

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

Complete each section of this report.

REPORT PERIOD:	FROM: MARCH 2017	TO: MARCH 2018
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**MS4 OPERATOR INFORMATION: (As it appears on the current permit)**

NAME: Village of Buffalo Grove		TELEPHONE NUMBER: 847-459-2547
MAILING ADDRESS: 51 Raupp Boulevard		
CITY: Buffalo Grove	STATE: IL	ZIP: 60089
CONTACT PERSON: Michael J. Reynolds (Person responsible for Annual Report)		

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

Cook County	Lake County

**THE FOLLOWING ITEMS MUST BE ADDRESSED.**

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

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

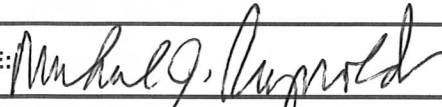
**B.**  
Attach the status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and your identified measurable goals for each of the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

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

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

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

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

SIGNATURE: 	DATE: May 29, 2018
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Information required by this form must be provided to comply with 415 ILCS 5/39 (1996). Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

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## Part A. Changes to Best Management Practices

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

Year 11	Year 12	Year 13	Year 14	Year 15	
X	X	X	X	X	MS4
<b>A. Public Education and Outreach</b>					
X	X	X	X	X	A.1 Distributed Paper Material
			✓	✓	A.2 Speaking Engagement
X	X	X	X	X	A.3 Public Service Announcement
X	X	X	X	X	A.4 Community Event
					A.5 Classroom Education Material
X	X	X	X	X	A.6 Other Public Education
<b>B. Public Participation/Involvement</b>					
					B.1 Public Panel
X	X	X	X	X	B.2 Educational Volunteer
X	X	X	X	X	B.3 Stakeholder Meeting
					B.4 Public Hearing
					B.5 Volunteer Monitoring
X	X	X	X	X	B.6 Program Coordination
X	X	X	X	X	B.7 Other Public Involvement
<b>C. Illicit Discharge Detection and Elimination</b>					
X	X	X	X	X	C.1 Storm Sewer Map Preparation
X	X	X	X	X	C.2 Regulatory Control Program
X	X	X	X	X	C.3 Detection/Elimination Prioritization Plan
X	X	X	X	X	C.4 Illicit Discharge Tracing Procedures
X	X	X	X	X	C.5 Illicit Source Removal Procedures
X	X	X	X	X	C.6 Program Evaluation and Assessment
X	X	X	X	X	C.7 Visual Dry Weather Screening
X	X	X	X	X	C.8 Pollutant Field Testing
					C.9 Public Notification
X	X	X	X	X	C.10 Other Illicit Discharge Controls

Year 11	Year 12	Year 13	Year 14	Year 15	
X	X	X	X	X	MS4
<b>D. Construction Site Runoff Control</b>					
X	X	X	X	X	D.1 Regulatory Control Program
X	X	X	X	X	D.2 Erosion and Sediment Control BMPs
X	X	X	X	X	D.3 Other Waste Control Program
X	X	X	X	X	D.4 Site Plan Review Procedures
X	X	X	X	X	D.5 Public Information Handling Procedures
X	X	X	X	X	D.6 Site Inspection/Enforcement Procedures
					D.7 Other Construction Site Runoff Controls
<b>E. Post-Construction Runoff Control</b>					
X	X	X	X	X	E.1 Community Control Strategy
X	X	X	X	X	E.2 Regulatory Control Program
X	X	X	X	X	E.3 Long Term O&M Procedures
X	X	X	X	X	E.4 Pre-Const Review of BMP Designs
X	X	X	X	X	E.5 Site Inspections During Construction
X	X	X	X	X	E.6 Post-Construction Inspections
					E.7 Other Post-Const Runoff Controls
<b>F. Pollution Prevention/Good Housekeeping</b>					
X	X	X	X	X	F.1 Employee Training Program
X	X	X	X	X	F.2 Inspection and Maintenance Program
X	X	X	X	X	F.3 Municipal Operations Storm Water Control
X	X	X	X	X	F.4 Municipal Operations Waste Disposal
X	X	X	X	X	F.5 Flood Management/Assess Guidelines
X	X	X	X	X	F.6 Other Municipal Operations Controls

## **Part B. Status of Compliance with Permit Conditions**

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

The status of BMPs and measurable goals performed in Year 15 are described below.

### **1) PUBLIC EDUCATION AND OUTREACH**

The Village performs a variety of activities that meet the requirements of the Public Education and Outreach minimum control measure. These activities include BMP A.1, A.3 and A.6. A brief description and status is provided below.

#### **BMP No. A.1, A.3 – Distibuted Paper Material, Public Service Announcement**

**Brief Description of BMP:** The Village newsletter has been used to provide information for the purposes of public outreach. The Village website provides additional links related to notifying residents of various collection events for leaves, landscape waste, tires, prescription drugs, holiday trees, and holiday lights. By promoting proper disposal of these items, the Village reduces the likelihood of illegal dumping into storm drains and drainage ways. The Village will continue to include a stormwater and/or ambient water quality related articles in the Village's newsletter at least once a year. The Village will continue to utilize other available outlets such as the Village website to reach residents regarding stormwater and water quality information.

#### **BMP No. A.2 – Speaking Engagement**

**Brief Description of BMP:** The Village regularly participates in or provides presentations to local civic clubs, watershed groups or other interested parties on topics related to NPDES, stormwater quality or other similar subjects. Speaking engagements provide the opportunity to inform concerned citizens or interested parties about stormwater quality, environmental impacts and other issues NPDES related issues and activities including ways to help. During previous permit years, the Village's Director of Public Works provided a chloride presentation to the Buffalo Creek Clean Water Partnership, Lake County Stormwater Management Commission Municipal Advisory Committee, and the Buffalo Grove Rotary Club on responsible salt usage and ways to reduce chloride usage and impacts to the environment. Additionally, the Maintenance Superintendent is on the American Public Works Association Winter Maintenance Committee and provides numerous presentations regarding the Buffalo Grove snow and ice program and other salt reduction efforts.

