



VILLAGE OF

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BARRINGTON

May 3, 2017

Illinois Environmental Protection Agency
Water Pollution Control
Compliance Assurance Section #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

**Re: NPDES Phase II – Year 14 Annual Report
Village of Barrington MS4
ILR100285**

To Whom It May Concern:

On behalf of the Village of Barrington, please find attached a completed IEPA Annual Facility Inspection Report for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4) with supplemental information.

If you should have any questions or require additional information, please call our Environmental Consultant, Marcy Knysz at (847) 325-7300.

Sincerely,
Village of Barrington

Mark Werksman
Director of Public Works
cc: Marcy Knysz, Manhard (900 Woodlands Parkway, Vernon Hills, IL 60061)

VILLAGE HALL
200 S. HOUGH ST.
BARRINGTON, IL 60010
(847) 304-3400

PRESIDENT & BOARD
MANAGER'S OFFICE
TEL (847) 304-3444
FAX (847) 304-3490

COMMUNITY AND
FINANCIAL SERVICES
TEL (847) 304-3400
FAX (847) 381-7506

DEVELOPMENT SERVICES
TEL (847) 304-3460
FAX (847) 381-1056

PUBLIC WORKS
300 N. RAYMOND AVE.
BARRINGTON, IL 60010
TEL (847) 381-7903
FAX (847) 382-3030

PUBLIC SAFETY
400 N. NORTHWEST HWY.
BARRINGTON, IL 60010

POLICE
TEL (847) 304-3300
FAX (847) 381-2165

FIRE
TEL (847) 304-3600
FAX (847) 381-1889



Illinois Environmental Protection Agency

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

Division of Water Pollution Control ANNUAL FACILITY INSPECTION REPORT

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

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

Report Period: From March, 2016 To March, 2017

Permit No. ILR40 0285

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

Name: Village of Barrington - Public Works Mailing Address 1: 300 North Raymond Avenue

Mailing Address 2: _____ County: Lake

City: Barrington State: IL Zip: 60010 Telephone: (847) 381-7903

Contact Person: Mark Werksman Email Address: mwerksman@barrington-il.gov
(Person responsible for Annual Report)

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

Village of Barrington 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.

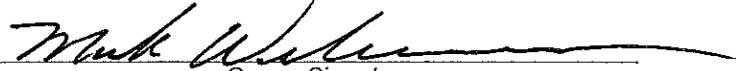
C. Attach results of information collected and analyzed, including monitoring data, if any during the reporting period.

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.

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



Owner Signature:

Mark Werksman

Printed Name:

5/10/17

Date:

Director of Public Works

Title:

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

or Mail to: ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL
COMPLIANCE ASSURANCE SECTION #19
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

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

**Village of Barrington
ILR100285**

MS4 Annual Facility Inspection Report

**Illinois Environmental Protection Agency National Pollutant
Discharge Elimination System, Phase II**

Permit Year 14: March 2015 to February 2016

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

Information regarding the status of all of the BMPs and measurable goals described in the Village of Barrington's Storm Water Management Program (SWMP) is provided in the following table.

Note: X indicates BMPs that were implemented in accordance with the Village of Barrington's SWMP
 ✓ Indicates BMPs that were changed during Year 14

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

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

No changes were made to the BMPs described in the MS4's SWMP during Year 14.

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

Stormwater Management Activities, Year 14

During Year 14, the Village of Barrington reviewed and revised its Storm Water Management Program (SWMP) to comply with the 2016 ILR40 permit conditions (which became effective March 1, 2016). The stormwater management activities that the Village of Barrington performed during Year 14 and the status of each of the BMPs and measurable goals described in the Village of Barrington's SWMP, as of the end of Year 14, are described in this Annual Report. Documentation of the Village's implementation of the SWMP is provided in Part C.

In addition to the efforts of the Village, the Lake County Storm Water Management Commission (SMC) performs activities related to each of the six minimum control measures on behalf of all MS4s in the County. These BMPs, implemented at the county level, make significant strides in achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable as watershed boundaries are not constrained by municipal borders.

A. Public Education and Outreach

The Village of Barrington utilizes a variety of methods to educate and provide outreach to the public about the impacts of storm water discharges on waterbodies and the steps that the public can take to reduce pollutants in storm water runoff. Outreach publications include Village contact information to encourage residences to report environmental concerns.

Distribution of Educational Materials

Educational materials are distributed in the Village newsletter, on the Village website, at take-a-way racks in Village offices, at outreach events, and at scheduled meetings with the public. Topics include:

- Storm water BMPs including cost-benefits and implementation guidance.
- Construction site activities (soil erosion and sediment control BMPs).
- Effective pollution prevention measures regarding storage and disposal of fuels, oils, and similar materials used in the operation of, or leaking from vehicles and other equipment.
- Effective pollution prevention measures regarding the use of soaps, solvents, or detergents used in outdoor washing of vehicles, furniture, and other property; paint and related décor.
- Refuse, recycling, and yard waste.
- Lawn and garden care.
- Winter de-icing material storage and use.
- Green infrastructure strategies such as green roofs, rain gardens, rain barrels, bio-swales, permeable piping, dry wells, and permeable pavement.
- Flooding, flood safety, basement flooding, flood control, and overhead sewers.
- Living Green Program.
- The potential impacts and effects on storm water discharge due to climate change <http://epa.gov/climatechange>.
- Hazards associated with illegal discharges and improper disposal of waste and the way to report such discharges.

- Proper hazardous waste use and disposal, special collection of household products, and programs organized by the Solid Waste Agency of Northern Cook County (SWANCC) and the Solid Waste Agency of Lake County (SWALCO).
- Hazards associated with illegal discharges and improper disposal of waste and the way to report such discharges.
- Information on the Village's MS4 Program, including the SWMP, Notice of Intent, and annual reports.

Measurable Goals

1. Distribute educational materials in the Village newsletter, on the Village website, at take-a-way racks in Village offices, at outreach events, and at scheduled meetings with the public.
2. Maintain and update the portion of the website dedicated to storm water.
3. Maintain and update links to websites related to the environment such as the Center for Neighborhood Technology, Environmental Protection Agency, Household Hazardous Waste Collection Schedule, and the Rain Garden Network.
4. Post the Village's SWMP, Notice of Intent, current Annual Report, and the previous 5 years of Annual Reports on the Village website.

Household Hazardous Waste Program

The desired behavior is to participate in household hazardous waste collection days, and to use appropriate pollution prevention techniques during rinsing, cleaning, and fueling activities. For household products that cannot go into the curbside recycling program or in landfills, there are several ways to dispose of these materials through programs organized by the Solid Waste Agency of Cook County (SWANCC) and the Solid Waste Agency of Lake County (SWALCO). The Village is a member community of both regional, intergovernmental agencies. As a member, Village residents are provided with a variety of waste management services, programs, and resource materials that include collections for special materials that are not allowed as part of curbside recycling or should not go into the garbage due to toxicity or recoverability (reuse and recycling). The Village also offers special collections of household batteries and compact fluorescent lights as noted below.

- Health Services in the Village of Barrington accepts household batteries (including Battery Recycling Program): The Village's Public Works Department has teamed up with SWANCC to offer residents the opportunity to safely dispose of household alkaline and rechargeable batteries. Common household alkaline batteries are no longer accepted at sponsored hazardous waste disposal events due to their benign nature and high recycle costs. This program makes it simple for residents to dispose of batteries safely. The Village provides two drop-off locations: Village Hall and Public Works.
- Compact Fluorescent Lightbulb Recycling: The Village participates in a recycling program for compact fluorescent lightbulbs. The program, sponsored by the SWANCC, is designed to help consumers properly dispose of burnt-out CFLs because of the small amounts of mercury they contain. Compact fluorescent lightbulbs have become increasingly popular for their energy-saving properties. The bulbs produce the same amount of light as incandescent bulbs but use 2/3 less energy and last 10 times longer—leading to an energy savings of about \$25 over the life of a lightbulb. The Illinois Bureau of Energy and Recycling estimates that if each household in the state replaced one incandescent bulb with one 18-watt CFL, the results would be equivalent to removing 294,000 tons of carbon emissions from the air. However, the bulbs also contain an average of 5 milligrams of mercury—about the size of a ballpoint pen tip. For that reason, they should not be disposed of with household garbage. Instead, SWANCC has organized recycling drop-off centers for the bulbs. Bulbs can be dropped off at Public Works.

Measurable Goals

1. Support and publicize SWANCC and SWALCO efforts.
2. Continue the Village's special collection efforts and community programs.

Residential Recycling & Refuse Program

Recycling is an effective means of achieving pollution prevention goals. Recycling is a series of activities that includes collecting recyclable materials that would otherwise be considered waste, sorting, and processing recyclables into raw materials such as fibers and manufacturing raw materials into new products. Trash and floating debris in waterways can become significant pollutants and potentially pose a threat to wildlife and human health (e.g., choking hazards to wildlife and bacteria to humans).

The following refuse and recycling programs are available in the Village:

- Refuse collection - Includes recyclables, compostable yard waste, and regular refuse.
- Electronics recycling program – Groot will put up unlimited electronic waste as the curb at no additional charge. Electronic materials include computers and monitors, video game consoles, printers, televisions, DVD players, etc.
- Household Refuse: Groot will pick up regular household refuse, furniture, swing sets (four ft. lengths maximum), bicycles, and carpeting. Carpet must be tied in bundles no longer than 4 feet. Only one large item will be collected per pickup. Groot will not take clumps of earth or construction material during regular pickups.
- Recyclable and Compostable Material: Each single-family home has one 65-gallon container for recyclable materials, which include glass, aluminum, tin, plastic bottles, and newspapers. All recyclables can be combined in this container. In addition, the Village provides each single-family home with a 95-gallon wheeled cart for compostable yard waste, which includes grass clippings, weeds, leaves and small twigs.
- Food Scrap Composting Program: Barrington residents are permitted to place approved food scrap materials inside their 95-gallon compost cart. Food composting keeps food waste out of landfills, where it takes up space, produces methane, and often cannot decompose. Composted food breaks down quickly and produces healthy soil making it much better for the environment.
- Yard Waste: The Village provides one 95-gallon container for residents. Yard waste material must be placed inside the 95-gallon cart provided; and any excess must be placed in Kraft 2-ply bio-degradable landscape waste bags.

