Control BMPs
X	A.3 Public Service Announcement	X	D.3 Other Waste Control Program
X	A.4 Community Event	X	D.4 Site Plan Review Procedures
X	A.5 Classroom Education Material	X	D.5 Public Information Handling Procedures
X	A.6 Other Public Education	X	D.6 Site Inspection/Enforcement Procedures
			D.7 Other Construction Site Runoff Controls
B. Public Participation/Involvement		E. Post-Construction Runoff Control	
X	B.1 Public Panel		E.1 Community Control Strategy
	B.2 Educational Volunteer	X	E.2 Regulatory Control Program
X	B.3 Stakeholder Meeting	X	E.3 Long Term O&M Procedures
	B.4 Public Hearing	X	E.4 Pre-Const Review of BMP Designs
	B.5 Volunteer Monitoring	X	E.5 Site Inspections During Construction
X	B.6 Program Coordination	X	E.6 Post-Construction Inspections
	B.7 Other Public Involvement	X	E.7 Other Post-Const Runoff Controls
C. Illicit Discharge Detection and Elimination		F. Pollution Prevention/Good Housekeeping	
	C.1 Storm Sewer Map Preparation	X	F.1 Employee Training Program
X	C.2 Regulatory Control Program		F.2 Inspection and Maintenance Program
	C.3 Detection/Elimination Prioritization Plan		F.3 Municipal Operations Storm Water Control
	C.4 Illicit Discharge Tracing Procedures		F.4 Municipal Operations Waste Disposal
	C.5 Illicit Source Removal Procedures	X	F.5 Flood Management/Assess Guidelines
	C.6 Program Evaluation and Assessment	X	F.6 Other Municipal Operations Controls
	C.7 Visual Dry Weather Screening		
	C.8 Pollutant Field Testing		
	C.9 Public Notification		
X	C.10 Other Illicit Discharge 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.lakecountyiil.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 de-icing. 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

Part F. Lake County (MS4) Construction Projects Conducted During Year 14

Project Name	Project Size (acres)	Construction Start Date	Construction End Date
Rollins Road at IL 83 / CNRR Grade Separation	50.5 Acres	June 2013	June 2016
River Road at Roberts Road Intersection	11.65 Acres	March 2014	June 2016
Peterson Road – US 45 to IL 83	37.5 Acres	March 2014	Nov 2015
Peterson Road – IL 83 to West of Alleghany Road	74.5 Acres	May 2015	July 2016
Multi-Department Storage Facility 646 Winchester Road Libertyville, IL	2.1 Acres	March 2017	December 2017
Depke Juvenile Justice Center Expansion	17 Acres	Nov 2015	Nov 2017
Hawley St Reconstruction – Midlothian Road to Seymour Ave.	12.1 Acres	June 2015	May 2017
Washington St Reconstruction & Widening – Hainesville Rd to Haryan Way	13.9 Acres	August 2015	August 2017
Washington St Grade Separation w/CNRR – Haryan Way to Lake Street	14.3 Acres	Jan 2015	October 2017
Washington St Bike Path – Atkinson Road to Lancer Lane	9.9 Acres	June 2015	April 2016
Round Lake Sanitary District Site Improvements	1 Acre	Dec 2014	May 2016
Diamond-Sylvan Lake Plant Decommissioning	1 Acre	Nov 2014	April 2016
Des Plaines River WRF Phases 2B & 3	3.5 Acres	April 2015	April 2017