#### **BMP No. A.6 – Other Public Education**

**Brief Description of BMP:** The Village has information on its website relating to recycling of waste, waste disposal, stormwater and/or water quality and provides contact information

for residents to report any potential stormwater or water quality related issues. The Village also has a website link on the Village's website to include information on the potential effects on storm water discharge due to climate change. The Village also holds an annual Public Works Open House where residents have the opportunity to learn about the functions of the Public Works Department including stormwater quality activities. This year's demonstrations included a mock drain set up to inform residents on the importance of the "only stormwater down the drain" concept and the distribution of educational materials.

## **2) PUBLIC PARTICIPATION AND INVOLVEMENT**

The Village performs a variety of activities that meet the requirements of the Public Participation and Involvement minimum control measure. These activities include BMP B.2, B.3, B.6, and B.7. A brief description and status is provided below.

### **BMP No. B.2 – Educational Volunteer**

**Brief Description of BMP:** The Village participates and coordinates with the Des Plaines River Watershed Workgroup (DRWW), the Municipal Advisory Committee (MAC) of the Lake County Stormwater Management Commission, the Lower Des Plaines Watershed Planning Council and Buffalo Creek Clean Water Partnership (BCCWP). The goal of the work groups is to identify best management practices that are most appropriate and cost effective for the region to be used by municipalities and includes an element for chloride reduction.

### **BMP No. B.3 – Stakeholder Meeting**

**Brief Description of BMP:** The Village will hold an annual public meeting to discuss topics including steps the public can take to reduce pollutants to stormwater runoff or the impacts of stormwater runoff on local water bodies. The goal is to increase public education and involvement regarding the Village's stormwater management and NDPES program and their knowledge on ways they can help.

### **BMP No. B.4 – Public Hearing**

**Brief Description of BMP:** The Village supports the Buffalo Creek Clean Water Partnership whose activities reduce the amount of pollutants and other materials that make it to the MS4. The Village regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality. Village staff will continue to perform these activities and work to increase participation from its staff and attendance by residents.

### **BMP No. B.6 – Program Involvement**

**Brief Description of BMP:** The Village coordinates with local groups to perform clean up activities. These activities directly reduce the amount of pollutants entering the Village's storm sewer system.

The Village supports the Buffalo Creek Clean Water Partnership whose activities reduce the amount of pollutants and other materials that make it to the MS4. The Village regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality. Village staff will continue to perform these activities and work to increase participation from its staff and attendance by residents.

#### **BMP No. B.7 – Other Public Involvement**

**Brief Description of BMP:** The Public Works Department provides contact information on the Village website to allow residents to report stormwater or water quality related issues.

Buffalo Grove has actively participated in the Des Plaines River Watershed Workgroup (DRWW). DRWW is a dues paying organization with a mission to bring together a diverse coalition of stakeholders to work together to improve water quality in the Des Plaines River and its tributaries in a cost effective manner to meet Illinois EPA requirements. The DRWW will monitor water quality in the river and tributaries, prioritize and implement water quality improvement projects, and secure grant funding to offset the cost. This committee has worked to reduce pollution in the Des Plaines River Watershed.

Buffalo Grove has actively participated in the Municipal Advisory Committee (MAC) of the Lake County Stormwater Management Commission. This committee has worked to reduce pollution in waterways and water bodies in Lake County.

The Village also holds an annual Public Works Open House where residents have the opportunity to learn about the functions of the Public Works Department including stormwater quality activities. This year's demonstrations included a mock drain set up to inform residents on the importance of the "only stormwater down the drain" concept and the distribution of educational materials.

### **3) ILLICIT DISCHARGE DETECTION AND ELIMINATION**

The Village performs a variety of activities that meet the requirements of the Illicit Discharge Detection and Elimination minimum control measure. These activities include BMP's C.1, C.2, C.3, C.4, and C.7. A brief description and status is provided below.

#### **BMP No. C.1 – Storm Sewer Map Preparation**

**Brief Description of BMP:** The Village maintains an updated storm sewer system map. The map shows the location all of the outfalls within the Village and identifies the name of all waters that receive discharges from those outfalls. The map is currently up-to-date and will be updated as needed based on development and other stormwater improvements.

#### **BMP No. C.2 – Regulatory Control Program and C.3 Detection/Elimination Prioritization Plan**

**Brief Description of BMP:** The Village has established a high quality suburban environment through adoption and enforcement of building and other codes which provide for polluted discharges to be properly routed to the sanitary sewer system for treatment. The Villages' Municipal Code prohibits improper discharges and Village staff effectively follow up any observation of improper discharges of pollutants. The Village will continue to enforce the ordinance to prevent or eliminate non-stormwater discharges from the municipal separate storm sewer system.

**BMP No. C.4 – Illicit Discharge Tracing Procedures and C.5 Illicit Source Removal**

**Brief Description of BMP:** The Village has existing policies and procedures in place to trace and eliminate illicit discharges to the municipal separate storm sewer system identified by resident reporting, visual screening, and public works maintenance activities. These procedures include the utilization of the storm sewer map, existing design plans and other available data to locate the source of potential pollutants. The Village will continue these tracing activities as needed to reduce or eliminate non-stormwater discharges to the MS4.