Measurable Goals

1. Continue to offer and promote refuse and recycling programs.

B. Public Participation/Involvement

The Village's Public Participation and Involvement Program allows input from citizens regarding implementation of the SWMP.

Public Review

The Village conducts one public meeting annually to present the annual report to the Village Board during an open meeting. This public meeting allows the public to provide input as to the adequacy of the Village's MS4 Program. Comments are evaluated for inclusion and incorporated into the next revision of the SWMP as appropriate. The meeting is typically part of a regular Village Board meeting. Public notification about the meeting content complies with Illinois' public notice requirements.

Measurable Goals

1. Present each year's Annual Report to the Village Board during an open meeting and encourage input from the public as to the adequacy of the SWMP.
2. Evaluate and incorporate comments received from the Village Board and the public.

Environmental Justice Area Review

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The USEPA has this goal for all communities and persons across the nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

The USEPA identifies potential environmental justice communities based on the percentage of low-income and/or minority populations in the Village compared to the statewide average. Areas that have greater than twice the statewide average may be considered a potential environmental justice community. If the low-income and/or minority population percentage is equal to or less than the statewide average, the community should not be considered a potential environmental justice community. The following web application was used to determine if the Village qualifies as an environmental justice community <https://ejscreen.epa.gov/mapper/index.html>. Three indicators were reviewed as follows:

- Demographic Index: An index based on the average of two demographic indicators; percent low-income and percent minority.
- Percent Minority: The percent of individuals in a block group who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino.
- Percent Low-Income: The percent of a block group's population in households where the household income is less than or equal to twice the federal "poverty level."

Using the USEPA environmental justice website noted above, the Village determined that there are currently no areas within the Village that qualify as environmental justice areas. The following table presents the 2016 baseline data.

Demographic Indicators	Village Statistic	State Average	Twice the Statewide Average	> Twice the State Average?
Demographic Index	14%	35%	70%	No
Minority Population	15%	37%	77%	No
Low Income Population	12%	32%	64%	No

Measurable Goals

1. Complete the environmental justice screening annually. If any environmental justice areas are identified within the community, ensure that BMP efforts are targeted at these areas.

Complaints, Suggestions, and Requests

The Village encourages the submission of complaints, suggestions, and requests related to its storm water management program. Calls are screened, logged, and routed to the appropriate individual for action. General program related calls are directed to the Public Works Director, or designee. Construction activity related telephone calls are directed to the Village Engineer.

The Village website contains an Online Service Request system that allows residents, businesses, and visitors to communicate their concern directly to the Public Works Department. All requests are

immediately directed to the appropriate Public Works Unit. Phone numbers are provided for working and non-working hours.

Measurable Goals

1. Encourage the submission of complaints, suggestions, and requests related to storm water by publicizing contact information on education materials and the Village website.
2. Provide methods for residents, businesses, and visitors to communicate their concerns.
3. Respond to concerns in a timely fashion.

Watershed Planning and Stakeholders Meetings

The Village of Barrington participates (and encourages the participation of local stakeholders) in local program events and other sponsored watershed planning events. The Village attends these events and will adopt watershed plans per the direction and in coordination SMC.

Measurable Goals

1. Participate (and encourages the participation of local stakeholders) in watershed planning and stakeholder meetings.

C. Illicit Discharge Detection and Elimination Program

Storm Sewer System Map

As required by the NPDES ILR40 permit, the Village developed a map of the municipal storm sewer system identifying the location of all outfalls, and the names and location of all receiving waters. The storm sewer system map is meant to demonstrate a basic awareness of the discharge areas of the system. It is needed to help determine the extent of discharged dry weather flows, the possible sources of the dry weather flow, and the particular waterbody these flows may be affecting. The outfall map is revised as needed to incorporate permitted outfalls associated with new developments.

Measurable Goals

1. Maintain the Village's storm sewer system map, updating annually.

Lake County Watershed Development Ordinance

Several provisions of the Lake County Watershed Development Ordinance (WDO) prohibit illicit discharges as part of the development process. Regulated developments are also required to meet the soil erosion and sediment control (SESC) standards of the WDO. The Village of Barrington has adopted the Lake County WDO and is currently a Certified Community for the review, permitting, inspection, and enforcement of the provisions of the WDO.

Measurable Goals

1. Adhere to the requirements of the WDO.

Visual Dry Weather Inspection Program

Inspecting storm water outfalls during dry-weather conditions reveals whether non-storm water flows exist. If non-storm water flows are observed, they can be screened and tested to determine whether pollutants are present. Dry weather discharges are typically composed of sewage from leaking pipes or septic systems; wash water from various residential, commercial, and industrial activities and operations; liquid wastes such as oil, paint, and process water; tap water from leaks in the water supply system; landscape irrigation; and groundwater. Water quality testing is used to conclusively identify flow types found during dry weather inspections. Testing can distinguish illicit flow types (e.g., sewage, liquid wastes, commercial/industrial wash water) from cleaner discharges (e.g., tap water, landscape irrigation, and

groundwater).

The Village's procedure for the identification of illicit discharges is included in the Village's SWMP. Step-by-step instructions for identifying storm sewers suspected of containing pollutants, suggestions for actions to be taken to determine the sources of identified pollutants, and steps for correcting identified problems are provided. The results of these procedures are intended to serve as indicators of pollution, rather than to provide specific quantitative analysis. If the presence of pollutants is indicated, the detective work of identifying the source of the discharge can begin. Once the source is identified, it can then be corrected.

Measurable Goals

1. Identify high priority outfalls.
2. Conduct outfall inspections annually during periods of dry weather.
3. Follow up on any observations of dry weather flow.

Public Notification

The Village provides educational material regarding illegal dumping of trash and used materials. Residents are encouraged to report illegal dumpers by calling the Public Works Department. The Village publicizes the Public Works Department phone number for the public to report illicit discharges and illegal dumping on outreach material and on the Village website.

Measurable Goals

1. Publicize the Public Works Department phone number on outreach material and on the Village website.
2. Provide educational material on illicit discharges and illegal dumping on the Village website.

D. Construction Site Runoff Control

By many accounts, the most environmentally dangerous period of development is the initial construction phase, when land is cleared of vegetation and graded to create a proper surface for construction. The removal of natural vegetation and topsoil makes the exposed area particularly susceptible to erosion.

Regulatory Authority

The Village of Barrington has adopted the Lake County WDO and is currently a Certified Community for the review, permitting, inspection, and enforcement of the provisions of the WDO in both counties. The Village of Barrington's Village Code meets the minimum requirements of the WDO and any project within the Village of Barrington corporate limits must meet these requirements. The Village of Barrington's storm water management regulations are in Title 10, Chapter 9 of the Village Code. The purpose of these regulations is to establish reasonable rules and regulations for development to ensure that new development does not increase existing storm water problems or create new ones. The Village Code establishes standards for runoff, maintenance, detention sites, soil erosion and sediment control, water quality, wetlands, and floodplains.

Applicants submit the completed application forms and supporting documentation to the Village for review and comment. After all applicable provisions of the Village Code have been addressed, a permit is issued. Each permit lists any additional conditions that are applicable to the development.

The Village Code is the regulatory mechanism that requires the use of SESCOs on development sites. At a minimum, these standards apply to any development project that hydrologically disturbs 5,000 square feet of land or more. In addition, applicants that hydrologically disturb greater than 1-acre are required to seek coverage under the NPDES Construction Site General Permit ILR10 by filing a NOI with the IEPA. A copy

of the NOI must be submitted to the Village prior to commencement of any site work, including demolition. During construction, applicants are required to submit to the IEPA Incidence of Noncompliance (ION) forms, as necessary. After the site is substantially stabilized, the applicant is required to submit a Notice of Termination (NOT) to the IEPA.

Site Plan Review

All permits start at the Building Department, who routes the plans to various departments. The Village reviews plans in accordance with the Village's Village Code. Elements reviewers look for in an effective site construction SESC plan include:

- Minimize needless clearing and grading.
- Protect waterways and stabilize drainage ways.
- Phase construction to limit soil exposure.
- Stabilize exposed soils immediately.
- Protect steep slopes and cuts.
- Install perimeter controls to filter sediments.
- Employ advanced sediment settling controls.

Measurable Goals

1. Review site plans and issue permits in accordance with the Village Code.
2. Ensure construction sites needing coverage under the NPDES Construction Site General Permit ILR10 obtain coverage prior to issuance of a Watershed Development Permit.

Construction Site Inspections & Enforcement

Title 10, Chapter 9 of the Village Code contains both recommended and minimum requirements for the inspection of development sites. For major developments, site inspections occur (at a minimum) upon completion of installation of SESC measures, prior to the start of any other land disturbing activities, after final stabilization and landscaping, and prior to the removal of SESC measures.

Section 10-9-12-1201 of the Village Code specifies the legal actions that may be taken and the penalties that may be imposed if the provisions of Chapter 9 (Storm Water Management Regulations) are violated. If development activities on a development site are not in compliance with the requirements of Chapter 9, the Village may issue a stop work order on all development activity on the site or on the development activities that are in direct violation of the Village Code. In addition, failure to comply with any of the requirements of Chapter 9 constitutes a violation of the Village Code, and any person convicted of violating the Village Code may be fined.

Measurable Goals

1. Document and track site inspections on development sites. Keep files for 5 years.

E. Post-Construction Runoff Control

The management of storm water runoff from sites after the construction phase is vital to controlling the impacts of development on urban water quality. The increase in impervious surfaces such as rooftops, roads, parking lots, and sidewalks due to land development can have a detrimental effect on aquatic systems. Runoff from impervious areas can also contain a variety of pollutants that are detrimental to water quality, including sediment, nutrients, road salts, heavy metals, pathogenic bacteria and petroleum hydrocarbons.

Regulatory Program

The Village Code establishes the minimum storm water management requirements for development, including requirements for post-construction runoff control. The Village Code requires all applicants to adopt storm water management strategies for controlling post-construction storm water runoff on development sites. All development must adopt storm water management strategies that minimize increases in storm water runoff rates, volumes, and pollutant loads from development sites. Proposed storm water management strategies must address the runoff volume reduction requirements and include appropriate storm water BMPs to address the other applicable post-construction runoff control requirements of the Village Code. Applicants are also required to adopt strategies that incorporate storm water infiltration, reuse, and evapotranspiration of storm water into the project to the maximum extent practicable. Types of techniques include green roofs, rain gardens, rain barrels, bio-swales, permeable piping, dry wells, and permeable pavement.

The Village Code requires that maintenance plans be developed for all storm water management systems designed to serve major developments. Such maintenance plans must include the following:

- Description of all maintenance tasks.
- Identification of the party or parties responsible for performing such maintenance tasks.
- Description of all permanent maintenance easements or access agreements, overland flow paths, and compensatory storage areas.
- Description of dedicated sources of funding for the required maintenance.

The Village Code also requires that all storm water management systems be located within a deed or plat restriction to ensure that the system remains in place in perpetuity and that access to the system is maintained in perpetuity for inspection and maintenance purposes.

Measurable Goals

1. Document BMPs approved on development sites.
2. Ensure maintenance plans are prepared for all storm water management systems as required by the Village Code.

Storm Water Management Facility Inspections

Regular inspection is essential to maintain the effectiveness of post-construction storm water management facilities. Inspection and maintenance of facilities can be categorized into two groups: (1) expected routine maintenance, and (2) non-routine maintenance (i.e., repairs). Routine maintenance refers to checks performed on a regular basis to keep the facility in good working order and aesthetically pleasing. In addition, routine inspection and maintenance is an efficient way to reduce the chance of polluting storm water runoff by finding and correcting problems before the next rain. The failure of structural storm water facilities can lead to downstream flooding, causing property damage, injury, and even death.

The Village attempts to inspect approximately 20% of all public and private storm water management facilities a year; resulting in a 5-year inspection interval. Observed erosion, seeding/reseeding needs, and slope stabilization needs are documented. During the inspections, staff identify facilities that would most benefit from a retrofit or other enhancements. SMC's Streambank/Shoreline Stabilization Manual is used as a starting point in choosing the appropriate BMP for remediation activities. Impacts and effects due to climate change are taken into considered when making recommendations. A master list of storm water management facilities is maintained and updated on a regular basis.

Measurable Goals

1. Maintain an inventory of all public and private storm water management facilities.
2. Inspect 20% of all public and private storm water management facilities on an annual basis. Recommend remedial actions as appropriate.
3. Evaluate the feasibility of retrofits and enhancements to storm water management facilities.

F. Pollution Prevention/Good Housekeeping

The Village is responsible for the care and upkeep of Village-owned property, municipal roads, and maintenance yards. Many maintenance activities are performed by Village staff; however, contractors are employed to perform specific activities. The Village requires documentation that appropriate training has been completed annually, for all contractors retained to manage or carry out routine maintenance, repair, or replacement of public surfaces in current green infrastructure or low impact design techniques applicable to such projects. Contractors are responsible for providing training to their employees for projects which include green infrastructure or low impact design techniques and providing proof of such training to the Village.

The Village maintains compliance with permit requirements by incorporating pollution prevention and good housekeeping storm water quality management into day-to-day operations. On-going education and training is provided to staff to ensure they have the knowledge and skills necessary to perform their functions effectively and efficiently. The Village of Barrington implements the following programs to fulfill the requirements of this minimum control measure.

Catch Basin/Inlet Cleaning

Catch basins are chambers or sumps that allow surface water runoff to enter the storm water conveyance system. Many catch basins are below the invert of the outlet pipe intended to retain coarse sediment. By trapping sediment, the catch basin prevents solids from clogging the storm sewer and being washed into receiving waters. Catch basins are cleaned periodically to maintain their ability to trap sediment and consequently, their ability to prevent flooding. The removal of sediment, decaying debris, and highly polluted water from catch basins has aesthetic and water quality benefits, including reducing foul odors, reducing suspended solids, and reducing the load of oxygen-demanding substances that reach receiving waters. Generally, catch basins are cleaned if the depth of deposits is greater than or equal to one-third to depth from the basin to the invert of the lowest pipe or opening into or out of the basin. Catch basins are cleaned either manually or by specially designed equipment. Before any materials can be disposed, it may be necessary to perform a detailed analysis to characterize the waste. However, material removed from catch basins is typically stored at the Village's maintenance yard and disposed in a conventional landfill. The Department of Public Works is currently responsible for administering the Villages Catch Basin/Inlet Cleaning BMP.

The Village cleans catch basins and inlets on an as needed basis (i.e. complaints, standing water, etc.). Catch basins found to have structural deficiencies are reported to the Director of Public Works. Necessary remedial actions are completed by a contractor or incorporated into a capital project

Measurable Goals

1. Clean catch basins and inlets on an as needed basis.
2. Report catch basins found to have structural deficiencies.
3. Complete necessary repairs.

Public Works Washing Station Facility

Vehicle and equipment wash waters have the potential to result in high loads of nutrients, metals, and hydrocarbons in receiving waters. The Village currently utilizes a triple catch basin connected to the sanitary sewer for washing vehicles and equipment at the Public Works Facility. The Department of Public Works maintains the triple catch basin.

Measurable Goals

1. Ensure Village vehicles are washed in the proper location.
2. Complete routine maintenance of the triple catch basin.

Material Storage

Uncovered materials such as salt, wood, sand, stone, gravel, etc. have the potential to contaminate storm water when exposed to rain and/or runoff. Tarp, plastic sheeting, roofs, buildings, and other enclosures are examples of temporary or permanent coverings that are effective in preventing storm water contamination. Covering is necessary for loading/unloading areas; raw material, byproduct, and final product outdoor storage areas; fueling and vehicle maintenance areas; and other high-risk areas. The Department of Public Works maintains its salt dome, covered fuel island, and material storage areas.

Measurable Goals

1. Maintain salt storage, covered fuel island, and material storage areas.
2. Conduct monthly pollution prevention inspections at the Public Works Facility.

Street Sweeping

The Village employs street sweeping on a regular basis to minimize pollutant export to receiving waters. These cleaning practices are designed to remove from road and parking lot surfaces sediment, debris and other pollutants that are potential source of pollution impacting urban waterways. Recent improvements in street sweeper technology have enhanced the ability of present day machines to pick up the fine-grained sediment particles that carry a substantial portion of the storm water pollutant load. Street sweeping is used during the spring snowmelt to reduce pollutant loads from road salt and to reduce sand export to receiving waters. The Department of Public Works is responsible for the street sweeping program for the Village. The Village attempts to sweep each street three times per year.

Measurable Goals

1. Maintain current street sweeping practices.

Landscape Maintenance

The Department of Public Works is responsible for maintenance of landscaping at municipal facilities, along municipal roads, and in maintenance yards. The Department of Public Works is also responsible for the Village's program for application of pesticides and herbicides. The use of pesticides and fertilizers are managed in a way that minimizes the volume of storm water runoff and pollutants. Landscape contractors are required to meet the NPDES MS4 training requirements and ensure that they adhere to the Village's SWMP.

Measurable Goals

1. Manage the use of pesticides and fertilizers in a way that minimizes the volume of storm water runoff and pollutants.
2. Ensure landscape contractors utilized by the Village meet NPDES MS4 training requirements.

Snow Removal and Ice Control

The Village of Barrington's Department of Public Works handles snow and ice removal on Village

Roadways. During snow removal and ice control activities, salt, de-icing chemicals, abrasives, and snow melt may pollute storm water runoff. To address these potential pollutants, the following procedures for the "winter season" (November 1 through May 1) are implemented.

Roadway Ice Control - Use the minimal amount of salt, de-icing chemicals, and additives necessary for effective control. Prior to November 1, preparation work to obtain seasonal readiness is completed. These tasks include installing, inspecting, re-conditioning, testing, and calibrating of spreaders and spinners per the National Salt Institution Application Guidelines. Driver training is also conducted annually for all drivers. The completion of these preparatory tasks helps to ensure that only the necessary level of salt is applied.

Snow Plowing - Snow plowing activities direct snow off the pavement and onto the parkways. This reduces the amount of salt, chemical additives, abrasives, or other pollutants that go directly into the storm sewer system.

Participation in Watershed Group - Village staff participate in a watershed group(s) organized to implement control measures which will reduce the chloride concentration in receiving streams in the watershed.

Salt Delivery and Storage - Steps are taken to ensure that the delivery, storage, and distribution of salt does not pollute storm water runoff. The floor of the enclosed salt storage building, and adjacent receiving/unloading area is constructed of impervious material. The limits of the salt piles are pushed back away from the door opening to minimize potential illicit runoff.

Measurable Goals

1. Continue to implement the pre-season procedures related to roadway ice control, snow plowing, participation in watershed groups, driver training, and management of salt delivery and storage.

Vehicle and Equipment Maintenance

Vehicle and equipment fueling procedures and practices are designed to minimize or eliminate the discharge of pollutants to the storm water management system, including receiving waters. The following standard procedures are implemented.

Vehicle Fueling - The vehicle fueling area contains two (2) single nozzle pumps with two (2) belowground tanks. One (1) 10,000-gallon single wall gasoline tank and one (1) 6,000-gallon double wall ultra-low sulfur diesel tank. The diesel tank has an interstitial monitoring alarm system.

Waste Oil - Used motor oil, transmission fluids, gear lubes, brake fluids and other vehicle fluids (except antifreeze) are collected and stored in approved containers. The waste oil tank is emptied by a private company and removed for recycling.

Antifreeze - Used antifreeze is stored in a 55-gallon tank. It is emptied by a private company and removed for recycling.

Batteries - Used batteries are stored in the vehicle maintenance area and are removed for recycling weekly by a private battery supplier.

Tires - Used tires are picked up and recycled by a local vendor as accumulated. Tires are stored outside at the Village's garage until picked up for disposal.

Other - Private certified companies perform all air-conditioning related work; therefore, the disposal of Freon is not handled directly by the Village. Cleaning fluids and solvents are contained within an enclosed tank and maintained by a private licensed special waste company.