**BMP No. C.6 – Program Evaluation and Assessment**

**Brief Description of BMP:** The Village performs an annual review of the effectiveness of the regulatory program. The Village also performs screenings of all Village outfalls to identify illicit discharges as part of its maintenance activities. The Village will continue to perform these activities.

**BMP No. C.7 – Visual Dry Weather Screening**

**Brief Description of BMP:** The Village performs inspections of all MS4 outfalls during dry weather conditions as determined by the inspection prioritization plan.

**BMP No. C.8 – Pollutant Field Testing**

**Brief Description of BMP:** The Village regularly samples, test and documents the results of influent and effluent flow to various lakes and streams throughout the community.

**BMP No. C.10 – Other Illicit Discharge Controls**

**Brief Description of BMP:** The Village performs annual monitoring of the receiving waters as required by the ILR40 permit conditions.

A segment of Buffalo Creek (GST) is in an approved TMDL water quality plan (Des Plaines River/Higgins Creek Watershed TMDL Report, dated May 2013).

A segment of the Des Plaines River (G-36) is identified on the IEPAs 303d list as impaired for primary recreational contact (fecal coliform), aquatic life (total phosphorus) and fish

consumption (mercury and PCBs). No TMDL has been identified for the segment of the Des Plaines River in the Village.

A segment of Indian Creek (GU-02) is identified on the IEPAs 303d list as impaired for aquatic life (DO). No TMDL has been identified for this segment of Indian Creek in the Village.

The Village will monitor the progress of watershed work groups and the establishment of any applicable TMDLs or other Watershed Management Plans. The Village will continue the monitoring and evaluation program.

#### **4) CONSTRUCTION SITE RUNOFF CONTROL**

The Village has ordinances and activities in place that meet the requirements of the Construction Site Runoff Control minimum control measure. These activities include BMP's D.1, D.2, D.3, D.4, D.5, and D.6. A brief description and status is provided below.

##### **BMP No. D.1 – Regulatory Control Program**

**Brief Description of BMP:** The Village has ordinances in place to require the review, inspection and enforcement of construction site runoff controls. The Village will continue with these policies/procedures and update as needed based on the impending MS4 permit.

##### **BMP No. D.2 – Erosion and Sediment Control BMPs and D.3 Other Waste Control Program**

**Brief Description of BMP:** The Village has ordinances in place to require the review, inspection and enforcement of soil erosion and sediment control best management practices. The Village will continue these procedures to reduce or prevent the discharge of soil and other potential pollutants from construction sites and amend as needed based on the impending permit. Other wastes which would leave the site, such as littering are also prohibited.

##### **BMP No. D.4 – Site Plan Review Procedures**

**Brief Description of BMP:** The Village has procedures that require the review of site plan for proposed developments for compliance. The Village will continue the review procedures for developments to verify compliance with applicable NDPES regulations.

##### **BMP No. D.5 – Public Information Handling Procedures**

**Brief Description of BMP:** The Village has procedures in place to receive, log and address publicly reported issues. The Village will continue these procedures and respond and/or investigate as needed.

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



**Brief Description of BMP:** The Village and County regulatory control programs all for the inspection and enforcement for construction site runoff control. The Village will continue the inspection and enforcement program to prevent the discharge of pollutants from construction sites.

## **5) POST-CONSTRUCTION RUNOFF CONTROL**

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

### **BMP No. E.1 – Community Control Strategy and E.2 – Regulatory Control Program**

**Brief Description of BMP:** The Village has ordinances in place that require the review, inspection and enforcement of post-construction runoff control measures. The Village will continue to enforce the ordinances and verify compliance of all developments following construction to reduce or prevent the discharge of pollutants to the MS4.

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

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

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

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

### **BMP No. E.5 – Site Inspections During Construction**

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

### **BMP No. E.5 – Site Inspections During Construction**

**Brief Description of BMP:** The Village, Lake County and MWRDGC have ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling construction site runoff. These procedures include review of the BMP designs by qualified staff and inspection/enforcement during and after construction.

### **BMP No. E.6 – Post-Construction Inspections**

**Brief Description of BMP:** The Village, Lake County and MWRDGC have ordinances and procedures in place that protect water quality and reduce the discharge of pollutants by controlling post-construction site runoff. These procedures include review of the BMP designs by qualified staff and inspection/enforcement during and after construction.

## **6) POLLUTION PREVENTION AND GOOD HOUSEKEEPING**

The Village performs a number of activities that meet the requirements of the Pollution Control and Good Housekeeping minimum control measure. These activities include BMP's F.1, F.2 and F.4. A brief description and status is provided below.

### **BMP No. F.1 – Employee Training Program**

**Brief Description of BMP:** The Village conducts annual stormwater pollution prevention training for Village employees to reduce or eliminate the discharge of pollutants from Village owned facilities to the storm sewer system. The Village staff also includes trained and licensed pesticide applicators.

### **BMP No. F.2 - Inspection and Maintenance Program**

**Brief Description of BMP:** The Village has an inspection and maintenance program in place to evaluate and maintain the municipal stormwater facilities. Additional activities include the Village's street sweeping program. The Village will continue this program aimed at reducing the amount of debris and other potential pollutants entering the municipal separate storm sewer system.

### **BMP No. F.3 – Municipal Operations Storm Water Control and F.4 – Municipal Operations Waste Disposal**

**Brief Description of BMP:** The Village has procedures and policies to prevent the discharge of pollutants to the MS4 from municipal operations. These policies include dewatering procedures, pumping activities and waste disposal. The Village has performed the annual evaluation of the Village's Pollution Prevention Plan and will continue these operations and re-evaluate and/or modify as needed to prevent the discharge of pollutants to the MS4.