Measurable Goals

1. Continue to implement the procedures for vehicle and equipment maintenance.

Waste Management

Waste Management consists of implementing procedural and structural practices for handling, storing, and disposing of wastes generated by Village maintenance activity. This helps prevent the release of waste materials into receiving waters. Waste management practices include removal of materials such as asphalt and concrete maintenance by-products, excess earth excavation, contaminated soil, hazardous wastes, sanitary waste, and material from within triple basins. The following standard procedures are implemented.

Spoil Stock Pile - Asphalt and concrete maintenance by-products and excess earth excavation materials are temporarily stored in the stock pile in the maintenance yard. Attempts are made to recycle asphalt and concrete products prior to storage in the spoil stock pile. Licensed waste haulers are contracted to remove and dispose of the contents at a licensed landfill. Surface runoff from this area is largely contained.

Contaminated Soil Management - Contaminated soil/sediment generated during an emergency response or identified during construction activities is collected and management for treatment or disposal. Attempts are made to avoid stockpiling of the contaminated soil.

Hazardous Waste - All hazardous wastes are stored in sealed containers constructed of compatible material and labeled. The containers are located in non-flammable storage cabinets or on a containment pallet. These items include paint, aerosol cans, gasoline, solvents, and other hazardous wastes. Care is taken to avoid overfilling containers. Paint brushes and equipment used for water and oil-based paints are cleaned within the designated cleaning area. The Department of Public Works maintains oversight of hazardous waste generated by the Village. Containerized hazardous waste materials are disposed of or recycled through a contract arrangement with a third party hazardous waste disposal firm.

Measurable Goals

1. Properly handle, store, and dispose of wastes generated by Village maintenance activities.

Special Events

Persons or organizations planning an event (such as parades and fairs) in the Village that includes using public property (including village streets) or requires the utilization of Village services (i.e., electrical needs, traffic and parking coordination, paramedic services, etc.) must apply for approval. This approval process ensures that entities in charge of special events prohibit the dumping, depositing, dropping, throwing, discarding, or leaving of litter and all other illicit discharges from entering the storm water management system. The Public Works Department oversees clean-up activities after these events.

Measurable Goals

1. Require approval for special events to prohibit the dumping, depositing, dropping, throwing, discarding, or leaving of litter and all other illicit discharges from entering the storm water management system.

Spill Response Plan

Spill prevention and control procedures are implemented wherever non-hazardous chemicals and/or hazardous substances are stored or used. These procedures and practices are implemented to prevent and control spills in a manner that minimizes or prevents discharge to the storm water drainage system and receiving waters.

The following general guidelines are implemented to prevent spills:

- Ensure all hazardous substances are properly labeled.
- Store all hazardous wastes in sealed containers constructed of compatible material and labeled.
- Locate items, such as paint, aerosol cans, gasoline, solvents and other hazardous wastes, in non-flammable storage cabinets or on a containment pallet.
- Do not overfill containers.
- Provide secondary containers when storing hazardous substances in bulk quantities (greater than 55 gallons).
- Dispense and/or use hazardous substances in a way that prevents release.

Non-Hazardous Spills/Dumping - Non-hazardous spills typically consist of an illicit discharge of household material(s) into the street or storm water management system. Upon notification or observance of a non-hazardous illicit discharge, the Public Works Department or Police Department implement the following procedure:

- Sand bag the receiving inlet to prevent additional discharge into the storm sewer system.
- Check structures (immediate and downstream) and if possible, vacuum materials out. Jet structure to dilute and flush the remaining unrecoverable illicit discharge.
- Clean up may consist of applying "Oil Dry" or sand and then sweeping up the remnant material.
- On-site personnel document the location, type of spill, and action taken.
- If a person is observed causing an illicit discharge, the Department Public Works is notified and appropriate citations issued.

Hazardous Spills - Upon notification or observance of a hazardous illicit discharge, the Public Works Department or Police Department implement the following procedure:

- Call 911, explain the incident. The Fire Department responds.
- Village Police provide emergency traffic control, as necessary.
- The Fire Department evaluates the situation and applies "No Flash" or "Oil Dry" as necessary.
- The Fire Department's existing emergency response procedure for hazardous spill containment clean-up activities is followed.
- On-site personnel document the location, type of spill, and action taken.

Measurable Goals

1. Implement the Spill Response Plan outlined above.

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

Stormwater Management Program Assessment, Year 14

On March 18, 2016, Village staff met with their consultant to review the annual report and tracking documents; assess the appropriateness and effectiveness of the Best Management Practices identified in the Village's SWMP; and discuss the changes to the ILR40 permit which became effective March 1, 2016. After the meeting, the SWMP was revised to incorporate items discussed at the annual review meeting and to also comply with the new 2016 ILR40 permit conditions. Based on this assessment, the Village believes that their current program is effectively making progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable.

Water Quality Monitoring and Assessment Program, Year 14

The Village of Barrington developed a Water Quality Monitoring and Assessment Program for the purpose of demonstrating compliance with the minimum standards required by the IEPA's General Storm Water Permit ILR40 for discharges from MS4s. The Permit requires annual monitoring of receiving waters upstream and downstream of the MS4 discharges, use of indicators to gauge the effects of storm water discharges on the physical/habitat-related aspects of the receiving waters and/or monitoring of the effectiveness of the Best Management Practices (BMPs). Monitoring of storm water discharges must be performed within 48 hours of a precipitation event greater than or equal to one-quarter inch in a 24-hour period.

Water pollution control programs are designed to protect the beneficial uses of the water resources within the state. Each state has the responsibility to set water quality standards (WQS) that protect these beneficial uses, commonly referred to as "designated uses". In 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, drinking water, food-processing water supply and aesthetic quality. Illinois' WQS provide the basis for assessing whether the beneficial uses of the state's waters are being attained. The purpose of the Village's Water Quality Monitoring and Assessment Program is to assess the quality of receiving waters and provide recommendations for BMPs that will target the identified areas of concern.

Test results are compared against the water quality standards (WQS) established by the Illinois Pollution Control Program (IPCB) and to the water quality results of prior testing. The Illinois WQS are located in the Illinois Administrative Rules Title 35, Environmental Protection; Subtitle C, Water Pollution; Chapter I, Pollution Control Board; Part 302, Water Quality Standards. The purpose of these standards are to protect existing uses of all waters of the State of Illinois, maintain above standard water quality and prevent unnecessary deterioration of waters of the State. Not all of the constituents tested for contain a limit under the General Use Water Quality Standard.

Water quality sampling was conducted during Year 14 at three locations within the receiving waters, both upstream and downstream of the Village's stormwater discharges. At these locations, the physical characteristics of the sampling point were observed and water quality samples were collected. Collected water quality samples were analyzed for ammonia, biochemical oxygen demand, phosphorus, total suspended solids, and pH.

The data was reviewed to determine whether or not it provides any evidence of reduced pollutant loads or improved water quality. The data collected from water quality sampling locations upstream and downstream of the Village's stormwater discharges show either no change or a decrease in the concentrations of a number of water quality parameters between the upstream and downstream sampling locations. These findings may be attributable to the MS4's stormwater management activities and indicate

that the Village's BMPs and stormwater management program are appropriate.

Tracking and Data Collection, Year 14

A summary of activities performed in accordance with the Village's SWMP are presented in the following pages.

Training

Description	Location	Date	Attendees
Surviving a MS4 Compliance Audit	Webinar hosted at Lake County Emergency Management Agency, Libertyville	3/16/16 12:00-1:30 PM	David Schmidt, Ralph Kuhlman
Annual MS4 Coordination meeting with Consultant to review SWMP.	Public Works Office.	3/18/2016	David Schmidt, Ralph Kuhlman, and Pam Payton

Public Education and Outreach

Description	Date	Distribution	Target Audience
Newsletter Article: Cross Connection Control Program	Mar-16	Online	Residents
Newsletter Article: Important Notice! Sewer back ups during extreme rain events.	Apr-16	Online	Residents, businesses
Newsletter Article: Cross Connection Control Program	Mar-16	Online	Residents
Newsletter: Sanitary sewer Replacement Program Update	Jun-16	Online	Residents, businesses
Newsletter: Pitch in to Conserve Water	Jun-16	Online	Residents, businesses
Newsletter: Pitch in to Conserve Water	Jul-16	Online	Residents, businesses
Newsletter: Water Conservation Tips	Jul-16	Online	Residents, businesses
Newsletter: Make Your Home the Solution to Stormwater Pollution.	Sep-16	Online	Residents
Newsletter Article: Important Notice! Sewer back ups during extreme rain events.	Oct-16	Online	Residents, businesses
"Green Initiatives" page on the Village website provides links to the Rain Barrel Rebate Program, Citizens for Conservation, Flint Creek Watershed Partnership, Smart Farms, Citizens for Open Space, Barrington Area Conservation Trust and Tree City USA.	Ongoing	Online	Everyone
Website: Report a Problem - Creek Maintenance	Ongoing	http://www.barrington-il.gov/i-want-to-report-a-problem	Everyone

Public Education and Outreach

Description	Date	Distribution	Target Audience
<p>Website: Stormwater Management</p> <ul style="list-style-type: none"> - Lake County Stormwater Management Ordinance - FEMA Floodplain Information - What to do if a resident has stormwater issue. - Link to resources for water quality, stormwater, green infrastructure, watershed partnerships, pollution prevention, construction site stormwater management, Best Management Practices, pollution sources/solutions, urban runoff, 10 ways to improve stormwater runoff. - Contact information for stormwater management - NPDS MS4 Annual Reports - General information on the MS4 program. 	Ongoing	http://www.barrington-il.gov/government/departments/development-services/stormwater-management	Everyone
Website: Links to all Village Services	Ongoing	http://www.barrington-il.gov/residents/village-services	Everyone
Website: Recycling and Refuse	Ongoing	http://www.barrington-il.gov/government/departments/community-financial-services/programs-services/recycling-refuse-services	Everyone
Website: Rules and Regulations	Ongoing	http://www.barrington-il.gov/government/rules-and-regulations	Everyone

Public Participation & Involvement

Description	Date	Distribution	Target Audience
Public Meeting - Update on MS4 Permit Program.	07/28/2016	Event	Residents
Flint Creek/Spring Creek Watershed Meeting	07/28/2016	Event	Jeff Ende attended
Flint Creek/Spring Creek Watershed Meeting	9/29/2016	Event	Jeff Ende attended
Proclamation of Arbord Day and Tree Care Week	4/11/2016	Notice	Residents

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
1	Hillside across from Eastern		Overgrowth/ cannot locate or inspect
2	820 Hillside		Overgrowth/ cannot locate or inspect
3	800Hillside	6/8/2016	
4	Hillside at Bristol		Overgrowth/ cannot locate or inspect
5	652 Hillside		Overgrowth/ cannot locate or inspect
6	506 Russell		Overgrowth/ cannot locate or inspect
7	Behind 226 Hager		
8	226 Hager		
9	R.R. at 510 Westwood	6/8/2016	
10	R.R. at 491 Hillside	6/8/2016	
11	R.R. at 514 Shady	6/8/2016	Large piece of metal sticking out
12	R.R. across from Eastern		
13	Hillside & R.R.		
14	946 Lakewood	6/8/2016	
15	940 Lakewood	6/8/2016	
16	650 Hillside Ct.	6/8/2016	
17	Bet. 631 & 625 Fairfield	6/8/2016	
18	Bet. 631 & 625 Fairfield	6/8/2016	
19	behind 610 Fairfield	6/8/2016	
20	behind 580 Chateaux	6/8/2016	
21	1417 Main St.	6/20/2016	Submerged cannot inspect

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
22	1417 Main St.	6/20/2016	Submerged cannot inspect
23	916 Lakewood Detention	6/8/2016	
24	916 Lakewood Detention	6/8/2016	
25	Behind 620 Haven	6/8/2016	
26	Behind 151 Kings Row	6/8/2016	
27	Behind 270 Balmoral	6/8/2016	
28	1420 S. Hough Pond (Governor's Park)		
29	1420 S. Hough Pond (Governors Park)		
30	Southgate Detention Area		
31	1435 Barrington Rd.		
32	Pond at 430 Park barr	6/8/2016	
33	Pond at 430 Park	6/8/2016	
34	Pond at 430 Park	6/8/2016	
35	Pond at 432 Park	6/8/2016	
36	Pond at 432 Park	6/8/2016	side of outfall damaged/missing
37	Pond at 402 Park	6/8/2016	
38	Pond at 402 Park	6/8/2016	
39	Bet. 1431 & 1432 Cascade	6/8/2016	
40	Bet. 210 & 208 Astoria	6/8/2016	
41	Bet. 1465 & 1467 Columbia	6/8/2016	
42	Bet. 1455 & 1457 Cascade	6/8/2016	

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
43	Barrington Woods Detention		
44	Barrington Woods Detention		
45	Pond NW of Grove and Dundee Pk Lot (NW)		
46	Pond NW of Grove and Dundee Pk Lot (N)		
47	Pond NW of Grove and Dundee Pk Lot (E)		
48	Prairie Middle School	6/20/2016	
49	Prairie Middle School	6/20/2016	
50	Behind Pepper Const (411 N. Lake Zurich Rd)		overgrowth/cannot locate
51	Bet. 1104 & 1106 North Shore Ct.		
52	End of Indian Way	6/14/2016	Oil sheen
53	Bet. 1307 & 1309 Lake Shore Dr.	6/14/2016	mild damage
54	Eastwood Pond (Whitney Dr.)	6/8/2016	
55	Eastwood Pond (Whitney Dr.)	6/8/2016	
56	Eastwood Pond (Whitney Dr.)	6/8/2016	
57	Eastwood Pond (Whitney Dr.)	6/8/2016	
58	Eastwood Pond (Whitney Dr.)	6/8/2016	
59	387 Valley Ct.	6/14/2016	
60	1400 Lake Shore	6/14/2016	
61	Bet. 1288-1290 The Point	6/14/2016	
62	Bet. 1403-501 Lake Shore North	6/14/2016	Side Damaged
63	Bet. 519-521 Lake Shore	6/14/2016	

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
64	Bet. 1540-1550 Lake Shore	6/14/2016	Damage
65	Bet. 1450-1460 Lake Shore	6/14/2016	Connection Broken
66	Tall Trees detention pond	6/13/2016	
67	Tall Trees detention pond	6/13/2016	
68	Across from 432 Fox glove	6/13/2016	
69	Foundry Mall Detention	6/14/2016	
70	Foundry Mall Detention	6/14/2016	
71	Foundry Mall Detention	6/14/2016	
72	Foundry Mall Detention	6/14/2016	
73	1000 Hart Rd	6/20/2016	
74	1000 Hart Rd	6/20/2016	Submerged cannot inspect
75	800 Hart Rd.	6/20/2016	
76	600 Hart Rd.	6/20/2016	Overgrowth/ cannot locate or inspect
77	Vacant Lot		
78	Recon/Optical	6/14/2016	
79	Recon/Optical	6/14/2016	
80	GE Capital	6/14/2016	
81	GE Capital	6/14/2016	
82	GE Capital	6/14/2016	
83	GE Capital		cannot locate/overgrowth
84	Behind Baseball fields at HS near bridge	6/20/2016	

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
85	Behind Baseball fields at HS near bridge	6/20/2016	
86	Behind Baseball fields at HS near bridge	6/20/2016	
87	End of Hager	6/27/2016	
88	Flint Creek		
89	End of Raymond (A few feet w. from bridge on N. Side)	6/27/2016	
90	End Raymond Directly Under bridge	6/27/2016	Submerged
91	At R.R. between Cumnor & Exmoor	6/27/2016	
92	Roslyn School Retention	6/14/2016	Excessive vegetation
93	Roslyn School Retention	6/14/2016	full of rocks
94	230 Carriage	6/13/2016	
95	230 Carriage	6/13/2016	
96	120 Carriage Trail	6/13/2016	
97	130 Carriage Trail	6/13/2016	
98	Bet. 905-909 Hampstead Ct.	6/13/2016	
99	End of Hampstead Ct.		Overgrowth/ cannot locate or inspect
100	Bet. 815 & 835 Fairfax Ct.	6/13/2016	
101	Bet. 345 & 365 Covington	6/13/2016	
102	Bet. 872 & 870 George Towne	6/13/2016	Fully Submerged
103	End of Bosworth Field	6/13/2016	
104	430 Elm Rd.	6/13/2016	covered in stones
105	317 Elm (under bridge)	6/13/2016	Under bridge/cannot inspect

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
106	Bent Ridge Retention	6/13/2016	
107	Bet. 731-749 Oak Rd	6/13/2016	
108	Overflow Weir by Barr. Courte Offices	6/20/2016	
109	Overflow Weir	6/20/2016	
110	Flint Creek & Union Pacific RR		Overgrowth/ cannot locate or inspect
111	Creek behind Shorely Dr. apartments		
112	Creek behind Shorely Dr. apartments		
113	Creek behind Shorely Dr. apartments		
114	Behind S. Heinens Grocery	6/13/2016	
115	Behind S. Heinens Grocery	6/27/2016	
116	Behind S. Heinens Grocery	6/27/2016	
117	Behind S. Heinens Grocery	6/27/2016	
118	Garlands Northeast pond	6/13/2016	
119	Garlands Northeast pond	6/13/2016	
120	Garlands Northeast pond	6/13/2016	
121	Garlands Northwest Pond	6/13/2016	
122	Garlands Northwest Pond	6/13/2016	
123	Garlands Northwest Pond		Submered cannot inspect
124	Garlands Southeast Pond	6/13/2016	
125	Garlands Southeast Pond	6/13/2016	
126	Garlands Southeast Pond	6/13/2016	

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
127	400. Rt 14, Public Saftey Bldg.	6/13/2016	Submered cannot inspect
Basin	Atonement Church Basin	6/22/2016	
Basin	Lakeview	6/8/2016	
Basin	Southgate Detention	6/14/2016	
Basin	North Governors Park		
Basin	Park barrington	6/8/2016	
Basin	Park barrington	6/8/2016	
Basin	Park barrington	6/8/2016	
Basin	Oaks of Barrington	6/8/2016	
Basin	Oaks of Barrington	6/8/2016	
Basin	Honquest/Motorwerks		
Basin	Barrington Place		
Basin	New Motorweks Lot		
Basin	Early learning Center	6/20/2016	
Basin	Lake Louise	6/14/2016	
Basin	Whitney Dr. Detention	6/8/2016	
Basin	Fox Glove Lane by Ela	6/8/2016	
Basin	Tall Trees detention	6/13/2016	
Basin	Tall Trees detention	6/13/2016	
Basin	SE Foundry	6/14/2016	
Basin	SW Foundry	6/14/2016	

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
Basin	N. Foundry	6/14/2016	
Basin	Hart Rd	6/20/2016	
Basin	Hart Rd	6/20/2016	
Basin	Hart Rd	6/20/2016	
Basin	Hart Rd	6/20/2016	
Basin	GE Capital	6/14/2016	
Basin	Behind GE Capital	6/14/2016	
Basin	Behind 912 Hampstead	6/13/2016	
Basin	Roslyn Rd School	6/14/2016	
Basin	Hamstead Ct	6/13/2016	
Basin	Carraige Trl	6/13/2016	
Basin	Carraige Trl	6/13/2016	
Basin	Steeplechase Detention	6/13/2016	
Basin	Chippendale	6/13/2016	
Basin	Chippendale	6/13/2016	
Basin	Flint Creek Estates	6/13/2016	
Basin	Heinens	6/13/2016	
Basin	Overflow Weir	6/20/2016	
Basin	Public Saftey Building	6/13/2016	
Basin	Garlands Northwest pond	6/13/2016	
Basin	Garlands Northeast pond	6/13/2016	

Illicit Discharge Detection and Elimination

Outfall ID	Location	Inspection Date	Comments
Basin	Garlands Southeast pond	6/13/2016	
Basin	Hospice	6/20/2016	