The Village also has a comprehensive Spill Prevention, Control and Countermeasure (SPCC) Plan for the Public Works facility to reduce the potential impacts to the environment. Specifically the SPCC plan details operating procedures that prevent spills and/or discharges, control measures installed to prevent spills from reaching the environment, and countermeasures to contain, clean up, and mitigate a spill or discharge that reaches the environment.

**BMP No. F.5 - Flood Management/Assess Guidelines**

**Brief Description of BMP:** The Village, Lake County and MWRDGC ordinances require the appropriate management of development and other uses within special flood hazard areas.

**BMP No. F.6 - Inspection and Maintenance Program**

**Brief Description of BMP:** The Village performs a variety of activities that reduce or prevent pollutants including pesticides, herbicides, fertilizers and trash from entering the storm sewer system and to minimize exposure. These activities are part of the Villages municipal operations controls and include proper storage and handling, certification, spill and leak prevention, and response procedures, street sweeping and waste recycling.

## **Part C. Information and Data Collection Results**

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

The 2017 Water Quality Monitoring Results for NPDES Phase II Permit Requirements, Buffalo Grove, Lake & Cook Counties, Illinois have been prepared as in previous years and are available upon request.

## Part D. Summary of Year 16 Stormwater Activities

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

The table shown below summarizes the BMPs committed to for Year 16. Specific BMPs and measurable goals for Year 16 program development activities are presented in the sections following the table.

**Note:** X indicates BMPs committed to for Year 16.

Year 16	
MS4	
<b>A. Public Education and Outreach</b>	
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
X	A.6 Other Public Education
<b>B. Public Participation/Involvement</b>	
	B.1 Public Panel
X	B.2 Educational Volunteer
X	B.3 Stakeholder Meeting
	B.4 Public Hearing
	B.5 Volunteer Monitoring
X	B.6 Program Coordination
X	B.7 Other Public Involvement
<b>C. Illicit Discharge Detection and Elimination</b>	
X	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
X	C.3 Detection/Elimination Prioritization Plan
X	C.4 Illicit Discharge Tracing Procedures
X	C.5 Illicit Source Removal Procedures
X	C.6 Program Evaluation and Assessment
X	C.7 Visual Dry Weather Screening
X	C.8 Pollutant Field Testing
	C.9 Public Notification
X	C.10 Other Illicit Discharge Controls

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

## 1. Public Education and Outreach

The Village is committing to conduct Public Education and Outreach as part of its permit. Public Education and Outreach requires implementation of a program to distribute educational material to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants to stormwater runoff. The Village commits to implementation of BMPs related to A.1, A.2, A.3, A.4 and A.6 as described below.

### **BMP No. A.1**

#### **Brief Description of BMP:**

The Village distributes a variety of paper materials from a number of sources informing the public about stormwater or water quality and why they are important.

#### **Measurable Goal(s), including frequencies:**

As in past years, the Village will distribute educational materials at the Public Works Open House. The materials chosen will be targeted toward residents, businesses and other potential pollutant sources to create better awareness and knowledge of the issue.

**Milestones:**            **Year 16:** The Village will continue to distribute the educational materials at the Public Works Open House.

### **BMP No. A.2**

#### **Brief Description of BMP:**

The Village regularly participates in or provides presentations to local civic clubs, watershed groups or other interested parties on topics related to NPDES, stormwater quality or other similar subjects. Speaking engagements provide the opportunity to inform concerned citizens or interested parties about stormwater quality, environmental impacts and other issues NPDES related issues and activities including ways to help.

#### **Measurable Goal(s), including frequencies:**

The Village will provide a speaking engagement to a local group regarding stormwater quality or related issue.

**Milestones:**            **Year 16:** The Village will provide a presentation or speaking engagement to the Lake County Stormwater Management Commission Municipal Advisory Committee or other interested party.

### **BMP No. A.3**

#### **Brief Description of BMP:**

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

#### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** Publish information articles in the Village newsletter at least once a year.

**BMP No. A.4**

**Brief Description of BMP:**

The Village will also continue its presence and support Village sponsored public engagements and events. These activities provide opportunities to engage the public on stormwater and/or environmental related issues and why they are important to all residents and businesses.

**Measurable Goal(s), including frequencies:**

The Mayor and Village have committed to National Wildlife Foundation's Mayors Monarch Pledge. The goal of this program is help save the monarch butterfly through the action of local units of government and other interested parties. This goal of this program is similar to many aspects of the NPDES program through protecting the environment, increasing or improving open space with naturalized planting and general environmental awareness and stewardess. This program allows the Village the opportunity engage the community through this and other similar events.

**Milestones:**           **Year 16:** Maintain the existing program and seek additional partnerships or events as funding allows.

**BMP No. A.6**

**Brief Description of BMP:**

The Village will utilize other means such as the Village website as a conduit for reaching additional residents and will continue the Public Works Open House.

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will update and modify the information provided as needed to stay current and informative.

**2. Public Participation/Involvement**

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

**BMP No. B.2**

**Brief Description of BMP:**

Village staff regularly participates in volunteering activities that provide opportunities to interact with residents and educate them on the importance of stormwater and water quality. These include many local planning and watershed groups such as Des Plaines

River Watershed Workgroup (DRWW), the Municipal Advisory Committee (MAC) of the Lake County Stormwater Management Commission, the Lower Des Plaines Watershed Planning Council and Buffalo Creek Clean Water Partnership (BCCWP).

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will participate in at least one volunteering activity each year.

**BMP No. B.3**

**Brief Description of BMP:**

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

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue to attend stakeholder meetings.

**BMP No. B.6**

**Brief Description of BMP:**

Annually host a clean-up event around a stream or a detention basin. Track the number of residents participating in the event and the amount of waste collected.