Construction Site Runoff Control

Address	Reference No	Type of Work	Date	Action
217 Eastern Ave	B16-0274	Site Development	5/9/2016	Approved site development permit
238 Coolidge Ave	B16-0188	Addition	4/15/2016	Approved site development permit
206 Tower Rd	B16-0240	New Construction	5/2/2016	Approved site development permit
307 E Hillside Ave	B16-0348	New Construction	6/3/2016	Approved site development permit
503 Division St	B16-0362	New Construction	6/7/2016	Approved site development permit
827 S Grove St	B16-0497	New Construction	7/21/2016	Approved site development permit
239 W Russell St	B16-0499	Addition	7/22/2016	Approved site development permit
235 Lions Dr	B16-0646	Swimming Pool/Spa	2/9/2016	Approved site development permit
101 W Liberty St	B16-0713	New Construction	27/09/2016	Approved site development permit
1529 S Grove Ave	B16-0738	New Construction	4/10/2016	Approved site development permit
420 Elm Rd	B16-0647	Addition	9/02/2016	Approved site development permit
519 Summit St	B16-0890	Demolition, Exterior	12/02/2016	Approved site development permit
491 W Hillside Ave	B17-0022	Swimming Pool/Spa	1/25/2017	Approved site development permit
101 W Liberty Street	B16-0713	New Construction/Residential	9/27/2016	ILR10 Permit ILR10X724
217 Eastern Ave	B16-0274	Site Development	5/09/2016	Pre-construction meeting
206 Tower Rd	B16-0240	New Construction	5/02/2016	Pre-construction meeting
307 E Hillside Ave	B16-0348	New Construction	6/03/2016	Pre-construction meeting
827 S Grove St	B16-0497	New Construction	7/21/2016	Pre-construction meeting
235 Lions Dr	B16-0646	Swimming Pool/Spa	9/02/2016	Pre-construction meeting
516 E Hillside Ave	PMT-16-0117	New Construction	5/27/2016	Code/Ordinance Violation

Year 14 March 2016 - February 2017

Post Construction Site Runoff Control

Description
Village staff conducted inspections of 43 detention basins during June and July of 2015. Data collected included location, flow and condition. A picture was taken at each basin.

Pollution Prevention / Good Housekeeping

Description	Date	Completed By	Notes
Monthly Inspection and Assessment for Public Works Facility	3/1/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	3/14/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	4/4/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	4/26/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	5/2/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	5/9/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	6/7/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	7/5/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	7/25/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	8/1/2016	Ralph Kuhlman	Reinstalled new triple basin and 3' catch basin at front parking lot of Public Works Building on 7/22/16.
Monthly Inspection and Assessment for Public Works Facility	8/18/2016	Mike Casper	

Pollution Prevention / Good Housekeeping

Description	Date	Completed By	Notes
Monthly Inspection and Assessment for Public Works Facility	9/13/2016	Ralph Kuhlman	Removed all concrete to recycler in first week of September. Working on asphalt pile.
Monthly Inspection and Assessment for Public Works Facility	9/26/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	10/6/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	10/13/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	11/1/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	11/3/2016	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	12/2/2016	Ralph Kuhlman	Asphalt hauled to recycler on 11/30 and 12/1.
Monthly Inspection and Assessment for Public Works Facility	12/20/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	1/13/2017	Ralph Kuhlman	
Monthly Inspection and Assessment for Public Works Facility	1/17/2016	Mike Casper	
Monthly Inspection and Assessment for Public Works Facility	2/9/2017	Ralph Kuhlman	Concrete pile removed in January 2017.

Pollution Prevention / Good Housekeeping

Description	Date	Completed By	Notes
Monthly Inspection and Assessment for Public Works Facility	2/14/2017	Mike Casper	
Annual Inspection and Assessment for Public Works Facility	2/14/2017	Mike Casper and David Schmidt	

Pollution Prevention Materials Tracking

Description	Units	TOTALS	2016										2017	
			March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
Catch Basin/Inlet Cleaned	# of catch basins/inlets	83.00	3	31	5	1	0	5	12	2	0	0	0	24
Catch Basin Debris Removed	Yards	39.50	3.5	12	2	1	0	2	5	6	0	0	0	8
CB/Inlet Repaired/Replaced	# of catch basins/inlets	26.00	3	2	6	2	8	1	0	0	1	0	2	1
Feet of storm line cleaned	Linear Feet	539.00	0	90	145	0	0	0	0	304	0	0	0	0
Adopt-A-Hwy Clean-up's	# of Events	3.00	0	0	0	1	0	0	1	0	1	0	0	0
Street Sweeping	Cubic Yards	970.50	54.5	18	23	37	32	36	51	173	448	56	42	0
Recycling	Tons	1,440.12	105.7	153.38	116.03	115.23	138.69	104.7	133.82	99.69	114.63	158.1	99.8	100.35
Salt Used	Tons	790.15	29.5	0	0	0	0	0	0	0	0	461	252.35	47.3
Liquid/Tri Mix Used	Gallons	2,620.00	0	0	0	0	0	0	0	0	0	2000	620	0
Sanitary MH Repaired/Replaced	# of manholes	4.00	0	1	0	1	0	1	1	0	0	0	0	0
Tire Disposal	# of tires	57.00	33	0	0	0	0	0	0	0	0	24	0	0
Vehicle Batteries	# of batteries	23.00	5	2	1	1	5	3	4	1	0	0	1	0
Used Oil Recycled	Gallons	55.00	55	0	0	0	0	0	0	0	0	0	0	0
Used Coolant Rec.	Gallons	-	0	0	0	0	0	0	0	0	0	0	0	0
Hazardous Spills	Gallons	-	0	0	0	0	0	0	0	0	0	0	0	0

Year 14 March 2016 - February 2017

Water Quality Testing

Baker's Lake Site						
Parameter	Accepted Limits	Test Results				
		2012	2013	2014	2015	2016
Ammonia (mg/L)	15	0.161	0.04	0.04	0.04	0.025
BOD (mg/L)	<8.0	8	8	7	8	14
Phosphorous, Total (mg/L)	0.05	0.11	0.18	0.05	0.18	0.67
Total Suspended Solids (mg/L)	15.0-30.0	18	77	47	0.18	170
pH	6.5 – 9.0	8.5	9.8	8.9	9.8	10.2

Lake Zurich Road Site						
Parameter	Accepted Limits	Test Results				
		2012	2013	2014	2015	2016
Ammonia (mg/L)	15	0.01	0.11	0.12	0.11	0.17
BOD (mg/L)	<8.0	1	3	5	3	7
Phosphorous, Total (mg/L)	0.05	0.47	0.37	0.15	4.16	0.56
Total Suspended Solids (mg/L)	15.0-30.0	5	0	2	0	12
pH	6.5 – 9.0	8	7.7	7.9	7.7	8

5 Hart Road Site						
Parameter	Accepted Limits	Test Results				
		2012	2013	2014	2015	2016
Ammonia (mg/L)	15	0.01	0.04	0.08	0.04	0.07
BOD (mg/L)	<8.0	5	3	3	3	6
Phosphorous, Total (mg/L)	0.05	0.38	4.16	1.62	4.16	1.68
Total Suspended Solids (mg/L)	15.0-30.0	9	1	0	1	5
pH	6.5 – 9.0	7.7	8	7.94	8	8

Part D. MS4 Summary of Year 15 Stormwater Activities

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

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

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

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

Stormwater Management Activities, Year 15

A. Public Education and Outreach

The Village of Barrington utilizes a variety of methods to educate and provide outreach to the public about the impacts of storm water discharges on waterbodies and the steps that the public can take to reduce pollutants in storm water runoff. Outreach publications include Village contact information to encourage residences to report environmental concerns. The Village plans to continue to implement the following BMPs as outlined in the Village's SWMP:

- Distribution of Educational Materials
- Household Hazardous Waste Program
- Residential Recycling & Refuse Program

Measurable Goals

1. Continue to implement the and track progress of BMPs as described in the SWMP.

B. Public Participation/Involvement

The Village of Barrington is committing to implementing the Public Participation/Involvement component of its SWMP. The Public Participation and Involvement Program allows input from citizens regarding implementation of the SWMP. The Village plans to continue to implement the following BMPs as outlined in the Village's SWMP:

- Public Review
- Environmental Justice Area Review
- Complaints, Suggestions, and Requests
- Watershed Planning and Stakeholders Meetings

Measurable Goals

1. Continue to implement the and track progress of BMPs as described in the SWMP.

C. Illicit Discharge Detection and Elimination Program

The Village of Barrington is committed to perform activities related to the illicit discharge component of its SWMP. The Village plans to continue to implement the following BMPs as outlined in the Village's SWMP:

- Storm Sewer System Map
- Enforcement of the Lake County Watershed Development Ordinance
- Visual Dry Weather Inspection Program
- Public Notification

Measurable Goals

1. Continue to implement the Illicit Discharge Detection and Elimination Program and track progress as described in the SWMP.

D. Construction Site Runoff Control

The Village of Barrington has adopted the Lake County Watershed Development Ordinance (WDO) that establishes the minimum stormwater management requirements for development in Lake County. The WDO, which is administered and enforced within the community by the Village of Barrington, establishes standards for construction site runoff control. The Village continues to have in place a website based Citizen Service Request system to provide a mechanism for citizens to report issues. The Village plans to continue to implement the following BMPs as outlined in the Village's SWMP:

- Site Plan Review
- Construction Site Inspections & Enforcement

Measurable Goals

1. Continue to implement the and track progress of BMPs as described in the SWMP.

E. Post-Construction Runoff Control

As described above, the WDO establishes the minimum stormwater management requirements for development in the village. The WDO establishes standards for post-construction site runoff control. The Village plans to continue to implement the following BMPs as outlined in the Village's SWMP:

- Regulatory Program
- Storm Water Management Facility Inspections

Measurable Goals

1. Continue to implement the and track progress of BMPs as described in the SWMP.

F. Pollution Prevention/Good Housekeeping

The Village of Barrington is committing to implementing the Pollution Prevention/Good Housekeeping component of its SWMP. 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 also follows the Storm Water Pollution Prevention Plan (SWPPP) prepared for the public works facility and conducts monthly and annual inspections. The Village of Barrington will continue to implement their SWMP which includes a training program for municipal employees. The Village of Barrington will examine and subsequently alter their actions to help ensure a reduction in the amount and type of pollution. Various pollution types include material that collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local waterways. The Village will continue to evaluate "sensible salting" procedures relating to a reduction in chloride use. The Village will conduct regular inlet/catch basin cleaning and street sweeping. The Village continues to organize events to help reduce pollution and floatable material. The Village plans to continue to implement the following BMPs as outlined in the Village's SWMP:

- Catch Basin/Inlet Cleaning
- Public Works Washing Station Facility
- Material Storage Handling
- Street Sweeping
- Landscape Maintenance
- Snow Removal and Ice Control
- Vehicle and Equipment Maintenance

- Waste Management
- Special Events
- Spill Response Plan

Measurable Goals

1. Continue to implement the and track progress of BMPs as described in the SWMP.

Part E. Notice of Qualifying Local Program

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

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

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

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

Year 14 QLP		Year 14 QLP	
A. Public Education and Outreach		D. Construction Site Runoff Control	
X	A.1 Distributed Paper Material	X	D.1 Regulatory Control Program
	A.2 Speaking Engagement	X	D.2 Erosion and Sediment Control BMPs
X	A.3 Public Service Announcement	X	D.3 Other Waste Control Program
X	A.4 Community Event	X	D.4 Site Plan Review Procedures
X	A.5 Classroom Education Material	X	D.5 Public Information Handling Procedures
X	A.6 Other Public Education	X	D.6 Site Inspection/Enforcement Procedures
			D.7 Other Construction Site Runoff Controls
B. Public Participation/Involvement		E. Post-Construction Runoff Control	
X	B.1 Public Panel		E.1 Community Control Strategy
	B.2 Educational Volunteer	X	E.2 Regulatory Control Program
X	B.3 Stakeholder Meeting	X	E.3 Long Term O&M Procedures
	B.4 Public Hearing	X	E.4 Pre-Const Review of BMP Designs
	B.5 Volunteer Monitoring	X	E.5 Site Inspections During Construction
X	B.6 Program Coordination	X	E.6 Post-Construction Inspections
	B.7 Other Public Involvement	X	E.7 Other Post-Const Runoff Controls
C. Illicit Discharge Detection and Elimination		F. Pollution Prevention/Good Housekeeping	
	C.1 Storm Sewer Map Preparation	X	F.1 Employee Training Program
X	C.2 Regulatory Control Program		F.2 Inspection and Maintenance Program
	C.3 Detection/Elimination Prioritization Plan		F.3 Municipal Operations Storm Water Control
	C.4 Illicit Discharge Tracing Procedures		F.4 Municipal Operations Waste Disposal
	C.5 Illicit Source Removal Procedures	X	F.5 Flood Management/Assess Guidelines
	C.6 Program Evaluation and Assessment	✓	F.6 Other Municipal Operations Controls
	C.7 Visual Dry Weather Screening		
	C.8 Pollutant Field Testing		
	C.9 Public Notification		
X	C.10 Other Illicit Discharge Controls		

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

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

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

A. Public Education and Outreach

A.1 Distributed Paper Material

Measurable Goal(s):

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

Year 14 QLP activities:

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

A.3 Public Service Announcement

Measurable Goal(s):

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

Year 14 QLP activities:

- SMC includes announcements highlighting community accomplishments related to IEPA's NPDES Stormwater Program on its website, in its newsletter, and through other media outlets.
- Watershed identification signage is located throughout the county.
- SMC continues to make available "The Big Picture: Water Quality, Regulations & NPDES" presentation to Lake County MS4s,
(url: <https://lakecountyiil.gov/DocumentCenter/View/16533>).

A.4 Community Event

Measurable Goal(s):

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

Year 14 QLP activities:

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

A.5 Classroom Education

Measurable Goal(s):

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

Year 14 QLP activities

- Stormwater educational materials were compiled for use at several public education events that were held between March 1, 2016 and March 31, 2017, including:
 - Riparian Landowner Open House held in Beach Park, IL on May 25, 2016
 - Loch Lomond Property Owners Association's Loch Fest held in Mundelein, IL on July 30, 2016
 - Rain Barrel, Compost Bin, and Native Plant Sale held in Libertyville, IL on May 7, 2016
 - Developed Deicing Residential & Commercial Informational Brochure
 - Developed "Living on the Water's Edge" Brochure used for multiple events, including Des Plaines River watershed planning meetings, watershed meetings, LCHD lakes committee meetings, etc.

A.6 Other Public Education

Measurable Goal(s):

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

Year 14 QLP activities:

- As new information and resource materials become available, they are posted to the SMC website and/or distributed directly to Lake County MS4s,
(url:<https://lakecountyil.gov/2479/NPDES-Phase-II>).
- SMC continues to make available "The Big Picture: Water Quality, Regulations & NPDES" presentation to Lake County MS4s, (url:<https://lakecountyil.gov/DocumentCenter/View/16533>).
- SMC developed an ArcGIS geospatial web tool for Lake County that indicates TMDL statuses, 303(b), 305(d), watershed and urbanized area information within an MS4,
(url:<https://lakecountyil.maps.arcgis.com/apps/InformationLookup/index.html?appid=09ab978957e7499f9926805d29e9394a>).
- SMC developed an ArcGIS geospatial web tool for Lake County within the Des Plaines River watershed, allowing the public to see an Inventory of Stream and Detention Basin Information, (url:<https://lakecountyil.maps.arcgis.com/apps/webappviewer/index.html?id=918c4042dcec431ba46b5c1a7030b46c&extent=-9835848.6057,5176480.893,-9738009.2095,5239847.1894,102100>).
- SMC maintains reference documents for stormwater best practices, BMPs and green infrastructure practices on its website, (url: <https://lakecountyil.gov/2261/Stormwater-Best-Practices>).

B. Public Participation/Involvement

B.1 Public Panel

Measurable Goal(s):

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

Year 14 QLP activities:

- Notice of all public meetings continues to be provided on the SMC website and through direct mailings and e-mailings to distribution lists.
- SMC tracked the number of Stormwater Management Committee Board (SMC) meetings, Technical Advisory Committee (TAC) meetings, Municipal Advisory Committee (MAC), and Watershed Management Board (WMB) meetings conducted during Year 14, between March 1, 2016 and March 31, 2017.
 - Per records, there were 10 SMC meetings, 0 TAC meetings, 4 MAC meetings, and 1 WMB meeting conducted during this reporting period.

B.3 Stakeholder Meeting

Measurable Goal(s):

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

Year 14 QLP activities:

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

- Des Plaines River Watershed Workgroup – 15 (excluding executive board meetings)

- SMC continues to establish and/or assist watershed planning committees for each new watershed planning effort.

B.6 Program Coordination

Measurable Goal(s):

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

Year 14 QLP activities:

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

C. Illicit Discharge Detection and Elimination

C.2 Regulatory Control Program

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 14 QLP activities:

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

C.10 Other Illicit Discharge Controls

Measurable Goal(s):

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

Year 14 QLP activities:

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

D. Construction Site Runoff Control

D.1 Regulatory Control Program

Measurable Goal(s):

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

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

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

D.2 Erosion and Sediment Control BMPs

Measurable Goal(s):

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

Year 14 QLP activities:

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

D.3 Other Waste Control Program

Measurable Goal(s):

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

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

D.4 Site Plan Review Procedures

Measurable Goal(s):

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

Year 14 QLP activities:

- SMC continues to track the number of enforcement officers (EOs) who have passed the EO exam and have become EOs. Per records, as of the end of Year 14, there are 57 EOs certified in Lake County.
- The list of EOs representing Certified Communities is continually updated and maintain on the SMC website: (url:<https://lakecountyil.gov/DocumentCenter/View/14412>).
- SMC last completed a cycle of the community re-certification process, which included a performance review of all 53 certified and non-certified communities, during a previous reporting period (i.e., Year 9). In accordance with the amended countywide WDO, the certification process is every 5 years the next cycle of the community re-certification process is scheduled to begin in fall/winter 2017.
(url: <https://lakecountyil.gov/2459/Community-Certification>)
- The website includes guidance information to supplement the TRM related to WDO interpretation as well as ordinance administration and enforcement.

D.5 Public Information Handling Procedures

Measurable Goal(s):

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

Year 14 QLP activities:

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

D.6 Site Inspection/Enforcement Procedures

Measurable Goal(s):

- Track number of site inspections conducted by SMC.

Year 14 QLP activities:

- SMC continues to track the number of site inspections conducted by SMC staff.
- According to records, between March 1, 2016 and March 31, 2017, 756 site inspections were conducted by SMC staff.

E. Post-Construction Runoff Control

E.2 Regulatory Control Program

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

E.3 Long Term O&M Procedures

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

E.4 Pre-Construction Review of BMP Designs

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

E.5 Site Inspections During Construction

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

E.6 Post-Construction Inspections

Measurable Goal(s):

- Continue to enforce the countywide WDO.

Year 14 QLP activities:

- SMC continues to enforce the countywide WDO.

E.7 Other Post-Construction Runoff Controls

Measurable Goal(s):

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

Year 14 QLP activities:

- The annual WMB meeting was held on Dec. 8, 2016.
- At the annual WMB meeting 13 Projects were selected to receive \$177,000 of funding through the SMC grant program. These projects including planning and in the ground project efforts that support flood reduction, water quality improvement, and stormwater retrofit projects.
 - 11 WMB project grants awarded
 - 1 Stormwater Infrastructure Repair Fund (SIRF) project grant awarded
 - 1 Watershed Management Assistance (WMAG) project grant awarded

F. Pollution Prevention/Good Housekeeping

F.1 Employee Training Program

Measurable Goal(s):

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

Year 14 QLP activities:

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

F.5 Flood Management/Assess Guidelines

Measurable Goal(s):

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

Year 14 QLP activities:

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

F.6 Other Municipal Operations Controls

Winter Roadway Deicing

Measurable Goal(s):

-
- Advise MS4 communities of watershed groups addressing issues associated with the use of chlorides (i.e. road salt)
Year 14 QLP activities:
 - SMC co-sponsored 2 de-icing workshops:
 - Deicing for Parking Lots and Sidewalks 10/4/2016
 - Deicing Roads 10/5/2016
 - A de-icing certification process to promote trained vendors is offered
 - Preferred Providers that successfully completed a Lake County Deicing Training Workshop and passed the Course Exam can be referenced on a Preferred Provider List (url: <https://www.lakecountyil.gov/DocumentCenter/Home/View/10767>)
 - Certification is through a third-party vendor, Fortin Consulting, Inc
 - SMC continues to make available chloride reduction documents
 - Too Much Salt in Our Winter Maintenance Recipe - Tips for Managing Snow and Ice at Home (PDF) (url: <https://lakecountyil.gov/DocumentCenter/Home/View/3047>)
 - Lake County Winter Parking Lot and Sidewalk Maintenance Manual (2015) (PDF) (url: <https://lakecountyil.gov/DocumentCenter/Home/View/3044>)
 - Less Salt Equals Less Money, Clean Water, Safe Conditions - Tips for Effective Road Salting (PDF) (url: <https://lakecountyil.gov/DocumentCenter/Home/View/3045>)