**Measurable Goal(s), including frequencies:**

Host a community clean-up event around a stream or a detention basin. Track the number of residents participating in the event and the amount of waste collected.

**Milestones:**           **Year 16:** The Village will continue to host events.

**BMP No. B.7**

**Brief Description of BMP:**

Annually inform residents of the existence of a telephone number for reporting stormwater related issues. Document the number of resident reports received annually.

**Measurable Goal(s), including frequencies:**

Document the number of resident reports received.

**Milestones:**           **Year 16:** The Village will continue with the program.



### **3. Illicit Discharge Detection and Elimination**

The Village commits to performing some activities related to the Illicit Discharge Detection and Elimination minimum control. BMPs will be implemented under BMP numbers C.1, C.2, C.3, C.4, C.5, C.6, C.7, C.8 and C.10 as described below.

#### **BMP No. C.1**

##### **Brief Description of BMP:**

The Village has a storm sewer mapping system of the receiving streams and outfalls.

##### **Measurable Goal(s), including frequencies:**

The Village will review the map and update as needed.

**Milestones:**           **Year 16:** The Village will continue to update the map as necessary.

#### **BMP No. C.2**

##### **Brief Description of BMP:**

The Village has an ordinance for Illicit Discharge and Detection Ordinance.

##### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue to enforce the existing ordinance.

#### **BMP No. C.3**

##### **Brief Description of BMP:**

The Village utilizes various tools to identify and report potential illicit discharges. The Village also investigates reports of illicit discharges.

##### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue to identify and investigate potential illicit discharges.

#### **BMP No. C.4/C.5**

##### **Brief Description of BMP:**

Develop procedures to trace and remove detected illicit discharges. Annually trace and remove all illicit discharges identified by resident reporting, visual dry weather screening, and public works maintenance activities.

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will trace and eliminate illicit discharges as needed.

**BMP No. C.6**

**Brief Description of BMP:**

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

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will evaluate the program at least once a year.

**BMP No. C.7**

**Brief Description of BMP:**

Annual screening of all outfalls to identify any illicit discharges. Annual screening of 20% of storm sewer structures (manholes, catch basins, and inlets), with a priority placed on storm sewer structures located in industrial areas.

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will evaluate its dry weather inspection form and procedures.

**BMP No. C.8**

**Brief Description of BMP:**

The Village regularly samples, test and documents the results of influent and effluent flow to various lakes and streams throughout the community.

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue the testing.

## **BMP No. C.10**

### **Brief Description of BMP:**

The Village performs annual monitoring of the receiving waters as required by the ILR40 permit conditions.

A segment of Buffalo Creek (GST) is in an approved TMDL water quality plan (Des Plaines River/Higgins Creek Watershed TMDL Report, dated May 2013).

A segment of the Des Plaines River (G-36) is identified on the IEPAs 303d list as impaired for primary recreational contact (fecal coliform), aquatic life (total phosphorus) and fish consumption (mercury and PCBs). No TMDL has been identified for the segment of the Des Plaines River in the Village.

A segment of Indian Creek (GU-02) is identified on the IEPAs 303d list as impaired for aquatic life (DO). No TMDL has been identified for this segment of Indian Creek in the Village.

The Village will monitor the progress of watershed work groups and the establishment of any applicable TMDLs or other Watershed Management Plans. The Village will continue the monitoring and evaluation program.

### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue the monitoring and assessment program.

## **4. Construction Site Runoff Control**

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

### **BMP No. D.1**

### **Brief Description of BMP:**

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

### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will enforce the regulatory procedures.

## **BMP No. D.2**

### **Brief Description of BMP:**

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

### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will enforce the regulatory procedures.

## **BMP No. D.4**

### **Brief Description of BMP:**

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

### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will enforce the review procedures.

## **BMP No. D.5**

### **Brief Description of BMP:**

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

### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will respond accordingly.

## **BMP No. D.6**

### **Brief Description of BMP:**

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

### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will enforce the ordinance.

## **5. Post-Construction Runoff Control**

The Village will perform activities and services related to the Post-Construction Site Runoff Control minimum control measure. BMPs will be implemented under BMP number E.2, E.3, E.4, E.5 and E.6 as described below.

### **BMP No. E.2**

#### **Brief Description of BMP:**

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

#### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will enforce the ordinances.

### **BMP No. E.3**

#### **Brief Description of BMP:**

The Village and County have procedures in place for assisting and evaluating the long term maintenance of stormwater best management practices.

#### **Measurable Goal(s), including frequencies:**

The Village will continue long term maintenance programs to assist developers and residents.

**Milestones:**           **Year 16:** The Village will continue the long term maintenance program as indicated in ordinance.

### **BMP No. E.4**

#### **Brief Description of BMP:**

The Village and County have procedures in place for the pre-construction review of BMP designs. These procedures include pre-application meetings for large scale developments.

#### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue the BMP review procedures.

#### **BMP No. E.5**

##### **Brief Description of BMP:**

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

##### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue with the site inspection procedures.

#### **BMP No. E.6**

##### **Brief Description of BMP:**

The Village has procedures in place to perform site inspections post construction by qualified personnel.

##### **Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue with the site inspection procedures.

### **6. Pollution Prevention/Good Housekeeping**

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

#### **BMP No. F.1**

##### **Brief Description of BMP:**

Annually conduct formal stormwater pollution prevention training for Village employees on topics such as: dry weather observation of outfalls using the outfall reconnaissance inventory, illicit discharge tracing and source removal procedures, maintenance of green infrastructure (dry wells), and implementing the Spill Prevention, Control and Countermeasure (SPCC) Plan for Public Works Facility. Document the date, topic, and attendees for employee stormwater pollution prevention training.