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

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

State of Lake County's Waters

March 2017

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

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

Streams

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

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

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

Table E3.1 2014 303(d) streams removed from 2016 303(d) list

Assessment ID	Name	Miles	Assessment ID	Name	Miles
IL_G-08	Des Plaines River	0.98	IL_QE-01	Dead Dog Creek	4.02
IL_GV-01	Bull Creek	2.33	IL_DTZS-01	Flint Creek	9.66
IL_RGZB	Hastings Lake	0.34	IL_RTJ	Long Lake	2.85
IL_DT-35	Fox River	5.03	IL_RHK	Eleanor Lake	0.36
IL_HCCB-05	West Fork North Branch	5.73	IL_GWA	North Mill Creek	6.62
IL_GST	Buffalo Creek	8.77	IL_RGZE	Slough Lake	0.42
IL_RGZA	Crooked Lake	1.00			

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

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

Lakes

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

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

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

Table E3.3 Inland Lakes added to 2016 303(d) list not previously listed in 2014					
Assessment ID	Name	Acres	Assessment ID	Name	Acres
IL_RGZD	Miltmore	83.1	IL_VGW	Rollins Savanna #1	8
IL_RGK	Grays	80	IL_VGX	Rollins Savanna #2	53
IL_SGZ	Briarcrest Pond	4			

Lake Michigan

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

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

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

- Aesthetic Quality, a 0.18 sq. mi area was assessed, with 0.12 sq. mi fully supporting and 0.06 sq. mi Not Supporting (poor).

- Aquatic Life, a 3.88 sq. mi area was assessed, with 3.82 sq. mi fully supporting and 0.06 sq. mi Not Supporting (poor).
- Fish Consumption, a 2.62 sq. mi area was assessed, with 2.62 sq. mi Not Supporting (poor).
- Primary and Secondary Contact were not assessed.

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

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

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

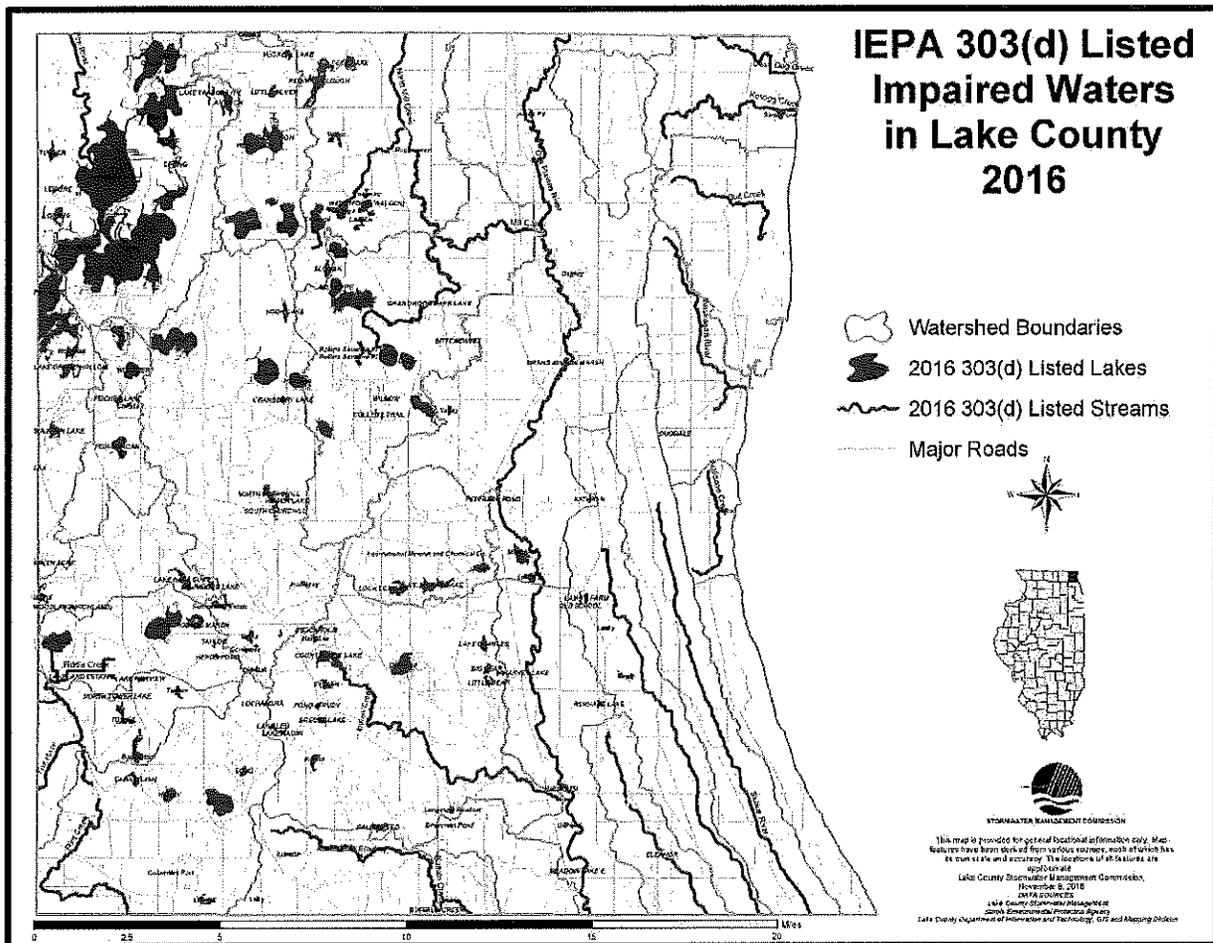


Figure E3.1

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

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

Part E4. QLP Summary of Year 15 Stormwater Activities

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

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

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

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

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

A. Public Education and Outreach

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

A.1 Distributed Paper Material

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

Measurable Goal(s):

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

A.2 Speaking Engagement

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

Measurable Goal(s):

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

A.3 Public Service Announcement

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

Measurable Goal(s):

- Include public service announcements related to IEPA’s NPDES Stormwater Program or stormwater BMPs in watershed E-News at least once each year.
- Post watershed identification signage in cooperation and collaboration with LCDOT.
- Provide information via social media (Facebook and Twitter).

A.4 Outreach Events

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

Measurable Goal(s):

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

A.5 Classroom Education Material

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

Measurable Goal(s):

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

A.6 Other Public Education

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

Measurable Goal(s):

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

B. Public Participation/Involvement

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

B.1 Public Panel

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

Measurable Goal(s):

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

B.3 Stakeholder Meeting

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

Measurable Goal(s):

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

B.6 Program Involvement

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

Measurable Goal(s):

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

C. Illicit Discharge Detection and Elimination

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

Measurable Goal(s):

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

C.2 Regulatory Control Program

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

Measurable Goal(s):

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

C.10 Other Illicit Discharge Controls

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

Measurable Goal(s):

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

- Distribute informational materials about the hazards of illicit discharges and illegal dumping from “take away” rack at SMC and SMC website.

D. Construction Site Runoff Control

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

D.1 Regulatory Control Program

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

Measurable Goal(s):

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

D.2 Erosion and Sediment Control BMPs

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

Measurable Goal(s):

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

D.3 Other Waste Control Program

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

Measurable Goal(s):

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

D.4 Site Plan Review Procedures

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

Measurable Goal(s):

- Administer the Enforcement Officer (EO) program outlined by the WDO.
- Maintain an up-to-date list identifying each community’s designated enforcement officer.
(url:<https://lakecountyil.gov/2467/Enforcement-Officers>)

- Periodically review each community's WDO administration and enforcement records. Re-Certification Procedure. url: ([url:https://lakecountyl.gov/DocumentCenter/Home/View/4244](https://lakecountyl.gov/DocumentCenter/Home/View/4244))
- Continue to maintain technical guidance documents.

D.5 Public Information Handling Procedures

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

Measurable Goal(s):

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

D.6 Site Inspection/Enforcement Procedures

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

Measurable Goal(s):

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

E. Post-Construction Runoff Control

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

E.2 Regulatory Control Program

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

Measurable Goal(s):

- Continue to administer and enforce the WDO.

E.3 Long Term O&M Procedures

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

Measurable Goal(s):

- Continue to administer and enforce the WDO.

E.4 Pre-Construction Review of BMP Designs

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

Measurable Goal(s):

- Continue to administer and enforce the WDO.

E.5 Site Inspections During Construction

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

Measurable Goal(s):

- Continue to administer and enforce the WDO.

E.6 Post-Construction Inspections

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

Measurable Goal(s):

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

E.7 Other Post-Construction Runoff Controls

Through the Watershed Management Board (WMB), SMC provides partial funding for flood damage reduction and surface water quality improvement projects. The WMB, which includes representatives from the Lake Michigan, North Branch of the Chicago River, Fox River, and Des Plaines River watersheds, meets annually to review potential projects and to make recommendations on stormwater BMP project funding. Members of the WMB include chief municipal elected officials, township supervisors, drainage district chairmen, and county board members from each district found within each of Lake County's four major watersheds. The goal of the WMB program is to maximize opportunities for local units of government and other groups to have input and influence on the solutions used to address local stormwater management problems. Previous WMB-funded projects have reduced flooding, improved surface water quality, and enhanced existing stormwater management facilities throughout Lake County.

Measurable Goal(s):

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

URL: <http://www.lakecountylil.gov/3635/Watershed-Management-Board-WMB>

F. Pollution Prevention/Good Housekeeping

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

F.1 Employee Training Program

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

Measurable Goal(s):

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

F.5 Flood Management/Assess Guidelines

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

Measurable Goal(s):

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

F.6 Other Municipal Operations Controls

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

Measurable Goal(s):

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

Part E5. QLP Construction Projects Conducted During Year 14

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