##### **Measurable Goal(s), including frequencies:**

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

**Milestones:**        **Year 16:** The Village will continue with the training program.

**BMP No. F.2**

**Brief Description of BMP:**

Annually clean the Village storm sewers and storm sewer structures. Annually document the weight of debris removed from the Village storm sewer system.

**Measurable Goal(s), including frequencies:**

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

**Milestones:**    **Year 16:** Continue the maintenance program.

**BMP No. F.3**

**Brief Description of BMP:**

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

**Measurable Goal(s), including frequencies:**

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

**Milestones:**        **Year 16:** The Village will continue with the municipal control measures and evaluate additional methods as needed.

**BMP No. F.4**

**Brief Description of BMP:**

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

**Measurable Goal(s), including frequencies:**

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

**Milestones:**        **Year 16:** The Village will continue with the municipal operations disposal program.

**BMP No. F.5**

**Brief Description of BMP:**

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

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue to enforce the flood management requirements.

**BMP No. F.6****Brief Description of BMP:**

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

**Measurable Goal(s), including frequencies:**

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

**Milestones:**           **Year 16:** The Village will continue the evaluation and monitoring program.



## **Part E. Notice of Qualifying Local Program**

The Village of Buffalo Grove enforces both the Lake County Watershed Development Ordinance and the MWRDGC Watershed Management Ordinance, as well as the Village Ordinances. The Village has the authority to enforce the County Ordinances within the Village limits, including the Construction Site and Post-Construction Stormwater Runoff Control requirements. As the Village takes on this responsibility, it will assure that construction sites are meeting the ILR10 permit requirements as well as the County's Ordinance requirements. The Village will also evaluate its policy toward long-term maintenance of BMPs. The Village also partners with the Lake County Stormwater Management Commission on a variety of activities related to their program. A summary of the Lake County SMC's activities is attached.

### **1. Public Education and Outreach:**

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

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

### **2. Public Participation/Involvement:**

The Village has developed a comprehensive program to address the Public Participation/Involvement requirement developed during the initial 10 years of the NPDES Phase II permit.

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

### **3. Illicit Discharge Detection and Elimination:**

The Village enforces a comprehensive program to address the Illicit Discharge Detection and Elimination requirements of the NPDES Phase II program. The applicable program details are outlined in the previous sections of this report.

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

### **4. Construction Site Runoff Control:**

The Village enforces the County Ordinance within the Village limits, including the Construction Site and Post-Construction Stormwater Runoff Control requirements.

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

### **5. Post-Construction Runoff Control:**

The Village enforces the County Ordinance within the Village limits, including the Construction Site and Post-Construction Stormwater Runoff Control requirements.

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

#### **6. Pollution Prevention/Good Housekeeping:**

The goal of this BMP is to identify current practices that contribute to stormwater pollution and implement programs and procedures for municipal activities that curtail the discharge of pollutants to storm sewer systems. The applicable program details are outlined in the previous sections of this report.

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

## Part 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 15 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 15.
- **Part E3** summarizes the information and data collected by the QLP during Year 15.
- **Part E4** describes the stormwater management activities that the QLP plans to undertake during Year 16.
- **Part E5** lists the construction projects conducted by the QLP during Year 15.

## Part E1. QLP Changes to Best Management Practices, Year 15

**Note: “X” indicates BMPs that were implemented as planned**

**✓ indicates BMPs that were changed during Year 15**

Year 15	
QLP	
<b>A. Public Education and Outreach</b>	
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>B. Public Participation/Involvement</b>	
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
<b>C. Illicit Discharge Detection and Elimination</b>	
	C.1 Storm Sewer Map Preparation
X	C.2 Regulatory Control Program
	C.3 Detection/Elimination Prioritization Plan
	C.4 Illicit Discharge Tracing Procedures
	C.5 Illicit Source Removal Procedures
	C.6 Program Evaluation and Assessment
	C.7 Visual Dry Weather Screening
	C.8 Pollutant Field Testing
	C.9 Public Notification
X	C.10 Other Illicit Discharge Controls

Year 15	
QLP	
<b>D. Construction Site Runoff Control</b>	
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
<b>E. Post-Construction Runoff Control</b>	
	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
<b>F. Pollution Prevention/Good Housekeeping</b>	
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 15

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 15 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 15 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.
- Provided NPDES related information via Facebook
- Provided a Watershed E-News in March 2017.
- SMC Developed a Voluntary Floodplain Buyout Program Handout in 2017, available as a PDF or in print (<https://lakecountyl.gov/DocumentCenter/View/20510>).
- SMC developed in June 2017 a Landowner's Monitoring and Maintenance Guide for the Bull Creek Restoration Project Area in Beach Park, IL.

### **A.3 Public Service Announcement**

#### Measurable Goal(s):

- Include public service announcement highlighting community accomplishments related to IEPA's NPDES Stormwater Program in “Watershed E-News”;
- Post watershed identification signage with LCDOT;
- Upon request or download “[The Big Picture: Water Quality, Regulations & NPDES](https://lakecountyl.gov/DocumentCenter/View/16533)” to Lake County MS4s, (<https://lakecountyl.gov/DocumentCenter/View/16533>).

#### Year 15 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 (url: <http://www.lakecountyl.gov/2331/Newsletters-Annual-Reports>).
- 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.

- SMC developed a Flood Response Report in July 2017 covering the rain event impacts from July 11 and July 12, 2017.

#### **A.4 Community Event**

##### Measurable Goal(s):

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

##### Year 15 QLP activities:

- SMC sponsored or co-sponsored many workshops and events on stormwater-related topics between March 1, 2017 and February 28, 2018, including:
  - SMC sponsored a Designated Erosion Control Inspector (DECI) Workshop held on Jan. 5/2017.
  - SMC co-sponsored a river cleanup for Chicago River Day on May 13, 2017 throughout the watershed.
  - SMC co-sponsored a Rain Barrel, Compost Bin, and Native Plant Sale held in Libertyville, IL on May 13, 2017.
  - SMC co-sponsored a Workshop for Homeowners Associations: Maintenance (Techniques and Practices) for Subdivision Drainage Systems in Kildeer, IL on May 15, 2017.
  - SMC sponsored a Lake Michigan Plan Info Meeting for Communities on May 31, 2017 in North Chicago, IL.
  - SMC co-sponsored Parking Lots & Sidewalks De-Icing Workshop held in Libertyville, IL on September 25, 2017.
  - SMC co-sponsored Roadway De-Icing Workshop held in Libertyville, IL on September 26, and 27, 2017.
  - SMC sponsored a Homeowners Floodproofing Expo and Workshop held in Libertyville, IL on October 19, 2017.
  - SMC co-sponsored a Community Fall Workday at Mike Rylko Park in Buffalo Grove, IL within the Farrington Ditch on October 21, 2017.
  - SMC sponsored a Closeout Project Tour for the Bull Creek Streambank Restoration Project in Beach Park, IL within the Dead River subwatershed on November 28, 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 15 QLP activities

- Stormwater educational materials were compiled for use at several public education events that were held between March 1, 2017 and February 28, 2018, including:
  - Loch Lomond Property Owners Association's Loch Fest held in Mundelein, IL on July 29, 2017
  - SMC presented as part of a career panel at the College of Lake County's Career Day on September 09, 2017.

- Homeowners Floodproofing Expo and Workshop held in Libertyville, IL on October 19, 2017.
- SMC presented as part of a career panel at Round Lake High School on November 14, 2017.
- SMC provided technical assistance with the Round Lake High School Student Group Flood Project on February 22, 2018. The group chose their topic and wanted to focus on flooding because many of them were affected by the July 2017 flood. They created a presentation to talk about flood hazards, why it occurs, and what can be done before, during, and after a flood event.

## **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 15 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 MS4 programs that indicates TMDL statuses, 303(b), 305(d), HUC 12 watershed information and urbanized area information within an MS4 defined boundary, (url:<https://lakecountyil.maps.arcgis.com/apps/webappviewer/index.html?id=0d60824433734de3bb7905c1113a8539>).
- SMC maintains 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>).
- SMC presented on the "Lake County's Wetland Restoration and Preservation Plan, part 1: Approach", on February 21, 2018 at the Wisconsin Wetlands Association 2018 Wetland Science Conference.
- SMC presented on the "Lake County's Wetland Restoration and Preservation Plan, part 2: GIS & decision support tool", on February 21, 2018 at the Wisconsin Wetlands Association 2018 Wetland Science Conference.
- SMC presented an overview of the "Lake County SMC sUAS Program" at Lake County GIS day on November 1, 2017 in Libertyville IL.

- SMC presented an “Overview of Flood Response Activities 2017 Flood Event – The Role of GIS” and an overview of “Lake County SMC’s sUAS Program” for the Lakes Region of the American Public Works Association on November 2, 2017.

## **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 15 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 15, between March 1, 2017 and February 28, 2018.
  - Per records, there were 9 SMC meetings, Zero TAC meetings, 4 MAC meetings, and 1 WMB meeting conducted during this reporting period.
- According to records, between March 1, 2017 and February 28, 2018, 16 CIRS community inquiries were received and processed by SMC staff.

### **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 15 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 15:
  - North Branch Chicago River Planning Committee – 3
  - Bull Creek/Bull’s Brook Watershed Council – 2
  - Buffalo Creek Clean Water Partnership – 0
  - Des Plaines Watershed Planning Committee – 10
  - Des Plaines River Watershed Workgroup – 4 (excluding executive board meetings)
  - North Branch Chicago River Watershed Workgroup– 2 (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 15.
- Prepare annual report on Qualifying Local Program activities at end of Year 15.

Year 15 QLP activities:

- SMC tracked the number of Municipal Advisory Committee (MAC) meetings conducted during Year 15: According to records, there were 4 MAC meetings conducted during this reporting period. 3/8/17, 6/14/17, 9/13/17, and 12/13/17.
- The stormwater management activities that SMC performed as a QLP during Year 15 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 16 are described in Part E4 of the Annual Report template.

## **C. Illicit Discharge Detection and Elimination**

### **C.2 Regulatory Control Program**

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 15 QLP activities:

- SMC continues to enforce the countywide WDO.
- Lake County continues to provide [the Lake County Illicit Discharge Detection and Elimination \(IDDE\) Manual](https://lakecountyiil.gov/DocumentCenter/View/17264) 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 15 QLP activities:

- SMC sponsored or co-sponsored many workshops and events on stormwater-related topics between March 1, 2017 and February 28, 2018. 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 15 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 DECIIs who have passed the exam (to date): 703.
- DECIIs who have passed the exam between 03/01/2017 – 02/28/2018: 99.
- Total listed DECIIs (to date): 190 (DECI completed certification process).
- DECIIs 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 15 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.
- SMC staff distributed 81 rainfall weather notifications. The rainfall reports indicate county rain events with observed precipitation for construction site runoff SE/SC inspections.

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

### Measurable Goal(s):

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

### Year 15 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 15 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 15, there are 99 EOs certified in Lake County.
- The list of EOs representing Certified Communities is continually updated and is maintained on the SMC website:  
(url:<https://lakecountyil.gov/DocumentCenter/View/14412>).
- SMC is in the current 5-year cycle of the community re-certification process, which includes a performance review of all 53 certified and non-certified communities for permitted development compliance from February 2, 2012 to October 1, 2017. The last recertification process occurred 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 Year 20. (url: <https://lakecountyil.gov/2459/Community-Certification>)
- The SMC 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 (SE/SC).

### Year 15 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, 2017 and February 28, 2018, 8 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 15 QLP activities:

- SMC continues to track the number of site inspections conducted by SMC staff.
- According to records, between March 1, 2017 and February 28, 2018, 779 site inspections were conducted by SMC staff.
- SMC staff distributed 81 rainfall weather notifications. The rainfall reports indicate county rain events with observed precipitation for construction site runoff SE/SC inspections.

## **E. Post-Construction Runoff Control**

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

#### Measurable Goal(s):

- Continue to enforce the countywide WDO.

#### Year 15 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 15 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 15 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 15 QLP activities:

- SMC continues to enforce the countywide WDO.

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

### Measurable Goal(s):

- Continue to enforce the countywide WDO.

### Year 15 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 15 QLP activities:

- The annual WMB meeting was held on Dec. 6, 2017.
- At the annual WMB meeting 13 Projects were selected to receive \$173,253 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.
  - 8 WMB project grants awarded
  - 2 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 15 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, 2017 and February 28, 2018. 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, 2017 and February 28, 2018, Zero MS4 borrowed the Excal Visual software. (url: <http://lakecountyil.gov/2479/NPDES-Phase-II>)

### **F.5 Flood Management/Assess Guidelines**

#### Measurable Goal(s):

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

#### Year 15 QLP activities:

- SMC continues to 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 15 QLP activities:

- SMC co-sponsored 3 de-icing workshops:
  - Deicing for Parking Lots and Sidewalks 9/25/2017.
  - Deicing Roads 9/26/2017 and 9/27/2017.
  - In total 184 attendees participated in these three workshops.
  - Since 2009 the deicing workshops have had a cumulative attendance of 1,200 attendees.
- 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.lakecountyl.gov/DocumentCenter/Home/View/10767>).
  - Certification is through a third-party vendor, Fortin Consulting, Inc.
  - In 2017, 151 preferred providers have been identified based on certification.
- 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://lakecountyl.gov/DocumentCenter/Home/View/3047>).
  - Lake County Winter Parking Lot and Sidewalk Maintenance Manual (2015) (PDF) (url: <https://lakecountyl.gov/DocumentCenter/Home/View/3044>).
  - Less Salt Equals Less Money, Clean Water, Safe Conditions - Tips for Effective Road Salting (PDF) (url: <https://lakecountyl.gov/DocumentCenter/Home/View/3045>).

## Part E3. QLP Information and Data Collection Results, Year 15

The QLP did not collect any monitoring data on behalf of Lake County's MS4s during Year 15. 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 2018

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 waters 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 uses 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





In addition to the information contained within the 303(b) and 303(d) reports, the Des Plaines River Watershed Workgroup (DRWW) founded in 2015, 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. 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 was submitted to IEPA in January 2018. DRWW's comprehensive monitoring program includes chemical, physical and biological assessments during the current YR15 reporting period, DRWW's monitoring program includes: Water/Sediment sampling and analysis at 50 Monitoring Locations for 2017; Bioassessment monitoring at 23 monitoring locations; Continuous water quality monitoring with data sondes and chlorophyll a sampling and analysis at 14 Monitoring Locations; and Flow Monitoring data collection at 21 sites. 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.

The NBWW is a newly developed watershed workgroup (1/17/2018) developing a monitoring program for water quality in the North Branch of the Chicago River and tributaries to accurately identify the quality of the river ecosystems as well as stressors associated with non-attainment of water quality standards and designated uses. 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 will begin in 2018 and NBWW members will be able to include chemical, physical and biological components monitored by the workgroup.

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 16 Stormwater Activities

The table below indicates the stormwater management activities that the QLP plans to undertake during Year 16. Additional information about the BMPs and measurable goals that the QLP will implement during Year 16 is provided in the section following the table.

Note: X indicates BMPs that will be implemented during Year 16

Year 16	
QLP	
<b>A. Public Education and Outreach</b>	
X	A.1 Distributed Paper Material
X	A.2 Speaking Engagement
X	A.3 Public Service Announcement
X	A.4 Community Event
X	A.5 Classroom Education Material
X	A.6 Other Public Education
<b>B. Public Participation/Involvement</b>	
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
<b>C. Illicit Discharge Detection and Elimination</b>	
	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 16	
QLP	
<b>D. Construction Site Runoff Control</b>	
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
<b>E. Post-Construction Runoff Control</b>	
	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
<b>F. Pollution Prevention/Good Housekeeping</b>	
X	F.1 Employee Training Program
	F.2 Inspection and Maintenance Program
	F.3 Municipal Operations Storm Water Control
	F.4 Municipal Operations Waste Disposal
X	F.5 Flood Management/Assess Guidelines
X	F.6 Other Municipal Operations Controls

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

SMC related to each of the six minimum control measures. These QLP commitments provide Lake County with a baseline Countywide stormwater management program that can be built upon by each of the individual MS4s.

During Year 16, 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 provides 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 maintains technical guidance resources and 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.
- Periodically review each community's WDO administration and enforcement records. Re-Certification Procedure.
- 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.

**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 15**

Project Name	Project Size (acres)	Construction Start Date	Construction End Date
Bull Creek Restoration Project - Beach Park, IL	1.87	5/2016	11/2017
Jamie Phase III – City of North Chicago	2.15	9/2017	ongoing

## Part F. Construction Projects Conducted During Year 15

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

[illegible]

There were no construction projects over 1 acre funded by the Village during this reporting year.